



Isle of Wight Council

Isle of Wight Junction Assessment and Design

Carisbrooke College – Link Road Impact Assessment

A090129-99-1

December 2019



Document Information

Prepared for	Isle of Wight Council
Project Name	Isle of Wight Junction Assessment and Design
File Reference	20200130 TN Carisbrooke College
Project Number	A090129-99-1
Publication Date	December 2019

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Document Control

Version	Date	Prepared by	Reviewed by	Approved by	Approver Signature
D1	23.12.19	GS	MA	MA	
Description	Draft for client review				
I1	31.01.20	GS	MA	MA	
Description	Issue				
Description					
Description					
Description					
Description					

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1 Introduction

General

- 1.1 WYG have been appointed by the Isle of Wight (IOW) Council to undertake a feasibility study for a new link road in the vicinity of Carisbrooke College, Newport. The study has been carried out to identify traffic management issues impacting on all road users and develop proposals that will form part of a package of schemes to be progressed as part of the Council's Local Implementation Plan (LIP) process.

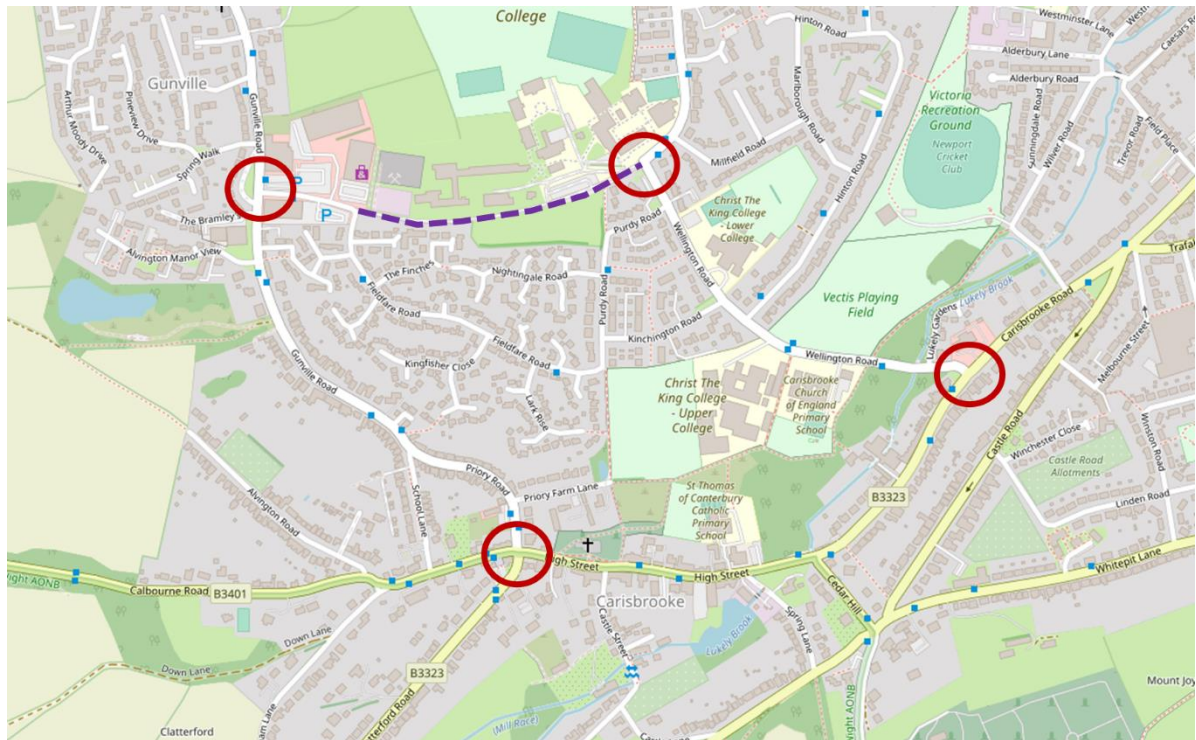
Site Location & Background

- 1.2 The Isle of Wight is an island located in the English Channel, approximately 6km off the Hampshire coast. The towns of Newport, Ryde, Shanklin and Sandown comprise the project study area for this feasibility study.
- 1.3 The town of Newport is the largest town on the IOW and is located in the centre of the island; the town of Ryde is located approximately 10km to the east of Newport, on the north-eastern coast of the island; whilst Shanklin and Sandown are located approximately 9km to the south of Ryde and 10km to the south east of Newport.
- 1.4 The IOW as a whole is characterised by high car ownership levels, with 77.5% of households on the island owning a car or van, as indicated by the 2011 Census. Thus, the private vehicle remains the most convenient and fastest way to travel around the island.
- 1.5 Carisbrooke College is a secondary school located on Mountbatten Drive, in the west of Newport. The school access forms the minor arm of a priority junction with Mountbatten Drive and Wellington Road, with the access serving staff parking, a bus stop and a turning area. A footway link extends further to the west, connecting to the retail park at Taylor Road.

Scope/Purpose of Study

- 1.6 The purpose of the study is to identify, through the use of traffic modelling software, where the main issues could arise in terms of capacity, congestion and queuing at four junctions with the provision of a new link road at Carisbrooke College; the traffic modelling will inform the type of highway improvements and design required at each junction.
- 1.7 The report considers the generation and redistribution of traffic (i.e. existing College traffic) arising from a new link road and associated residential development, as well as the background traffic in 2034. Junction capacity assessments at the following four junctions have been undertaken:
- Taylor Road/Gunville Road;
 - Wellington Road/Mountbatten Road/Link Road;
 - Wellington Road/Carisbrooke Road; and,
 - Carisbrooke Road/Clatterford Road/Priority Road.
- 1.8 The location of the footway and four key junctions link road is shown on **Figure 1.1**.

Figure 1.1 Site Location



Report Structure

1.9 The remainder of this document is structured as follows:

- **Chapter 2: Existing Conditions** - summarising the existing conditions at the junction, providing background to the junction, local highway network and detailing the current traffic issues experienced at the junction;
- **Chapter 3: Base Modelling Methodology** - setting-out details of tasks undertaken to build traffic models of the study area using specialist software;
- **Chapter 4: Base Modelling** – setting out the baseline model results for all four junctions;
- **Chapter 5: Future Year Base Modelling** - setting out the baseline model results for all four junctions for 2014;
- **Chapter 6: Trip Generation and Trip Distribution** – Trip generation and trip distribution associated with the proposals;
- **Chapter 7: Development Scenario Modelling** – 2034 with development junction modelling; and,
- **Chapter 8: Junction Mitigation Strategy** – providing a potential mitigation scenario as well as additional work to be undertaken in early January 2020.

1.10 All Appendices are included at the end of this report for reference.



2 Existing Traffic Conditions

General

- 2.1 This chapter establishes the existing, or 'baseline', highway conditions which prevail in the area surrounding the proposed link road. It describes the existing local highway network and any traffic issues present at junctions that comprise the local highway network.
- 2.2 Baseline studies have been informed by detailed site visits and desk-based research carried out between October and December 2019.

Data Collection

- 2.3 Traffic flow surveys were undertaken by MHC Traffic Ltd on Thursday 5th December 2019 to establish the baseline traffic conditions for the local highway network. The following surveys were undertaken:
 - Manual Classified Counts (MCC) at the four junctions being assessed for capacity; and,
 - Four Automatic Traffic Counts (ATCs) at appropriate locations surrounding the four junctions.
- 2.4 The data collected as part of the surveys was used directly for calibrating and validating the base scenario for the Junctions 9 junction models. Video footage of the surveyed junctions was additionally reviewed to ensure that the base models reflect the on-street road conditions as closely as possible.

2019 Base Traffic Flows

- 2.5 The 2019 baseline AM and PM peak hour traffic flows (in PCUs) are shown in **Figure 2.1 to Figure 2.8**. The full survey data is included as **Appendix A**.

Figure 2.1 2019 Base Traffic Flows – Taylor Road/Gunville Road

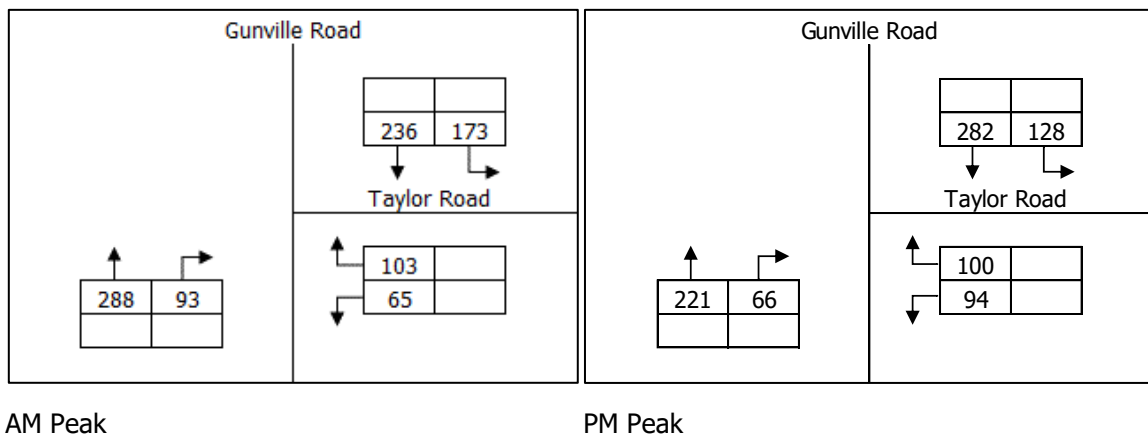




Figure 2.2 2019 Base Traffic Flows - Wellington Road/Mountbatten Road/Link Road

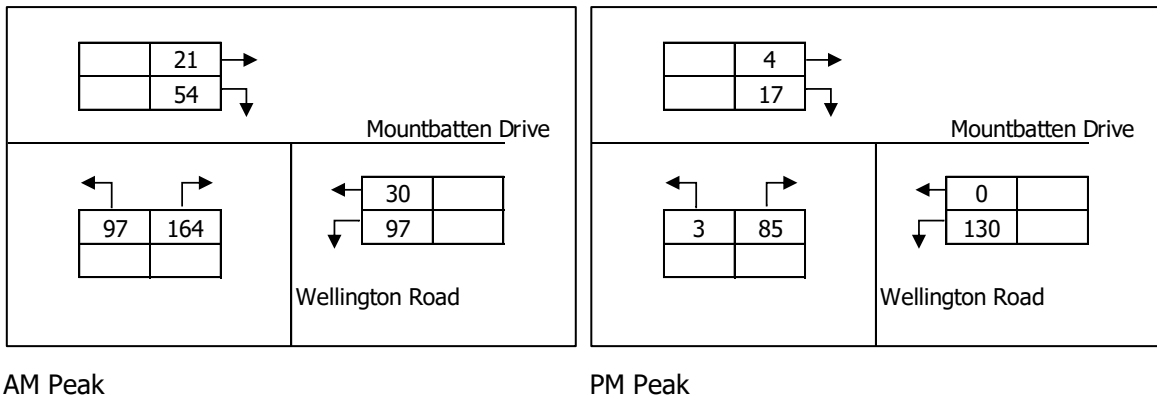


Figure 2.3 2019 Base Traffic Flows - Wellington Road/Carisbrooke Road

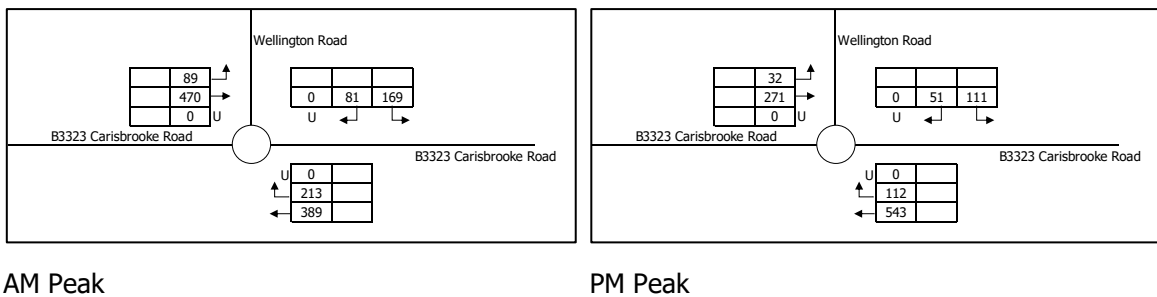
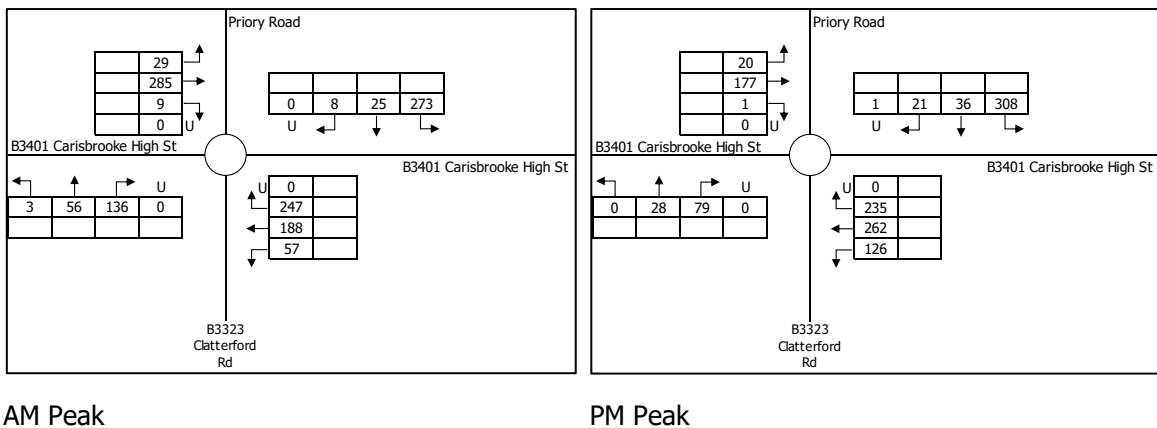


Figure 2.4 2019 Base Traffic Flows - Carisbrooke Road/Clatterford Road/Priory Road



2.6 Traffic was distributed as follows:

- The residential distribution was based on 2011 Census data and routed on the network accordingly. This assumes that the link road is open;
- The re-distributed school traffic assumes that 50% will come from the east and 50% from the west, compared to all traffic currently accessing from the east due to the link road not currently being open (i.e. via Mountbatten Drive / Wellington Road); and,
- Redistribution was also undertaken based on there being less traffic entering / exiting the retail park via Gunville Road / Taylor Road junction (staff and customers, as some of the retail units are open in the morning peak). This was therefore re-distributed accordingly at the junctions to the east and via the link road.



3 Junction Modelling Methodology

Introduction

- 3.1 Junction modelling has been undertaken as part of the feasibility study, to identify how the local highway network operates and how it might operate following the proposed improvements to the junction. Junctions 9 is the latest version of the industry-standard software for modelling roundabouts and priority junctions and has therefore been used to model these junctions.
- 3.2 The modelling has been undertaken for two weekday periods determined to be the network peaks in terms of traffic volumes, with the AM peak between 08:00 and 09:00 and the PM peak between 17:00 and 18:00. These peaks were identified through analysis of traffic count data. Initially, Base Year modelling was using survey data collected in December 2019. Future Year modelling was subsequently carried out in order to test the proposed changes to the network and assess the scale of impact on road traffic at the four aforementioned junctions.

Explanation of Results

- 3.3 Junction capacity results are usually expressed in terms of 'Ratio of Flow to Capacity' (RFC) for priority junctions (i.e. roundabouts, T-junctions). An existing junction is considered to have reached its theoretical capacity when it has an RFC of 1.00 or greater. However, an RFC of less than 0.85 is preferred, as a value above either of this figure is considered too close to the theoretical capacity for the junction to perform satisfactorily. Where junction improvements or a new junction are proposed, an RFC of significantly less than 0.85 is desirable, although this may not always be possible in instances of a junction already operating at capacity.
- 3.4 Queue lengths at junction approaches are usually expressed in terms of 'Passenger Car Unit' (PCU). A standard car typically has a PCU value of 1.0; larger vehicles, such as goods vehicles, typically have PCU values greater than 1.0 and smaller vehicles, such as motorcycles, typically have PCU values less than 1.0.



4 Base Year Modelling (2019 Observed)

Taylor Road/Gunville Road - Base Year Modelling

- 4.1 The results for the Taylor Road/Gunville Road priority junction are summarised in **Table 4.1**, with full output results included in **Appendix B**.

Junction Modelling Results – 2019 Base Year

Table 4.1 2019 Base Assessment: Existing Junction

Approach	2019 Base Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Gunville Road (N)	-	-	-	-
Taylor Road	0.30	0.4	0.28	0.4
Gunville Road (S)	0.24	0.5	0.16	0.3

- 4.2 The base year results as shown in Table 4.1, indicate that the junction currently operates within capacity during the AM and PM peaks, with a RFC of 0.30 recorded in the AM Peak and 0.28 recorded in the PM Peak. It appears that the junction does not exhibit any capacity issues at present.

Wellington Road/Mountbatten Road/Link Road - Base Year Modelling

- 4.3 The results for the Wellington Road/Mountbatten Road/Link Road priority junction are summarised in **Table 4.2**, with full output results included in **Appendix B**.

Junction Modelling Results – 2019 Base Year

Table 4.2 2019 Base Assessment: Existing Junction

Approach	2019 Base Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Mountbatten Road	0.06	0.1	0.00	0.0
Link Road/Carisbrooke College	0.13	0.1	0.04	0.0
Wellington Road	-	-	-	-

- 4.4 The base year results as shown in Table 4.2, indicate that the junction currently operates within capacity during the AM and PM peaks, with a RFC of 0.13 recorded in the AM Peak and 0.04 recorded in the PM Peak. It appears that the junction does not exhibit any capacity issues at present.



Wellington Road/Carisbrooke Road - Base Year Modelling

- 4.5 The results for the Wellington Road/Carisbrooke Road roundabout junction are summarised in **Table 4.3**, with full output results included in **Appendix B**.

Junction Modelling Results – 2019 Base Year

Table 4.3 2019 Base Assessment: Existing Junction

Approach	2019 Base Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Carisbrooke Road North	0.69	2.2	0.74	2.7
Carisbrooke Road South	0.75	2.8	0.37	0.6
Wellington Road	0.43	0.7	0.23	0.3

- 4.6 The base year results as shown in Table 4.3, indicate that the junction currently operates within capacity during the AM and PM peaks, with a RFC of 0.75 recorded in the AM Peak and 0.74 recorded in the PM Peak. It appears that the junction does not exhibit any capacity issues at present.

Carisbrooke Road/Clatterford Road/Priory Road - Base Year Modelling

- 4.7 The results for the Carisbrooke Road/Clatterford Road/Priory Road roundabout junction are summarised in **Table 4.4**, with full output results included in **Appendix B**.

Junction Modelling Results – 2019 Base Year

Table 4.4 2019 Base Assessment: Existing Junction

Approach	2019 Base Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Carisbrooke High Street East	0.58	1.4	0.75	2.9
Clatterford Road	0.31	0.5	0.19	0.2
Carisbrook High Street West	0.55	1.2	0.31	0.4
Priory Road	0.48	0.9	0.49	1

- 4.8 The base year results as shown in Table 4.1, indicate that the junction currently operates within capacity during the AM and PM peaks, with a RFC of 0.58 recorded in the AM Peak and 0.75 recorded in the PM Peak. It appears that the junction does not exhibit any capacity issues at present.



5 Future Year Modelling 2034 (Do Nothing)

- 5.1 The 'Do Nothing' Future Year 2034 was assessed as part of this scenario and thus TEMPRO growth factors were applied to the 2019 traffic survey data in order to calculate the potential future year 2034 traffic flows. The 'Isle of Wight' as a whole was selected as the geographical area.
- 5.2 All modelling in this chapter relates to the 'Do Nothing scenario', with no Link Road provided and no development at Carisbrooke College.
- 5.3 These TEMPRO growth factors are shown in **Table 5.1**.

Table 5.1 2019-2034 TEMPRO Growth Factors – All Urban Road Types

Time Period	TEMPRO Growth Factors (2017-2034)
AM Peak	1.1929
PM Peak	1.1904

Taylor Road/Gunville Road - Future Year Modelling

- 5.4 The results for the Taylor Road/Gunville Road priority junction are summarised in **Table 5.2**, with full output results included in **Appendix B**.

Table 5.2 2034 Base Assessment: Existing Junction

Approach	2034 Base Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Gunville Road (N)	-	-	-	-
Taylor Road	0.39	0.6	0.37	0.6
Gunville Road (S)	0.31	0.7	0.21	0.4

- 5.5 The base year results as shown in Table 5.2, indicate that the junction is forecast to operate within capacity during the AM and PM peaks, with a RFC of 0.39 recorded in the AM Peak and 0.37 recorded in the PM Peak. The junction is therefore not forecast to exhibit any capacity issues in 2034.

Wellington Road/Mountbatten Road/Link Road - Future Year Modelling

- 5.6 The results for the Wellington Road/Mountbatten Road/Link Road priority junction are summarised in **Table 5.3**, with full output results included in **Appendix B**.



Table 5.3 2034 Base Assessment: Existing Junction

Approach	2034 Base Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Mountbatten Road	0.08	0.1	0.00	0.0
Link Road/Carisbrooke College	0.16	0.2	0.04	0.0
Wellington Road	-	-	-	-

5.7 The base year results as shown in Table 5.3, indicate that the junction is forecast to operate within capacity during the AM and PM peaks, with a RFC of 0.16 recorded in the AM Peak and 0.04 recorded in the PM Peak. The junction is therefore not forecast to exhibit any capacity issues in 2034.

Wellington Road/Carisbrooke Road - Future Year Modelling

5.8 The results for the Wellington Road/Carisbrooke Road roundabout junction are summarised in **Table 5.4**, with full output results included in **Appendix B**.

Table 5.4 2034 Base Assessment: Existing Junction

Approach	2034 Base Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Carisbrooke Road North	0.83	4.7	0.88	6.6
Carisbrooke Road South	0.92	9.0	0.45	0.8
Wellington Road	0.57	1.3	0.29	0.4

5.9 The base year results as shown in Table 5.4, indicate that the junction is forecast to operate close to capacity during the AM and PM peaks, with a RFC of 0.92 recorded in the AM Peak and 0.88 recorded in the PM Peak. However, queueing is relatively limited, with maximum queues of 9 vehicles in the AM peak hour and 6-7 vehicles in the PM peak hour.

Carisbrooke Road/Clatterford Road/Priory Road – Future Year Modelling

5.10 The results for the Carisbrooke Road/Clatterford Road/Priory Road roundabout junction are summarised in **Table 5.5**, with full output results included in **Appendix B**.



Table 5.5 2034 Base Assessment: Existing Junction

Approach	2034 Base Year Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Carisbrooke High Street East	0.70	2.3	0.90	7.4
Clatterford Road	0.41	0.7	0.25	0.3
Carisbrook High Street West	0.72	2.5	0.39	0.6
Priory Road	0.63	1.7	0.61	1.6

5.11 The base year results as shown in Table 5.5, indicate that the junction is forecast to operate close to capacity during the PM peak, with a RFC of 0.90 recorded. However, queueing is relatively limited, with maximum queues of 7-8 vehicles in the PM peak hour.

6 Trip Generation and Distribution

Residential Trip Generation

- 6.1 Vehicular trip rates for the potential residential development have been taken from the TRICS database. The assessment is based on the AM (08:00-09:00) and PM (17:00-18:00) peak hours.
- 6.2 Sites have been selected from the 'Privately Owned Houses' category within TRICS. The derivation of these trip rates therefore represents a worst-case scenario which in turn provides a robust assessment of the likely traffic impact on the operation of the local highway network.
- 6.3 The vehicle trip rates are set out in **Table 6.1** and **Appendix C**, along with indicative trip numbers for 200 dwellings.

Table 6.1 Vehicle Trip Rates and Generation

	AM Peak			PM Peak		
	In	Out	Two-Way	In	Out	Two-Way
Trip Rate	0.13	0.37	0.50	0.33	0.15	0.48
Trip Generation (200 Dwellings)	26	73	99	66	30	96

Residential Trip Distribution

- 6.4 Data from the 2011 census has been used to determine the travel patterns of residents of the E02003591 Isle of Wight 011 output area, in which the site is located.
- 6.5 The number of people driving to work has been calculated for different regions of the island, and trips have been assigned to the network using the most likely routing. In cases where multiple routes are viable, traffic has been split accordingly.
- 6.6 A summary of the data is provided in **Table 6.2**, with the full data included as **Appendix D**.

Table 6.2 Summary of Trip Distribution from Isle of Wight 011 MSOA

place of work : 2011 super output area - middle layer	Location	All categories: Method of travel to work (2001 specification)	Driving a car or van	Percentage of Overall Area
E02003588 : Isle of Wight 008	East and North of Newport	831	528	27%
E02003589 : Isle of Wight 009	North and West of Newport	852	282	15%
E02003591 : Isle of Wight 011	South of Newport	521	237	12%
E02003583 : Isle of Wight 003	Osborne	155	121	6%
E02003582 : Isle of Wight 002	Northwood and West of Cowes	139	116	6%
E02003584 : Isle of Wight 004	Ryde	100	83	4%
E02003593 : Isle of Wight 013	West of Newport	132	81	4%
E02003581 : Isle of Wight 001	Cowes	96	62	3%
E02003595 : Isle of Wight 015	Sandown	75	57	3%
E02003587 : Isle of Wight 007	Ryde and Elmfield	63	52	3%
E02003590 : Isle of Wight 010	East of Ryde	64	50	3%



E02003594 : Isle of Wight 014	Brading	57	47	2%
E02003592 : Isle of Wight 012	Yarmouth	68	45	2%
E02003596 : Isle of Wight 016	Shanklin	58	45	2%
E02003585 : Isle of Wight 005	Fishbourne	45	35	2%
E02003597 : Isle of Wight 017	South of island	48	30	2%
E02003586 : Isle of Wight 006	West of Ryde	35	28	1%
E02003598 : Isle of Wight 018	South of Shanklin	32	27	1%

- 6.7 Therefore, the residential trips calculated using the trip rates set out previously have been assigned to the network based on the census data. The distribution is included within **Appendix A**.

Link Road Trip Reassignment

- 6.8 Consideration has been given to the impact of the Link Road on existing traffic patterns. The route would present a slightly quicker journey time from Gunville Road to Wellington Road, which currently would be routed via Fieldfare Road.
- 6.9 However, as the Link Road would not open up any routes that are not currently possible (i.e. it is already possible to travel from east to west between Gunville Road and Wellington Road), the impact on through traffic may be limited. In particular, in the AM peak hour there would be significant traffic associated with Carisbrooke College and Christ the King College, leading to the Link Road and Wellington Road becoming less attractive routes when compared to Gunville Road and Carisbrooke Road.
- 6.10 The most significant change in travel patterns is expected to be relating to traffic associated with the school and with the retail park on Taylor Road. Traffic heading to and from Carisbrooke College may arrive and depart to the west for trips to Gunville and the A3054 Forest Road; rather than travelling via Wellington Road and Fieldfare Road, this traffic could then use the Link Road.
- 6.11 Similarly, drivers heading to the retail park travelling from the east may opt to use Wellington Road and the Link Road, rather than Carisbrooke Road and Gunville Road.
- 6.12 As a sensitivity test, it has been assumed that half of school traffic would arrive and depart from the west, i.e. traffic that would normally use Fieldfare Road to travel to Gunville Road and the A3054.
- 6.13 For the retail park traffic, it has been assumed that 20% of traffic at the Taylor Road/Gunville Road junction will instead head east along the Link Road.
- 6.14 Full redistribution flow diagrams are included within **Appendix A**.



7 Future Year Modelling (Link Road Scenario)

- 7.1 The Future Year 2034 was assessed as part of this scenario and thus TEMPRO growth factors were applied to the 2019 traffic survey data in order to calculate the 2034 traffic flows. The 'Isle of Wight' as a whole was selected as the geographical area.
- 7.2 All modelling in this chapter relates to the Link Road scenario, with no Link Road provided and 200 dwellings being accessed from the Link Road.
- 7.3 The traffic flows are therefore a sum of the 2034 base flows, the traffic flows for the 200 dwellings, and the redistributed traffic using the Link Road as an alternative route.

Taylor Road/Gunville Road - Future Year Modelling

- 7.4 The results for the Taylor Road/Gunville Road priority junction are summarised in **Table 7.1**, with full output results included in **Appendix B**.

Table 7.1 2034 Link Road Assessment: Existing Junction

Approach	2034 Link Road Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Gunville Road (N)	-	-	-	-
Taylor Road	0.48	0.9	0.34	0.5
Gunville Road (S)	0.38	1.0	0.19	0.4

- 7.5 The base year results as shown in Table 7.1, indicate that the junction is forecast to operate within capacity during the AM and PM peaks, with a RFC of 0.48 recorded in the AM Peak and 0.34 recorded in the PM Peak. The junction is therefore not forecast to exhibit any capacity issues in 2034 with the Link Road.

Wellington Road/Mountbatten Road/Link Road - Future Year Modelling

- 7.6 The results for the Wellington Road/Mountbatten Road/Link Road priority junction are summarised in **Table 7.2**, with full output results included in **Appendix B**.



Table 7.2 2034 Link Road Assessment: Existing Junction

Approach	2034 Link Road Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Mountbatten Road	0.14	0.2	0.03	0.0
Link Road/Carisbrooke College	0.42	0.7	0.15	0.2
Wellington Road	-	-	-	-

7.7 The base year results as shown in Table 7.2, indicate that the junction is forecast to operate within capacity during the AM and PM peaks, with a RFC of 0.42 recorded in the AM Peak and 0.15 recorded in the PM Peak. The junction is therefore not forecast to exhibit any capacity issues in 2034 with the addition of the Link Road.

Wellington Road/Carisbrooke Road - Future Year Modelling

7.8 The results for the Wellington Road/Carisbrooke Road roundabout junction are summarised in **Table 7.3**, with full output results included in **Appendix B**.

Table 7.3 2034 Link Road Assessment: Existing Junction

Approach	2034 Link Road Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Carisbrooke Road North	0.90	7.7	0.91	8.7
Carisbrooke Road South	1.01	20.8	0.47	0.9
Wellington Road	0.70	2.2	0.36	0.5

7.9 The base year results as shown in Table 7.3, indicate that the junction is forecast to operate in excess of capacity during the AM and PM peaks, with a RFC of 0.92 recorded in the AM Peak and 0.88 recorded in the PM Peak. However, queuing is relatively limited in the PM peak hour, with maximum queues of 9 vehicles.

Carisbrooke Road/Clatterford Road/Priory Road – Future Year Modelling

7.10 The results for the Carisbrooke Road/Clatterford Road/Priory Road roundabout junction are summarised in **Table 7.4**, with full output results included in **Appendix B**.



Table 7.4 2034 Link Road Assessment: Existing Junction

Approach	2034 Link Road Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Carisbrooke High Street East	0.71	2.4	0.89	6.7
Clatterford Road	0.43	0.7	0.24	0.3
Carisbrook High Street West	0.75	2.8	0.39	0.6
Priory Road	0.65	1.8	0.59	1.4

7.11 The base year results as shown in Table 7.4, indicate that the junction is forecast to operate close to capacity during the PM peak, with a RFC of 0.89 recorded. However, queueing is relatively limited, with maximum queues of 7 vehicles in the PM peak hour. This also represents an increase in capacity and reduction in queueing compared with the 'Do Nothing' scenario.

8 Mitigation

Junction Capacity Summary

8.1 As shown above, the junction modelling results indicate the following key junction impacts:

Table 8.1 Traffic Impact Assessment Summary – All Scenarios

Junction	Maximum	Scenario 1 2019 Baseline		Scenario 2 2034 Forecast Year		Scenario 3 2034 Forecast Year plus Development	
		AM	PM	AM	PM	AM	PM
Taylor Road/Gunville Road	RFC / DoS	0.30	0.28	0.39	0.37	0.48	0.34
	Queue / MMQ	0	0	1	1	1	1
Wellington Road/Mountbatten Road/Link Road	RFC / DoS	0.13	0.04	0.16	0.04	0.42	0.15
	Queue / MMQ	0	0	0	0	1	0
Wellington Road/Carisbrooke Road	RFC / DoS	0.75	0.74	0.92	0.88	1.01	0.91
	Queue / MMQ	3	3	9	7	21	9
Carisbrooke Road/Clatterford Road/Priory Road	RFC / DoS	0.58	0.75	0.72	0.90	0.75	0.89
	Queue / MMQ	1	3	3	7	3	7

Notes: Green – Operates within capacity; Amber – Operates close to capacity; Red – Operates above capacity

8.2 On the basis of the above, it is evident that the following junction may operate over capacity in the 2034 development year that includes the link road being opened and additional residential development of up to 200 dwellings:

- Wellington Road/Carisbrooke Road.

8.3 It is however pertinent to note that background traffic growth is in the region of 19% and is therefore considered to be a significant reason why the traffic impact at all junctions increases capacity increases and why, in the future year the aforementioned junction may begin to operate over capacity.

Mitigation Strategy and Potential Re-distribution of Traffic

8.4 A desk-top review of the potential mitigation strategy at the Wellington Road/Carisbrooke roundabout junction has been undertaken and indicates that design improvements could be difficult to achieve on the basis of the existing pinch points, particularly on the northern arm of Carisbrooke Road.

8.5 However, there is scope to improve capacity on the southern arm of Carisbrooke Road by altering the kerb line, for a relatively low-cost scheme. A proposed scheme is illustrated on **Drawing A090129-99-1-SK01** at **Appendix E**, subject to confirmation of the highway boundary.

8.6 Whilst the junction would still perform close to capacity, there would be an improvement when compared with the existing junction, with queues and RFCs comparable to the 2034 Baseline scenario.

8.7 Queues on Carisbrooke Road South reduce from 21 to 6 in the AM peak hour, and the RFC reduces from 1.01 to 0.88.

8.8 A summary of the results is provided in **Table 8.2** and in **Appendix F**.



Table 8.2 2034 Link Road Assessment: With Mitigation

Approach	2034 Link Road Assessment			
	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Carisbrooke Road North	0.90	7.7	0.91	8.7
Carisbrooke Road South	0.88	6.2	0.41	0.7
Wellington Road	0.64	1.7	0.32	0.5

- 8.9 There is limited scope to provide a full roundabout due to space constraints.
- 8.10 However, should further capacity be required, a signalised junction may be viable, subject to further design work.



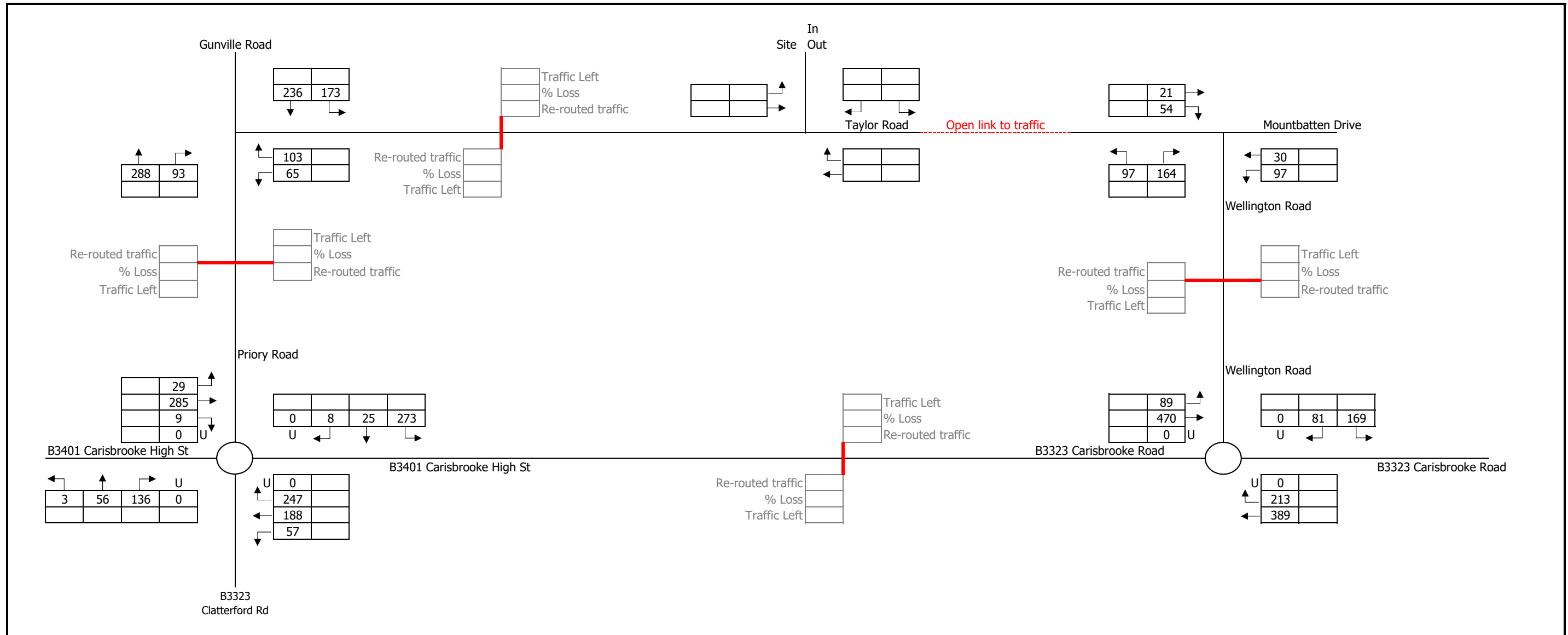
9 Summary

- 9.1 WYG have been appointed by the Isle of Wight (IOW) Council to undertake a feasibility study for a new Link Road to enable development on land at Carisbrooke College, Newport.
- 9.2 Based on traffic survey data collected in December 2019, capacity assessments of four junctions have been undertaken in the vicinity of the proposed Link Road.
- 9.3 A number of assumptions have been made regarding the likely alterations to travel patterns following the introduction of the Link Road, which includes the redistribution of trips already on the network.
- 9.4 Junction models for a 2034 scenario with the Link Road have determined that two junctions (Taylor Road/Gunville Road and Mountbatten Drive/Wellington Road/Link Road) are operating with ample residual capacity.
- 9.5 One junction (Carisbrooke Road/Clatterford Road/Priory Road) is forecast to operate close to capacity with the introduction of the Link Road; however, it has greater capacity than the 2034 'Do Nothing' scenario, as the Link Road diverts traffic away from the northern and eastern arms.
- 9.6 The Wellington Road/Carisbrooke Road roundabout junction is predicted to operate close to capacity in the 2034 'Do Nothing' scenario, and over capacity in the 2034 Link Road scenario.
- 9.7 A review of the junction indicates that the existing pinch-points may make junction improvements difficult to deliver. A minor mitigation scheme has been proposed that would increase capacity and reduce queueing to a level comparable with the 'Do Nothing' scenario.
- 9.8 Should further capacity be required, it may be possible to provide a signalised junction at Carisbrooke Road/Wellington Road, subject to further investigation.



Appendix A

TRAFFIC FLOW DIAGRAMS

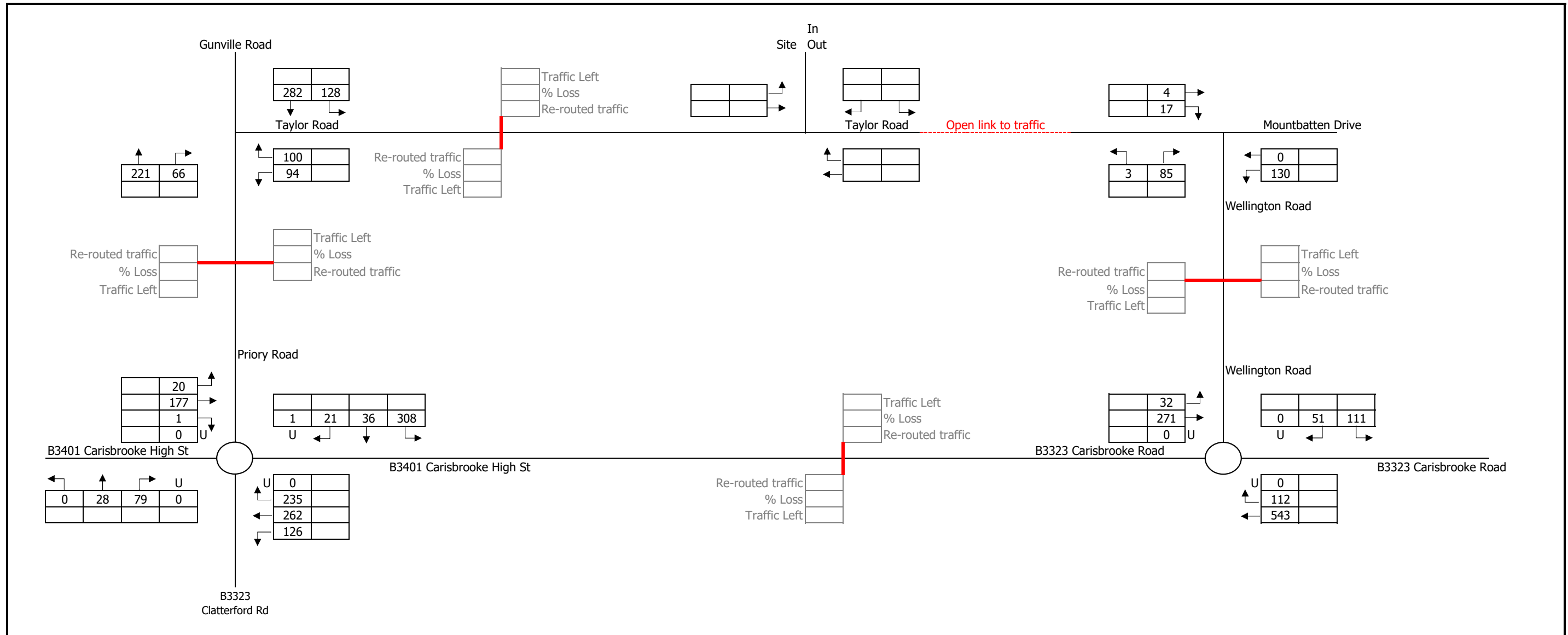


WYG Transport

90 Victoria Street,
Bristol, BS1 6DP
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Client:	Isle of Wight Council
Project:	Carisbrooke College Link Road
Title:	2019 Base - AM
Figure 1	Date: December 2019
	Job No: A090129-99-1

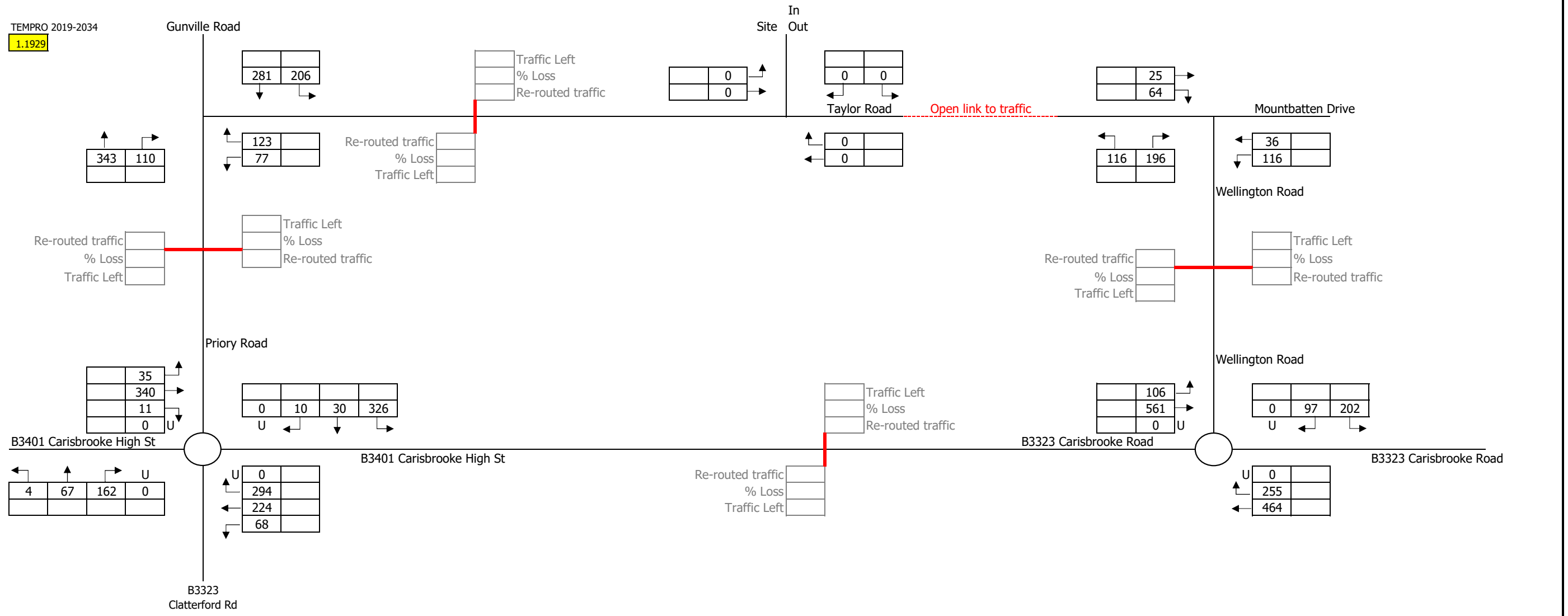


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t:0117 925 4394,
e:transport.bristol@wyg.com



Client:	Isle of Wight Council	
Project:	Carisbrooke College Link Road	
Title:	2019 Base - PM	
Figure 2	Date:	December 2019
	Job No:	A090129-99-1

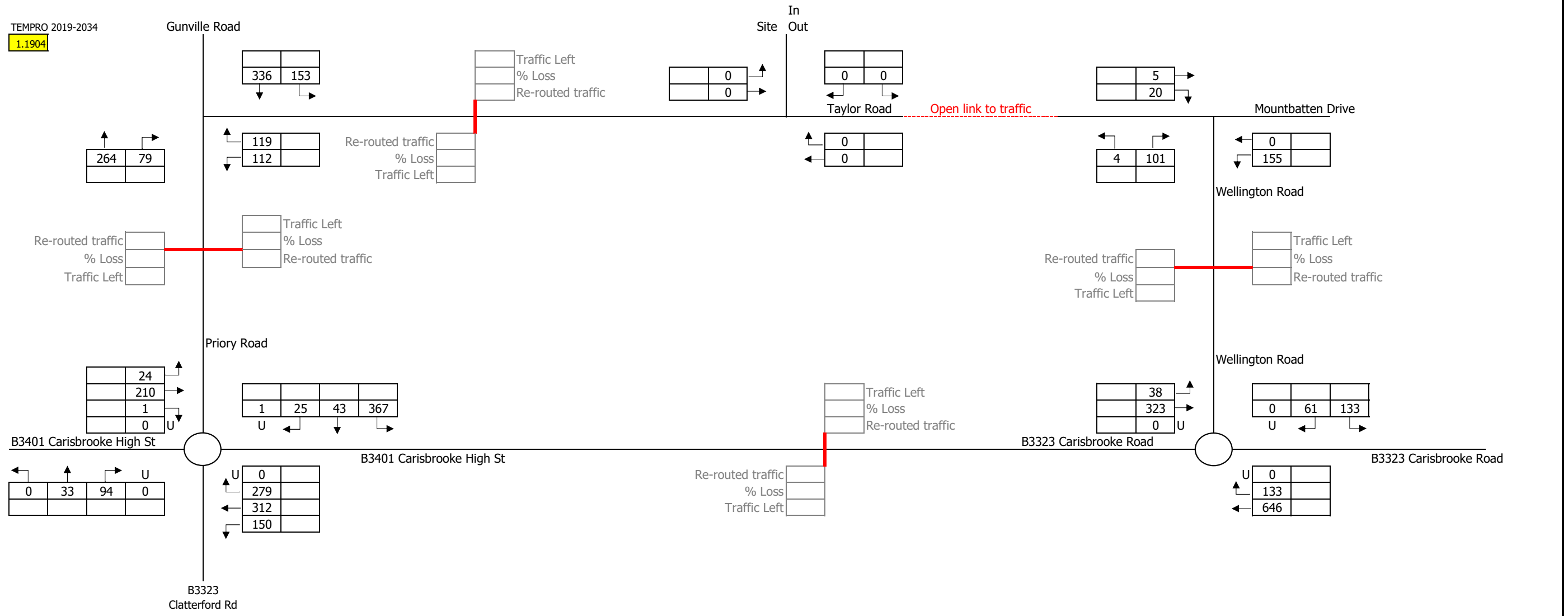


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Client:	Isle of Wight Council	
Project:	Carisbrooke College Link Road	
Title:	2034 Base Traffic - AM	
Figure 3	Date:	December 2019
	Job No:	A090129-99-1

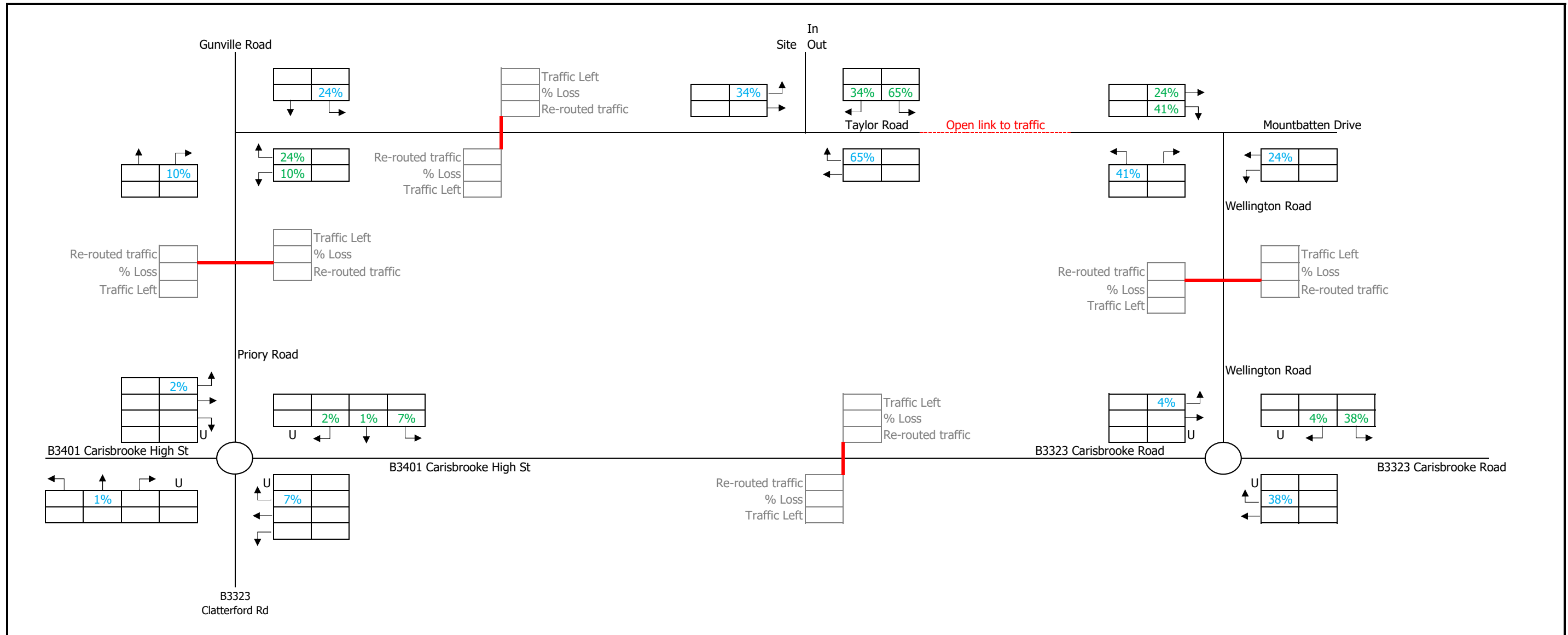


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Client:	Isle of Wight Council
Project:	Carisbrooke College Link Road
Title:	2034 Base Traffic - PM
Figure 4	Date: December 2019
	Job No: A090129-99-1

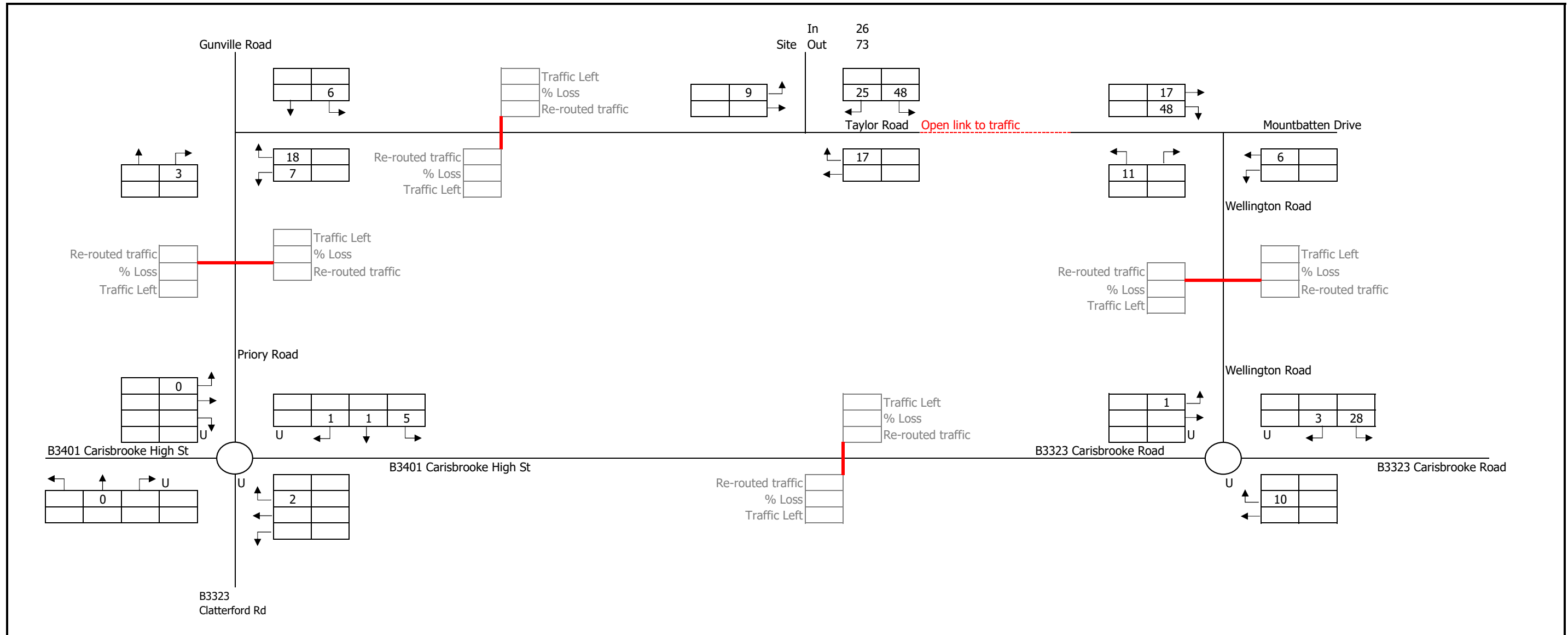


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Client:	Isle of Wight Council	
Project:	Carisbrooke College Link Road	
Title:	Residential Traffic Distribution	
Figure 5	Date:	December 2019
	Job No:	A090129-99-1

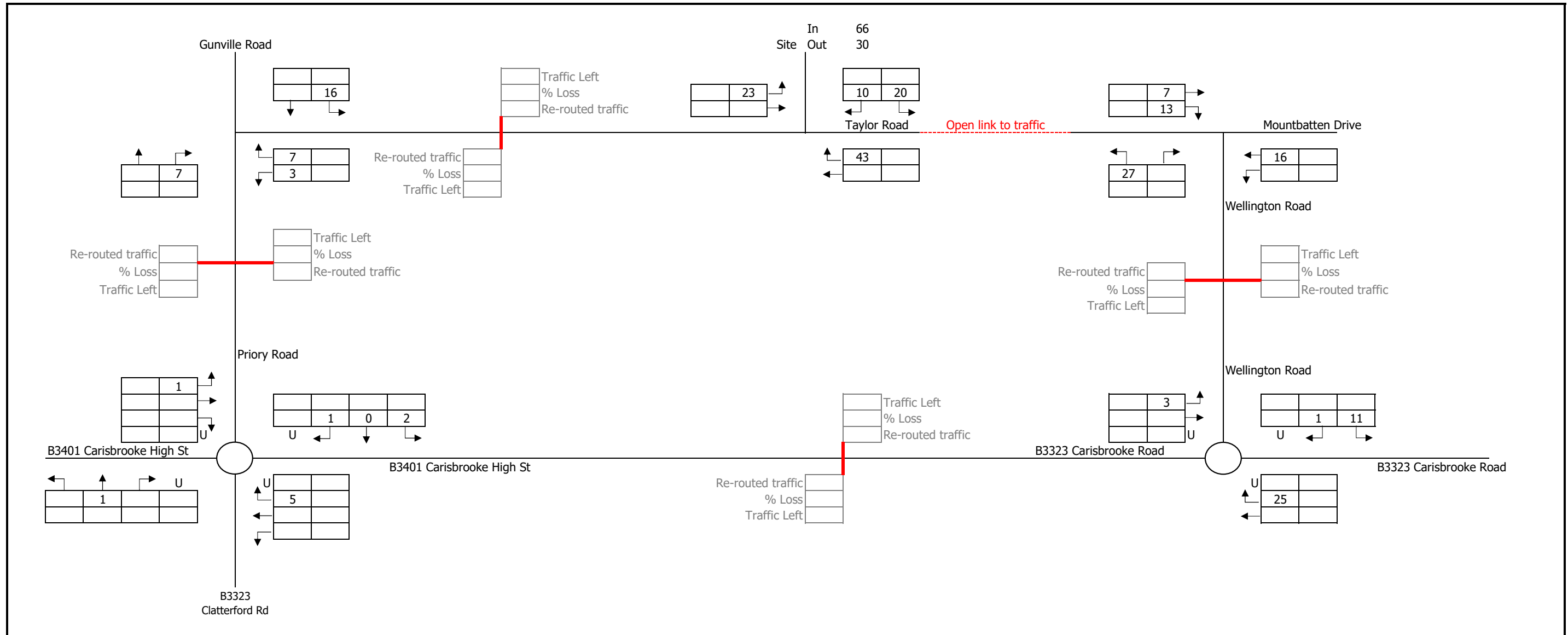


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Client:	Isle of Wight Council
Project:	Carisbrooke College Link Road
Title:	Residential Traffic - AM
Figure 6	Date: December 2019
	Job No: A090129-99-1

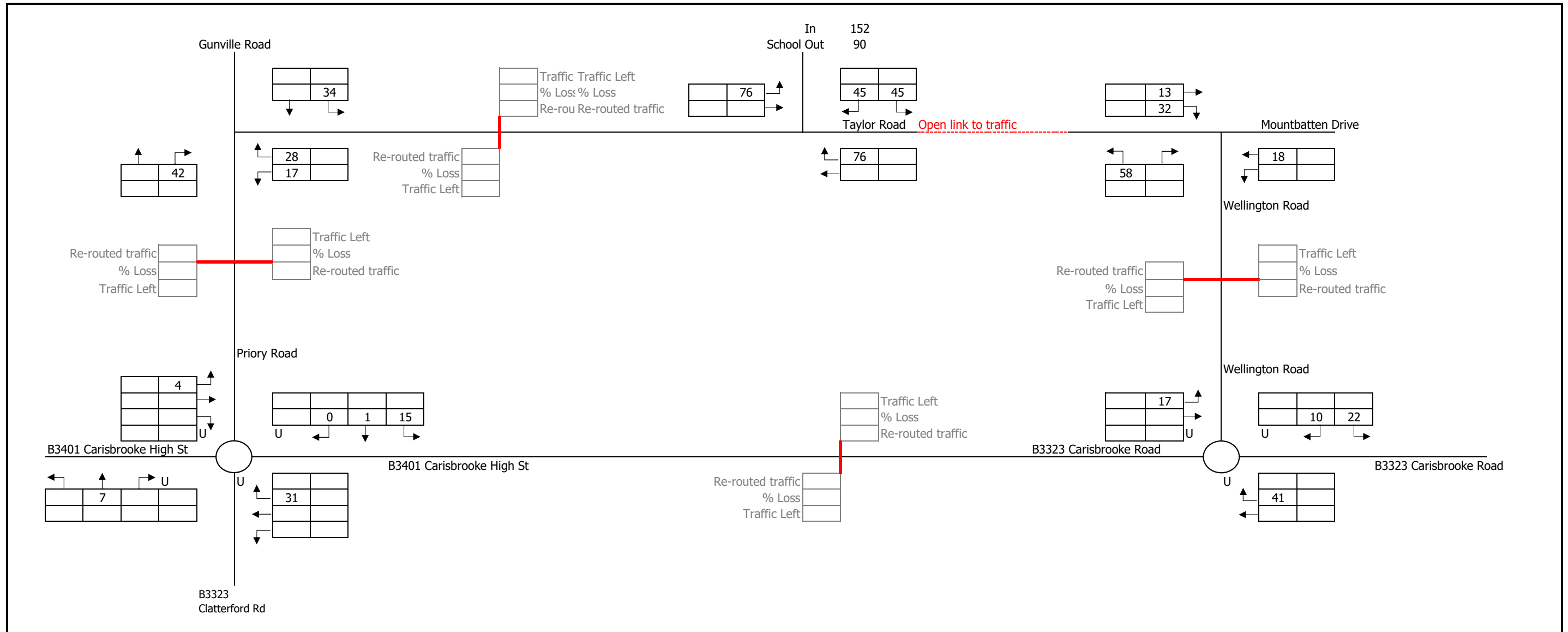


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Client:	Isle of Wight Council
Project:	Carisbrooke College Link Road
Title:	Residential Traffic - PM
Figure 7	Date: December 2019
	Job No: A090129-99-1

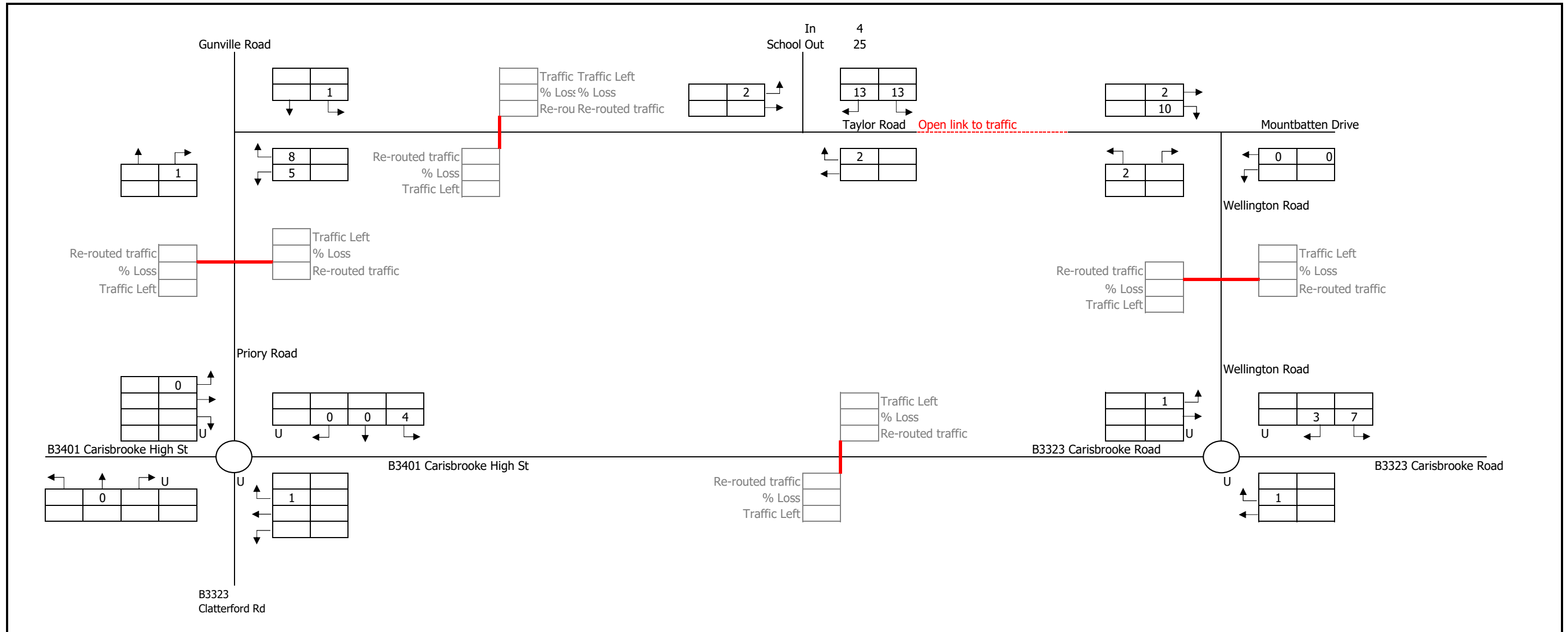


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Client:	Isle of Wight Council	
Project:	Carisbrooke College Link Road	
Title:	Link Road Redistribution - School - AM	
Figure 8	Date:	December 2019
	Job No:	A090129-99-1

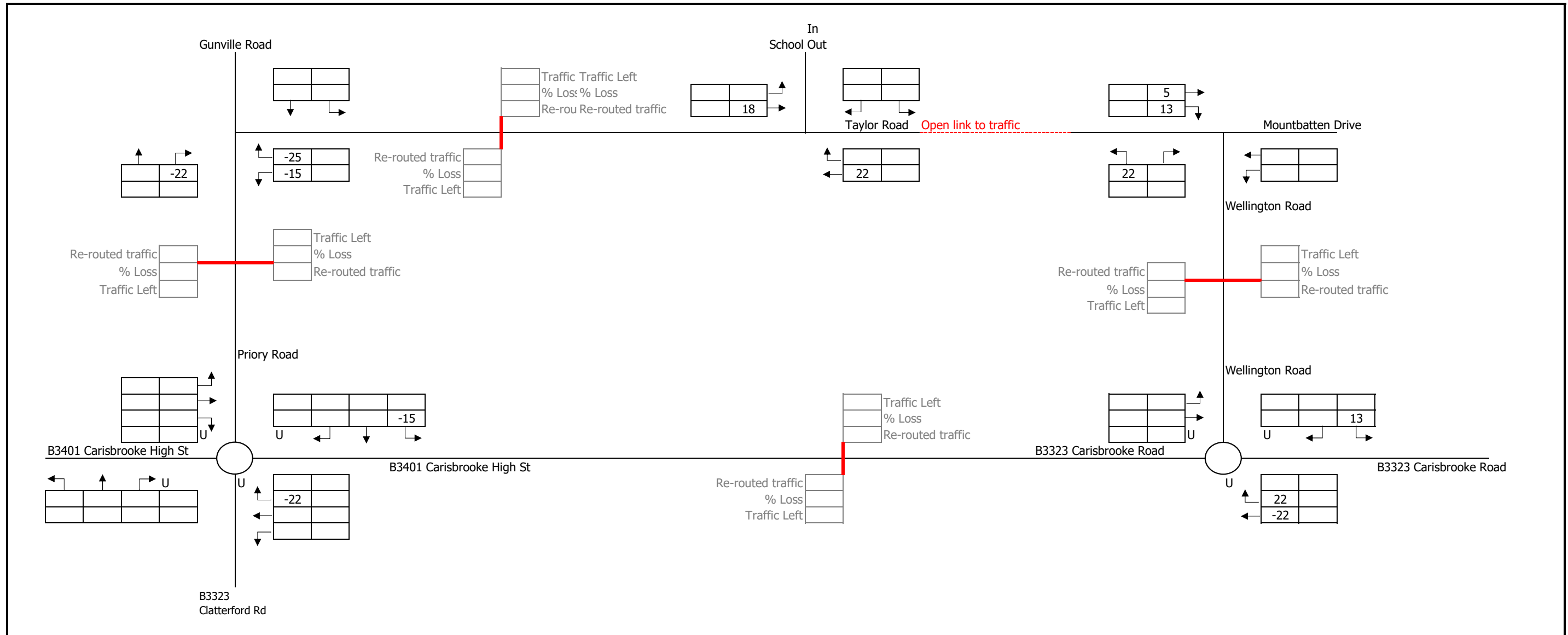


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Client:	Isle of Wight Council
Project:	Carisbrooke College Link Road
Title:	Link Road Redistribution - School - PM
Figure 9	Date: December 2019
	Job No: A090129-99-1

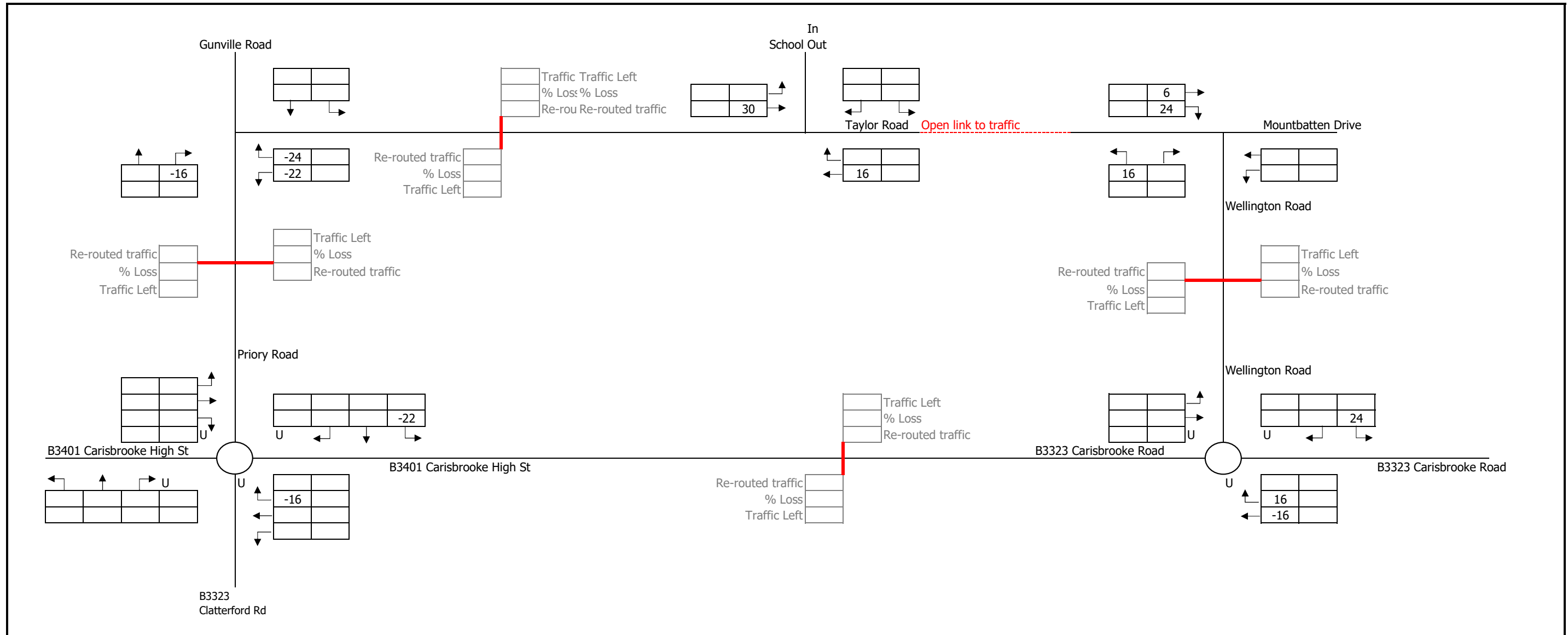


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Client:	Isle of Wight Council	
Project:	Carisbrooke College Link Road	
Title:	Link Road Redistribution - Retail Park - AM	
Figure 10	Date:	December 2019
	Job No:	A090129-99-1

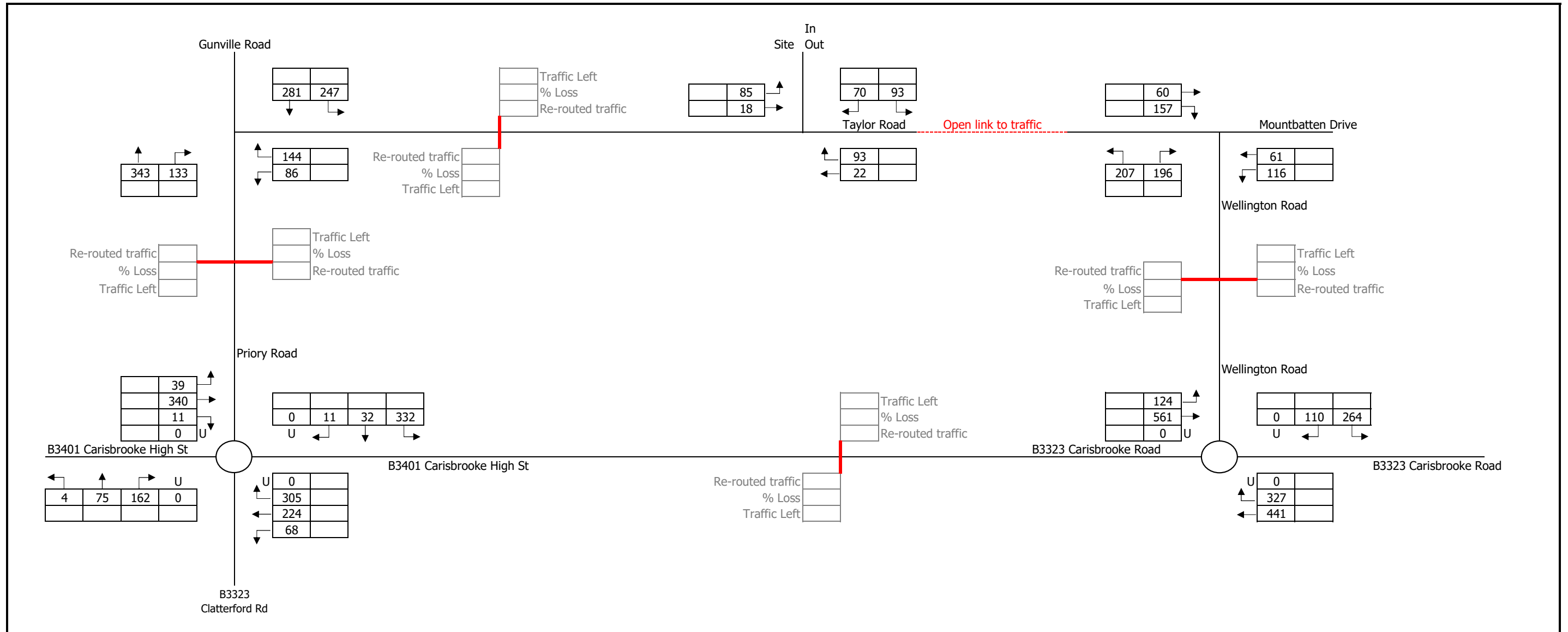


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Client:	Isle of Wight Council	
Project:	Carisbrooke College Link Road	
Title:	Link Road Redistribution - Retail Park - PM	
Figure 11	Date:	December 2019
	Job No:	A090129-99-1

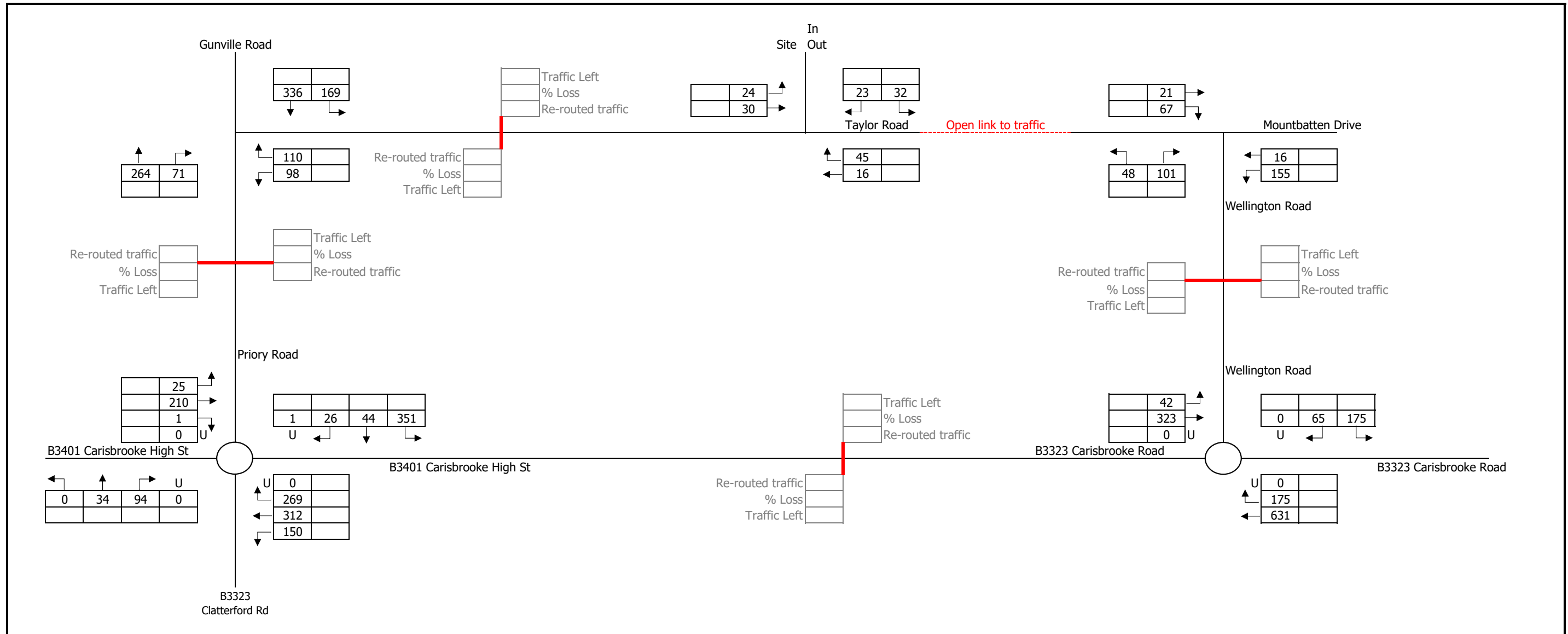


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Client:	Isle of Wight Council
Project:	Carisbrooke College Link Road
Title:	2034 Link Road Scenario - AM
Figure 12	Date: December 2019
	Job No: A090129-99-1



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Client:	Isle of Wight Council
Project:	Carisbrooke College Link Road
Title:	2034 Link Road Scenario - AM
Figure 13	Date: December 2019
	Job No: A090129-99-1



Appendix B

JUNCTION MODELLING OUTPUTS

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
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Filename: A090129-99-1_Gunville Rd -Taylor Rd.j9
Path: X:\2012\A090000\A090129-99-1 Carisbrooke College\30 Technical\31 Modelling
Report generation date: 20/12/2019 16:44:53

- »2019, AM
- »2019, PM
- »2034, AM
- »2034, PM
- »2034 Link Road, AM
- »2034 Link Road, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2019						
Stream B-C	0.1	6.83	0.12	0.2	7.30	0.17
Stream B-A	0.4	13.75	0.30	0.4	13.00	0.28
Stream C-AB	0.5	6.44	0.24	0.3	6.28	0.16
2034						
Stream B-C	0.2	7.74	0.16	0.3	8.39	0.22
Stream B-A	0.6	17.28	0.39	0.6	15.93	0.37
Stream C-AB	0.7	6.85	0.31	0.4	6.47	0.21
2034 Link Road						
Stream B-C	0.2	8.71	0.19	0.2	7.95	0.19
Stream B-A	0.9	20.96	0.48	0.5	15.08	0.34
Stream C-AB	1.0	7.73	0.38	0.4	6.35	0.19

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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	Gunville Road -Taylor Road
Location	
Site number	
Date	12/12/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\clara.evans
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	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
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	Relationship type	Relationship
D1	2019	AM	ONE HOUR	08:00	09:30	15	✓		
D2	2019	PM	ONE HOUR	17:00	18:30	15	✓		
D3	2034	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*1.1929
D4	2034	PM	ONE HOUR	17:00	18:30	15	✓	Simple	D2*1.1904
D5	2034 Link Road	AM	ONE HOUR	08:00	09:30	15	✓		
D6	2034 Link Road	PM	ONE HOUR	17:00	18:30	15	✓		

Analysis Set Details

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

2019, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Taylor Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Gunville Road North		Major
B	Taylor Road		Minor
C	Gunville Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Gunville Road South	7.45			68.7	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Taylor Road	One lane plus flare	9.91	3.77	3.43	3.43	3.43	✓	1.00	21	19

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	534	0.091	0.230	0.145	0.329
1	B-C	757	0.109	0.275	-	-
1	C-B	614	0.223	0.223	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic 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	2019	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gunville Road North		ONE HOUR	✓	409	100.000
B - Taylor Road		ONE HOUR	✓	168	100.000
C - Gunville Road South		ONE HOUR	✓	381	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	173	236
	B - Taylor Road	103	0	65
	C - Gunville Road South	288	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	0	0
	B - Taylor Road	0	0	0
	C - Gunville Road South	0	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-C	0.12	6.83	0.1	A	60	89
B-A	0.30	13.75	0.4	B	95	142
C-AB	0.24	6.44	0.5	A	138	207
C-A					212	318
A-B					159	238
A-C					217	325

Main Results for each time segment

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-C	49	12	659	0.074	49	0.0	0.1	5.893	A
B-A	78	19	426	0.182	77	0.0	0.2	10.270	B
C-AB	102	25	696	0.146	101	0.0	0.2	6.041	A
C-A	185	46			185				
A-B	130	33			130				
A-C	178	44			178				

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-C	58	15	636	0.092	58	0.1	0.1	6.234	A
B-A	93	23	405	0.229	92	0.2	0.3	11.505	B
C-AB	132	33	714	0.184	131	0.2	0.3	6.176	A
C-A	211	53			211				
A-B	156	39			156				
A-C	212	53			212				

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-C	72	18	599	0.119	71	0.1	0.1	6.818	A
B-A	113	28	375	0.302	113	0.3	0.4	13.685	B
C-AB	180	45	740	0.243	179	0.3	0.5	6.424	A
C-A	240	60			240				
A-B	190	48			190				
A-C	260	65			260				

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-C	72	18	599	0.120	72	0.1	0.1	6.826	A
B-A	113	28	375	0.302	113	0.4	0.4	13.747	B
C-AB	180	45	741	0.243	180	0.5	0.5	6.438	A
C-A	239	60			239				
A-B	190	48			190				
A-C	260	65			260				

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-C	58	15	635	0.092	59	0.1	0.1	6.245	A
B-A	93	23	405	0.229	93	0.4	0.3	11.572	B
C-AB	132	33	715	0.184	132	0.5	0.3	6.196	A
C-A	211	53			211				
A-B	156	39			156				
A-C	212	53			212				

09:15 - 09:30

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-C	49	12	659	0.074	49	0.1	0.1	5.908	A
B-A	78	19	426	0.182	78	0.3	0.2	10.352	B
C-AB	102	26	697	0.147	102	0.3	0.2	6.067	A
C-A	185	46			185				
A-B	130	33			130				
A-C	178	44			178				

2019, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Taylor Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2019	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gunville Road North		ONE HOUR	✓	410	100.000
B - Taylor Road		ONE HOUR	✓	194	100.000
C - Gunville Road South		ONE HOUR	✓	287	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	128	282
	B - Taylor Road	100	0	94
	C - Gunville Road South	221	66	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	0	0
	B - Taylor Road	0	0	0
	C - Gunville Road South	0	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-C	0.17	7.30	0.2	A	86	129
B-A	0.28	13.00	0.4	B	92	138
C-AB	0.16	6.28	0.3	A	88	132
C-A					175	263
A-B					117	176
A-C					259	388

Main Results for each time segment

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-C	71	18	656	0.108	70	0.0	0.1	6.146	A
B-A	75	19	435	0.173	74	0.0	0.2	9.963	A
C-AB	66	17	661	0.100	66	0.0	0.2	6.046	A
C-A	150	37			150				
A-B	96	24			96				
A-C	212	53			212				

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-C	85	21	632	0.134	84	0.1	0.2	6.570	A
B-A	90	22	415	0.217	90	0.2	0.3	11.053	B
C-AB	84	21	672	0.126	84	0.2	0.2	6.132	A
C-A	174	43			174				
A-B	115	29			115				
A-C	254	63			254				

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-C	103	26	597	0.173	103	0.2	0.2	7.293	A
B-A	110	28	387	0.284	110	0.3	0.4	12.949	B
C-AB	113	28	687	0.164	112	0.2	0.3	6.266	A
C-A	203	51			203				
A-B	141	35			141				
A-C	310	78			310				

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-C	103	26	596	0.174	103	0.2	0.2	7.305	A
B-A	110	28	387	0.284	110	0.4	0.4	12.995	B
C-AB	113	28	687	0.164	113	0.3	0.3	6.276	A
C-A	203	51			203				
A-B	141	35			141				
A-C	310	78			310				

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-C	85	21	632	0.134	85	0.2	0.2	6.586	A
B-A	90	22	415	0.217	90	0.4	0.3	11.109	B
C-AB	85	21	672	0.126	85	0.3	0.2	6.143	A
C-A	173	43			173				
A-B	115	29			115				
A-C	254	63			254				

18:15 - 18:30

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-C	71	18	655	0.108	71	0.2	0.1	6.167	A
B-A	75	19	435	0.173	76	0.3	0.2	10.032	B
C-AB	67	17	661	0.101	67	0.2	0.2	6.064	A
C-A	149	37			149				
A-B	96	24			96				
A-C	212	53			212				

2034, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Taylor Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	Relationship type	Relationship
D3	2034	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*1.1929

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gunville Road North		ONE HOUR	✓	488	100.000
B - Taylor Road		ONE HOUR	✓	200	100.000
C - Gunville Road South		ONE HOUR	✓	454	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	206	282
	B - Taylor Road	123	0	78
	C - Gunville Road South	344	111	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	0	0
	B - Taylor Road	0	0	0
	C - Gunville Road South	0	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-C	0.16	7.74	0.2	A	71	107
B-A	0.39	17.28	0.6	C	113	169
C-AB	0.31	6.85	0.7	A	182	273
C-A					235	353
A-B					189	284
A-C					258	387

Main Results for each time segment

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-C	58	15	637	0.092	58	0.0	0.1	6.218	A
B-A	93	23	405	0.228	91	0.0	0.3	11.424	B
C-AB	131	33	714	0.183	130	0.0	0.3	6.155	A
C-A	211	53			211				
A-B	155	39			155				
A-C	212	53			212				

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-C	70	17	605	0.115	70	0.1	0.1	6.723	A
B-A	110	28	380	0.291	110	0.3	0.4	13.332	B
C-AB	172	43	737	0.234	172	0.3	0.5	6.381	A
C-A	236	59			236				
A-B	186	46			186				
A-C	253	63			253				

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-C	85	21	552	0.155	85	0.1	0.2	7.715	A
B-A	135	34	344	0.394	134	0.4	0.6	17.115	C
C-AB	242	60	769	0.314	241	0.5	0.7	6.825	A
C-A	259	65			259				
A-B	227	57			227				
A-C	310	77			310				

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-C	85	21	550	0.155	85	0.2	0.2	7.740	A
B-A	135	34	343	0.394	135	0.6	0.6	17.277	C
C-AB	242	61	770	0.315	242	0.7	0.7	6.855	A
C-A	258	65			258				
A-B	227	57			227				
A-C	310	77			310				

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-C	70	17	604	0.115	70	0.2	0.1	6.749	A
B-A	110	28	379	0.291	111	0.6	0.4	13.484	B
C-AB	173	43	737	0.235	174	0.7	0.5	6.418	A
C-A	236	59			236				
A-B	186	46			186				
A-C	253	63			253				

09:15 - 09:30

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-C	58	15	635	0.092	58	0.1	0.1	6.240	A
B-A	93	23	405	0.229	93	0.4	0.3	11.561	B
C-AB	132	33	715	0.184	132	0.5	0.3	6.197	A
C-A	211	53			211				
A-B	155	39			155				
A-C	212	53			212				

2034, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Taylor Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	Relationship type	Relationship
D4	2034	PM	ONE HOUR	17:00	18:30	15	✓	Simple	D2*1.1904

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gunville Road North		ONE HOUR	✓	488	100.000
B - Taylor Road		ONE HOUR	✓	231	100.000
C - Gunville Road South		ONE HOUR	✓	342	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	152	336
	B - Taylor Road	119	0	112
	C - Gunville Road South	263	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	0	0
	B - Taylor Road	0	0	0
	C - Gunville Road South	0	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-C	0.22	8.39	0.3	A	103	154
B-A	0.37	15.93	0.6	C	109	164
C-AB	0.21	6.47	0.4	A	113	170
C-A					200	300
A-B					140	210
A-C					308	462

Main Results for each time segment

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-C	84	21	633	0.133	84	0.0	0.2	6.545	A
B-A	90	22	416	0.216	89	0.0	0.3	10.970	B
C-AB	84	21	671	0.125	83	0.0	0.2	6.116	A
C-A	173	43			173				
A-B	115	29			115				
A-C	253	63			253				

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-C	101	25	602	0.167	100	0.2	0.2	7.170	A
B-A	107	27	391	0.273	107	0.3	0.4	12.620	B
C-AB	108	27	685	0.158	108	0.2	0.3	6.243	A
C-A	199	50			199				
A-B	137	34			137				
A-C	302	75			302				

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-C	123	31	553	0.223	123	0.2	0.3	8.364	A
B-A	131	33	357	0.367	130	0.4	0.6	15.813	C
C-AB	147	37	704	0.209	147	0.3	0.4	6.463	A
C-A	229	57			229				
A-B	168	42			168				
A-C	370	92			370				

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-C	123	31	552	0.223	123	0.3	0.3	8.394	A
B-A	131	33	357	0.367	131	0.6	0.6	15.929	C
C-AB	148	37	705	0.210	148	0.4	0.4	6.475	A
C-A	229	57			229				
A-B	168	42			168				
A-C	370	92			370				

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-C	101	25	601	0.167	101	0.3	0.2	7.196	A
B-A	107	27	391	0.274	108	0.6	0.4	12.734	B
C-AB	108	27	685	0.158	109	0.4	0.3	6.262	A
C-A	199	50			199				
A-B	137	34			137				
A-C	302	75			302				

18:15 - 18:30

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-C	84	21	632	0.133	84	0.2	0.2	6.576	A
B-A	90	22	415	0.216	90	0.4	0.3	11.082	B
C-AB	84	21	672	0.125	85	0.3	0.2	6.138	A
C-A	173	43			173				
A-B	115	29			115				
A-C	253	63			253				

2034 Link Road, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Taylor Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2034 Link Road	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gunville Road North		ONE HOUR	✓	528	100.000
B - Taylor Road		ONE HOUR	✓	230	100.000
C - Gunville Road South		ONE HOUR	✓	476	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	247	281
	B - Taylor Road	144	0	86
	C - Gunville Road South	343	133	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	0	0
	B - Taylor Road	0	0	0
	C - Gunville Road South	0	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-C	0.19	8.71	0.2	A	79	118
B-A	0.48	20.96	0.9	C	132	198
C-AB	0.38	7.73	1.0	A	220	330
C-A					217	326
A-B					227	340
A-C					258	387

Main Results for each time segment

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-C	65	16	621	0.104	64	0.0	0.1	6.456	A
B-A	108	27	397	0.273	107	0.0	0.4	12.355	B
C-AB	158	39	708	0.223	156	0.0	0.4	6.513	A
C-A	201	50			201				
A-B	186	46			186				
A-C	212	53			212				

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-C	77	19	582	0.133	77	0.1	0.2	7.133	A
B-A	129	32	369	0.351	129	0.4	0.5	14.937	B
C-AB	208	52	730	0.285	207	0.4	0.6	6.902	A
C-A	220	55			220				
A-B	222	56			222				
A-C	253	63			253				

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-C	95	24	510	0.186	94	0.2	0.2	8.651	A
B-A	159	40	330	0.480	157	0.5	0.9	20.601	C
C-AB	292	73	761	0.384	291	0.6	1.0	7.678	A
C-A	232	58			232				
A-B	272	68			272				
A-C	309	77			309				

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-C	95	24	508	0.186	95	0.2	0.2	8.712	A
B-A	159	40	330	0.480	158	0.9	0.9	20.963	C
C-AB	293	73	762	0.385	293	1.0	1.0	7.726	A
C-A	231	58			231				
A-B	272	68			272				
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-C	77	19	579	0.133	78	0.2	0.2	7.179	A
B-A	129	32	369	0.351	131	0.9	0.6	15.231	C
C-AB	209	52	731	0.286	210	1.0	0.6	6.956	A
C-A	219	55			219				
A-B	222	56			222				
A-C	253	63			253				

09:15 - 09:30

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-C	65	16	620	0.104	65	0.2	0.1	6.490	A
B-A	108	27	396	0.274	109	0.6	0.4	12.566	B
C-AB	158	40	709	0.224	159	0.6	0.4	6.571	A
C-A	200	50			200				
A-B	186	46			186				
A-C	212	53			212				

2034 Link Road, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Taylor Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2034 Link Road	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gunville Road North		ONE HOUR	✓	505	100.000
B - Taylor Road		ONE HOUR	✓	208	100.000
C - Gunville Road South		ONE HOUR	✓	335	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	169	336
	B - Taylor Road	110	0	98
	C - Gunville Road South	264	71	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gunville Road North	B - Taylor Road	C - Gunville Road South
From	A - Gunville Road North	0	0	0
	B - Taylor Road	0	0	0
	C - Gunville Road South	0	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-C	0.19	7.95	0.2	A	90	135
B-A	0.34	15.08	0.5	C	101	151
C-AB	0.19	6.35	0.4	A	103	154
C-A					205	307
A-B					155	233
A-C					308	462

Main Results for each time segment

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-C	74	18	636	0.116	73	0.0	0.1	6.393	A
B-A	83	21	417	0.199	82	0.0	0.2	10.719	B
C-AB	76	19	669	0.114	75	0.0	0.2	6.056	A
C-A	176	44			176				
A-B	127	32			127				
A-C	253	63			253				

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-C	88	22	607	0.145	88	0.1	0.2	6.934	A
B-A	99	25	393	0.252	99	0.2	0.3	12.207	B
C-AB	98	25	683	0.144	98	0.2	0.3	6.160	A
C-A	203	51			203				
A-B	152	38			152				
A-C	302	75			302				

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-C	108	27	562	0.192	108	0.2	0.2	7.926	A
B-A	121	30	360	0.337	120	0.3	0.5	14.997	B
C-AB	134	33	702	0.191	133	0.3	0.4	6.343	A
C-A	235	59			235				
A-B	186	47			186				
A-C	370	92			370				

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-C	108	27	561	0.192	108	0.2	0.2	7.947	A
B-A	121	30	360	0.337	121	0.5	0.5	15.082	C
C-AB	134	34	702	0.191	134	0.4	0.4	6.353	A
C-A	235	59			235				
A-B	186	47			186				
A-C	370	92			370				

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-C	88	22	606	0.145	88	0.2	0.2	6.956	A
B-A	99	25	393	0.252	100	0.5	0.3	12.298	B
C-AB	98	25	683	0.144	99	0.4	0.3	6.177	A
C-A	203	51			203				
A-B	152	38			152				
A-C	302	75			302				

18:15 - 18:30

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-C	74	18	635	0.116	74	0.2	0.1	6.418	A
B-A	83	21	416	0.199	83	0.3	0.3	10.816	B
C-AB	76	19	670	0.114	77	0.3	0.2	6.076	A
C-A	176	44			176				
A-B	127	32			127				
A-C	253	63			253				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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Filename: A090129-99-1_Wellington Rd-Mountbatten Drive.j9
Path: X:\2012\A090000\A090129-99-1 Carisbrooke College\30 Technical\31 Modelling
Report generation date: 20/12/2019 16:49:44

- »2019, AM
- »2019, PM
- »2034, AM
- »2034, PM
- »2034 Link Road, AM
- »2034 Link Road, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2019						
Stream B-C	0.1	8.00	0.05	0.0	7.49	0.01
Stream B-A	0.1	9.12	0.13	0.0	7.32	0.04
Stream C-AB	0.1	6.23	0.06	0.0	0.00	0.00
2034						
Stream B-C	0.1	8.32	0.06	0.0	7.57	0.01
Stream B-A	0.2	9.80	0.16	0.0	7.50	0.04
Stream C-AB	0.1	6.31	0.08	0.0	0.00	0.00
2034 Link Road						
Stream B-C	0.2	10.92	0.17	0.1	7.95	0.05
Stream B-A	0.7	14.78	0.42	0.2	8.85	0.15
Stream C-AB	0.2	7.01	0.14	0.0	5.56	0.03

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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	(untitled)
Location	
Site number	
Date	12/12/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\clara.evans
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
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	Relationship type	Relationship
D1	2019	AM	ONE HOUR	08:00	09:30	15	✓		
D2	2019	PM	ONE HOUR	17:00	18:30	15	✓		
D3	2034	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*1.1929
D4	2034	PM	ONE HOUR	17:00	18:30	15	✓	Simple	D2*1.1904
D5	2034 Link Road	AM	ONE HOUR	08:00	09:30	15	✓		
D6	2034 Link Road	PM	ONE HOUR	17:00	18:30	15	✓		

Analysis Set Details

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

2019, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Wellington Road		Major
B	Mountbatten Drive West		Minor
C	Mountbatten Drive East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Mountbatten Drive East	6.63			60.8	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Mountbatten Drive West	One lane plus flare	4.99	4.49	4.04	3.71	3.53	✓	1.00	66	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	535	0.095	0.240	0.151	0.342
1	B-C	535	0.080	0.202	-	-
1	C-B	609	0.230	0.230	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic 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	2019	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wellington Road		ONE HOUR	✓	261	100.000
B - Mountbatten Drive West		ONE HOUR	✓	75	100.000
C - Mountbatten Drive East		ONE HOUR	✓	127	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	97	164
	B - Mountbatten Drive West	54	0	21
	C - Mountbatten Drive East	97	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	0	0
	B - Mountbatten Drive West	0	0	0
	C - Mountbatten Drive East	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	8.00	0.1	A	19	29
B-A	0.13	9.12	0.1	A	50	74
C-AB	0.06	6.23	0.1	A	32	49
C-A					84	126
A-B					89	134
A-C					150	226

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	493	0.032	16	0.0	0.0	7.532	A
B-A	41	10	480	0.085	40	0.0	0.1	8.186	A
C-AB	26	6	614	0.042	25	0.0	0.1	6.113	A
C-A	70	17			70				
A-B	73	18			73				
A-C	123	31			123				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	485	0.039	19	0.0	0.0	7.723	A
B-A	49	12	469	0.104	48	0.1	0.1	8.560	A
C-AB	31	8	616	0.051	31	0.1	0.1	6.161	A
C-A	83	21			83				
A-B	87	22			87				
A-C	147	37			147				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	473	0.049	23	0.0	0.1	7.999	A
B-A	59	15	454	0.131	59	0.1	0.1	9.118	A
C-AB	40	10	618	0.065	40	0.1	0.1	6.229	A
C-A	100	25			100				
A-B	107	27			107				
A-C	181	45			181				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	473	0.049	23	0.1	0.1	8.002	A
B-A	59	15	454	0.131	59	0.1	0.1	9.123	A
C-AB	40	10	618	0.065	40	0.1	0.1	6.233	A
C-A	100	25			100				
A-B	107	27			107				
A-C	181	45			181				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	485	0.039	19	0.1	0.0	7.727	A
B-A	49	12	469	0.104	49	0.1	0.1	8.570	A
C-AB	31	8	616	0.051	32	0.1	0.1	6.167	A
C-A	83	21			83				
A-B	87	22			87				
A-C	147	37			147				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	493	0.032	16	0.0	0.0	7.539	A
B-A	41	10	480	0.085	41	0.1	0.1	8.203	A
C-AB	26	6	614	0.042	26	0.1	0.1	6.120	A
C-A	70	17			70				
A-B	73	18			73				
A-C	123	31			123				

2019, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2019	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wellington Road		ONE HOUR	✓	88	100.000
B - Mountbatten Drive West		ONE HOUR	✓	21	100.000
C - Mountbatten Drive East		ONE HOUR	✓	130	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	3	85
	B - Mountbatten Drive West	17	0	4
	C - Mountbatten Drive East	130	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	0	0
	B - Mountbatten Drive West	0	0	0
	C - Mountbatten Drive East	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.49	0.0	A	4	6
B-A	0.04	7.32	0.0	A	16	23
C-AB	0.00	0.00	0.0	A	0	0
C-A					119	179
A-B					3	4
A-C					78	117

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.75	492	0.006	3	0.0	0.0	7.354	A
B-A	13	3	525	0.024	13	0.0	0.0	7.023	A
C-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
C-A	98	24			98				
A-B	2	0.56			2				
A-C	64	16			64				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.90	489	0.007	4	0.0	0.0	7.409	A
B-A	15	4	519	0.029	15	0.0	0.0	7.143	A
C-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
C-A	117	29			117				
A-B	3	0.67			3				
A-C	76	19			76				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	485	0.009	4	0.0	0.0	7.487	A
B-A	19	5	511	0.037	19	0.0	0.0	7.316	A
C-AB	0	0	587	0.000	0	0.0	0.0	0.000	A
C-A	143	36			143				
A-B	3	0.83			3				
A-C	94	23			94				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	485	0.009	4	0.0	0.0	7.487	A
B-A	19	5	511	0.037	19	0.0	0.0	7.316	A
C-AB	0	0	587	0.000	0	0.0	0.0	0.000	A
C-A	143	36			143				
A-B	3	0.83			3				
A-C	94	23			94				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.90	489	0.007	4	0.0	0.0	7.413	A
B-A	15	4	519	0.029	15	0.0	0.0	7.144	A
C-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
C-A	117	29			117				
A-B	3	0.67			3				
A-C	76	19			76				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.75	492	0.006	3	0.0	0.0	7.358	A
B-A	13	3	525	0.024	13	0.0	0.0	7.027	A
C-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
C-A	98	24			98				
A-B	2	0.56			2				
A-C	64	16			64				

2034, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	Relationship type	Relationship
D3	2034	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*1.1929

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wellington Road		ONE HOUR	✓	311	100.000
B - Mountbatten Drive West		ONE HOUR	✓	89	100.000
C - Mountbatten Drive East		ONE HOUR	✓	151	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	116	196
	B - Mountbatten Drive West	64	0	25
	C - Mountbatten Drive East	116	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	0	0
	B - Mountbatten Drive West	0	0	0
	C - Mountbatten Drive East	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	8.32	0.1	A	23	34
B-A	0.16	9.80	0.2	A	59	89
C-AB	0.08	6.31	0.1	A	40	60
C-A					99	149
A-B					106	159
A-C					180	269

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	485	0.039	19	0.0	0.0	7.715	A
B-A	48	12	469	0.103	48	0.0	0.1	8.543	A
C-AB	31	8	616	0.051	31	0.0	0.1	6.158	A
C-A	83	21			83				
A-B	87	22			87				
A-C	147	37			147				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	475	0.047	22	0.0	0.0	7.960	A
B-A	58	14	456	0.127	58	0.1	0.1	9.034	A
C-AB	39	10	617	0.063	39	0.1	0.1	6.219	A
C-A	97	24			97				
A-B	104	26			104				
A-C	176	44			176				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	7	460	0.060	28	0.0	0.1	8.321	A
B-A	71	18	438	0.162	71	0.1	0.2	9.788	A
C-AB	50	12	620	0.080	50	0.1	0.1	6.307	A
C-A	117	29			117				
A-B	127	32			127				
A-C	215	54			215				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	7	460	0.060	28	0.1	0.1	8.324	A
B-A	71	18	438	0.162	71	0.2	0.2	9.798	A
C-AB	50	12	620	0.080	50	0.1	0.1	6.309	A
C-A	117	29			117				
A-B	127	32			127				
A-C	215	54			215				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	475	0.047	23	0.1	0.1	7.966	A
B-A	58	14	456	0.127	58	0.2	0.1	9.048	A
C-AB	39	10	618	0.063	39	0.1	0.1	6.226	A
C-A	97	24			97				
A-B	104	26			104				
A-C	176	44			176				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	485	0.039	19	0.1	0.0	7.725	A
B-A	48	12	469	0.103	49	0.1	0.1	8.566	A
C-AB	31	8	616	0.051	32	0.1	0.1	6.166	A
C-A	83	21			83				
A-B	87	22			87				
A-C	147	37			147				

2034, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	Relationship type	Relationship
D4	2034	PM	ONE HOUR	17:00	18:30	15	✓	Simple	D2*1.1904

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wellington Road		ONE HOUR	✓	105	100.000
B - Mountbatten Drive West		ONE HOUR	✓	25	100.000
C - Mountbatten Drive East		ONE HOUR	✓	155	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	4	101
	B - Mountbatten Drive West	20	0	5
	C - Mountbatten Drive East	155	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	0	0
	B - Mountbatten Drive West	0	0	0
	C - Mountbatten Drive East	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.57	0.0	A	4	7
B-A	0.04	7.50	0.0	A	19	28
C-AB	0.00	0.00	0.0	A	0	0
C-A					142	213
A-B					3	5
A-C					93	139

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.90	489	0.007	4	0.0	0.0	7.408	A
B-A	15	4	519	0.029	15	0.0	0.0	7.138	A
C-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
C-A	117	29			117				
A-B	3	0.67			3				
A-C	76	19			76				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	486	0.009	4	0.0	0.0	7.475	A
B-A	18	5	512	0.036	18	0.0	0.0	7.289	A
C-AB	0	0	588	0.000	0	0.0	0.0	0.000	A
C-A	139	35			139				
A-B	3	0.80			3				
A-C	91	23			91				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	481	0.011	5	0.0	0.0	7.569	A
B-A	22	6	502	0.044	22	0.0	0.0	7.504	A
C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
C-A	170	43			170				
A-B	4	0.98			4				
A-C	111	28			111				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	481	0.011	5	0.0	0.0	7.569	A
B-A	22	6	502	0.044	22	0.0	0.0	7.504	A
C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
C-A	170	43			170				
A-B	4	0.98			4				
A-C	111	28			111				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	486	0.009	4	0.0	0.0	7.475	A
B-A	18	5	512	0.036	18	0.0	0.0	7.290	A
C-AB	0	0	588	0.000	0	0.0	0.0	0.000	A
C-A	139	35			139				
A-B	3	0.80			3				
A-C	91	23			91				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.90	489	0.007	4	0.0	0.0	7.412	A
B-A	15	4	519	0.029	15	0.0	0.0	7.145	A
C-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
C-A	117	29			117				
A-B	3	0.67			3				
A-C	76	19			76				

2034 Link Road, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2034 Link Road	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wellington Road		ONE HOUR	✓	403	100.000
B - Mountbatten Drive West		ONE HOUR	✓	217	100.000
C - Mountbatten Drive East		ONE HOUR	✓	177	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	207	196
	B - Mountbatten Drive West	157	0	60
	C - Mountbatten Drive East	116	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	0	0
	B - Mountbatten Drive West	0	0	0
	C - Mountbatten Drive East	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.17	10.92	0.2	B	55	83
B-A	0.42	14.78	0.7	B	144	216
C-AB	0.14	7.01	0.2	A	69	103
C-A					94	140
A-B					190	285
A-C					180	269

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	45	11	453	0.100	45	0.0	0.1	8.806	A
B-A	118	30	456	0.259	117	0.0	0.3	10.579	B
C-AB	54	13	601	0.089	53	0.0	0.1	6.574	A
C-A	79	20			79				
A-B	156	39			156				
A-C	147	37			147				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	54	13	432	0.125	54	0.1	0.1	9.528	A
B-A	141	35	440	0.321	141	0.3	0.5	12.027	B
C-AB	66	17	600	0.111	66	0.1	0.2	6.749	A
C-A	92	23			92				
A-B	186	47			186				
A-C	176	44			176				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	66	17	396	0.167	66	0.1	0.2	10.880	B
B-A	173	43	416	0.415	172	0.5	0.7	14.675	B
C-AB	85	21	599	0.143	85	0.2	0.2	7.009	A
C-A	109	27			109				
A-B	228	57			228				
A-C	215	54			215				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	66	17	396	0.167	66	0.2	0.2	10.920	B
B-A	173	43	416	0.415	173	0.7	0.7	14.781	B
C-AB	85	21	599	0.143	85	0.2	0.2	7.013	A
C-A	109	27			109				
A-B	228	57			228				
A-C	215	54			215				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	54	13	431	0.125	54	0.2	0.1	9.570	A
B-A	141	35	439	0.321	142	0.7	0.5	12.139	B
C-AB	66	17	600	0.111	67	0.2	0.2	6.757	A
C-A	92	23			92				
A-B	186	47			186				
A-C	176	44			176				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	45	11	452	0.100	45	0.1	0.1	8.853	A
B-A	118	30	456	0.259	119	0.5	0.4	10.700	B
C-AB	54	13	601	0.090	54	0.2	0.1	6.587	A
C-A	79	20			79				
A-B	156	39			156				
A-C	147	37			147				

2034 Link Road, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2034 Link Road	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wellington Road		ONE HOUR	✓	149	100.000
B - Mountbatten Drive West		ONE HOUR	✓	88	100.000
C - Mountbatten Drive East		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	48	101
	B - Mountbatten Drive West	67	0	21
	C - Mountbatten Drive East	155	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wellington Road	B - Mountbatten Drive West	C - Mountbatten Drive East
From	A - Wellington Road	0	0	0
	B - Mountbatten Drive West	0	0	0
	C - Mountbatten Drive East	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	7.95	0.1	A	19	29
B-A	0.15	8.85	0.2	A	61	92
C-AB	0.03	5.56	0.0	A	19	28
C-A					138	207
A-B					44	66
A-C					93	139

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	492	0.032	16	0.0	0.0	7.562	A
B-A	50	13	501	0.101	50	0.0	0.1	7.979	A
C-AB	15	4	662	0.022	15	0.0	0.0	5.559	A
C-A	114	28			114				
A-B	36	9			36				
A-C	76	19			76				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	485	0.039	19	0.0	0.0	7.722	A
B-A	60	15	492	0.122	60	0.1	0.1	8.330	A
C-AB	18	5	673	0.027	18	0.0	0.0	5.498	A
C-A	135	34			135				
A-B	43	11			43				
A-C	91	23			91				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	476	0.049	23	0.0	0.1	7.953	A
B-A	74	18	480	0.154	74	0.1	0.2	8.848	A
C-AB	23	6	688	0.034	23	0.0	0.0	5.418	A
C-A	165	41			165				
A-B	53	13			53				
A-C	111	28			111				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	476	0.049	23	0.1	0.1	7.955	A
B-A	74	18	480	0.154	74	0.2	0.2	8.855	A
C-AB	23	6	688	0.034	23	0.0	0.0	5.419	A
C-A	165	41			165				
A-B	53	13			53				
A-C	111	28			111				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	485	0.039	19	0.1	0.0	7.727	A
B-A	60	15	492	0.122	60	0.2	0.1	8.340	A
C-AB	18	5	673	0.027	18	0.0	0.0	5.499	A
C-A	135	34			135				
A-B	43	11			43				
A-C	91	23			91				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	491	0.032	16	0.0	0.0	7.569	A
B-A	50	13	501	0.101	51	0.1	0.1	7.996	A
C-AB	15	4	662	0.022	15	0.0	0.0	5.562	A
C-A	114	28			114				
A-B	36	9			36				
A-C	76	19			76				

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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Filename: A090129-99-1_Wellington Rd-Carisbrook Rd Mini Rbt.j9
Path: X:\2012\A090000\A090129-99-1 Carisbrooke College\30 Technical\31 Modelling
Report generation date: 20/12/2019 17:11:34

- »2019, AM
- »2019, PM
- »2034, AM
- »2034, PM
- »2034 Link Road, AM
- »2034 Link Road, PM

Summary of junction performance

	AM		PM	
	Queue (Veh)	RFC	Queue (Veh)	RFC
2019				
1 - Carisbrooke Road North	2.2	0.69	2.7	0.74
2 - Carisbrooke Road South	2.8	0.75	0.6	0.37
3 - Wellington Road	0.7	0.43	0.3	0.23
2034				
1 - Carisbrooke Road North	4.7	0.83	6.6	0.88
2 - Carisbrooke Road South	9.0	0.92	0.8	0.45
3 - Wellington Road	1.3	0.57	0.4	0.29
2034 Link Road				
1 - Carisbrooke Road North	7.7	0.90	8.7	0.91
2 - Carisbrooke Road South	20.8	1.01	0.9	0.47
3 - Wellington Road	2.2	0.70	0.5	0.36

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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	(untitled)
Location	
Site number	
Date	11/12/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\clara.evans
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	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	Relationship type	Relationship
D1	2019	AM	ONE HOUR	08:00	09:30	15	✓		
D2	2019	PM	ONE HOUR	17:00	18:30	15	✓		
D3	2034	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*1.1929
D4	2034	PM	ONE HOUR	17:00	18:30	15	✓	Simple	D2*1.1904
D5	2034 Link Road	AM	ONE HOUR	08:00	09:30	15	✓		
D6	2034 Link Road	PM	ONE HOUR	17:00	18:30	15	✓		

Analysis Set Details

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

2019, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 82% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wellington Road/Carisbrook Road	Mini-roundabout		1, 2, 3	13.72	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Carisbrooke Road North	
2	Carisbrooke Road South	
3	Wellington Road	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Carisbrooke Road North	3.74	3.74	4.14	3.9	16.00	16.06	0.0	
2 - Carisbrooke Road South	3.59	3.59	4.32	1.5	13.51	9.90	0.0	
3 - Wellington Road	3.53	3.53	4.62	13.3	11.60	8.55	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Carisbrooke Road North	0.672	1019
2 - Carisbrooke Road South	0.625	971
3 - Wellington Road	0.644	972

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

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	2019	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke Road North		ONE HOUR	✓	602	100.000
2 - Carisbrooke Road South		ONE HOUR	✓	559	100.000
3 - Wellington Road		ONE HOUR	✓	250	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	389	213
	2 - Carisbrooke Road South	470	0	89
	3 - Wellington Road	169	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	0	0
	2 - Carisbrooke Road South	0	0	0
	3 - Wellington Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke Road North	0.69	12.13	2.2	B	552	829
2 - Carisbrooke Road South	0.75	17.14	2.8	C	513	769
3 - Wellington Road	0.43	9.89	0.7	A	229	344

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	453	113	61	978	0.463	450	477	0.0	0.9	6.771	A
2 - Carisbrooke Road South	421	105	159	871	0.483	417	351	0.0	0.9	7.868	A
3 - Wellington Road	188	47	351	746	0.252	187	226	0.0	0.3	6.420	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	541	135	73	970	0.558	540	572	0.9	1.2	8.333	A
2 - Carisbrooke Road South	503	126	191	851	0.590	501	421	0.9	1.4	10.206	B
3 - Wellington Road	225	56	421	701	0.321	224	271	0.3	0.5	7.542	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	663	166	89	959	0.691	659	698	1.2	2.1	11.853	B
2 - Carisbrooke Road South	615	154	233	825	0.746	610	515	1.4	2.8	16.354	C
3 - Wellington Road	275	69	513	642	0.429	274	330	0.5	0.7	9.764	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	663	166	89	959	0.691	663	703	2.1	2.2	12.131	B
2 - Carisbrooke Road South	615	154	234	824	0.747	615	517	2.8	2.8	17.142	C
3 - Wellington Road	275	69	517	639	0.431	275	332	0.7	0.7	9.891	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	541	135	73	970	0.558	545	580	2.2	1.3	8.545	A
2 - Carisbrooke Road South	503	126	193	850	0.591	508	425	2.8	1.5	10.682	B
3 - Wellington Road	225	56	427	697	0.322	226	274	0.7	0.5	7.655	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	453	113	61	978	0.464	455	483	1.3	0.9	6.908	A
2 - Carisbrooke Road South	421	105	161	870	0.484	423	355	1.5	1.0	8.089	A
3 - Wellington Road	188	47	356	743	0.253	189	228	0.5	0.3	6.500	A

2019, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 85% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wellington Road/Carisbrook Road	Mini-roundabout		1, 2, 3	10.68	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

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	2019	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke Road North		ONE HOUR	✓	655	100.000
2 - Carisbrooke Road South		ONE HOUR	✓	303	100.000
3 - Wellington Road		ONE HOUR	✓	162	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	543	112
	2 - Carisbrooke Road South	271	0	32
	3 - Wellington Road	111	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	0	0
	2 - Carisbrooke Road South	0	0	0
	3 - Wellington Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke Road North	0.74	13.80	2.7	B	601	902
2 - Carisbrooke Road South	0.37	6.43	0.6	A	278	417
3 - Wellington Road	0.23	5.98	0.3	A	149	223

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	493	123	38	993	0.497	489	286	0.0	1.0	7.091	A
2 - Carisbrooke Road South	228	57	84	918	0.248	227	444	0.0	0.3	5.196	A
3 - Wellington Road	122	30	203	841	0.145	121	108	0.0	0.2	4.995	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	589	147	46	988	0.596	587	343	1.0	1.4	8.932	A
2 - Carisbrooke Road South	272	68	100	908	0.300	272	532	0.3	0.4	5.657	A
3 - Wellington Road	146	36	243	815	0.179	145	129	0.2	0.2	5.372	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	721	180	56	981	0.735	716	420	1.4	2.6	13.353	B
2 - Carisbrooke Road South	334	83	122	894	0.373	333	650	0.4	0.6	6.407	A
3 - Wellington Road	178	45	298	780	0.229	178	158	0.2	0.3	5.975	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	721	180	56	981	0.735	721	421	2.6	2.7	13.801	B
2 - Carisbrooke Road South	334	83	123	894	0.373	334	654	0.6	0.6	6.427	A
3 - Wellington Road	178	45	298	780	0.229	178	158	0.3	0.3	5.983	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	589	147	46	988	0.596	594	344	2.7	1.5	9.234	A
2 - Carisbrooke Road South	272	68	101	907	0.300	273	538	0.6	0.4	5.681	A
3 - Wellington Road	146	36	244	815	0.179	146	130	0.3	0.2	5.383	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	493	123	38	993	0.497	495	288	1.5	1.0	7.262	A
2 - Carisbrooke Road South	228	57	85	918	0.249	229	449	0.4	0.3	5.227	A
3 - Wellington Road	122	30	204	840	0.145	122	109	0.2	0.2	5.012	A

2034, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 82% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wellington Road/Carisbrook Road	Mini-roundabout		1, 2, 3	30.82	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

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	Relationship type	Relationship
D3	2034	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*1.1929

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke Road North		ONE HOUR	✓	718	100.000
2 - Carisbrooke Road South		ONE HOUR	✓	667	100.000
3 - Wellington Road		ONE HOUR	✓	298	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	464	254
	2 - Carisbrooke Road South	561	0	106
	3 - Wellington Road	202	97	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
1 - Carisbrooke Road North	0	0	0
2 - Carisbrooke Road South	0	0	0
3 - Wellington Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke Road North	0.83	22.44	4.7	C	659	988
2 - Carisbrooke Road South	0.92	47.19	9.0	E	612	918
3 - Wellington Road	0.57	14.41	1.3	B	274	410

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	541	135	72	970	0.557	536	568	0.0	1.2	8.194	A
2 - Carisbrooke Road South	502	126	190	852	0.589	496	418	0.0	1.4	9.971	A
3 - Wellington Road	225	56	417	703	0.319	223	269	0.0	0.5	7.462	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	646	161	87	961	0.672	643	681	1.2	2.0	11.210	B
2 - Carisbrooke Road South	599	150	227	829	0.724	595	502	1.4	2.5	15.140	C
3 - Wellington Road	268	67	500	650	0.413	267	322	0.5	0.7	9.385	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	791	198	106	948	0.834	781	820	2.0	4.4	20.415	C
2 - Carisbrooke Road South	734	184	276	798	0.920	714	610	2.5	7.6	36.043	E
3 - Wellington Road	328	82	600	586	0.561	326	390	0.7	1.2	13.754	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	791	198	106	947	0.835	790	835	4.4	4.7	22.443	C
2 - Carisbrooke Road South	734	184	279	796	0.922	729	617	7.6	9.0	47.187	E
3 - Wellington Road	328	82	613	578	0.569	328	395	1.2	1.3	14.414	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	646	161	88	960	0.672	656	707	4.7	2.1	12.210	B
2 - Carisbrooke Road South	599	150	232	826	0.726	624	511	9.0	2.8	19.727	C
3 - Wellington Road	268	67	525	634	0.423	270	331	1.3	0.7	9.949	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	541	135	73	970	0.558	544	579	2.1	1.3	8.523	A
2 - Carisbrooke Road South	502	126	192	850	0.590	507	425	2.8	1.5	10.656	B
3 - Wellington Road	225	56	427	697	0.322	226	273	0.7	0.5	7.646	A

2034, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 85% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wellington Road/Carisbrook Road	Mini-roundabout		1, 2, 3	20.16	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

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	Relationship type	Relationship
D4	2034	PM	ONE HOUR	17:00	18:30	15	✓	Simple	D2*1.1904

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke Road North		ONE HOUR	✓	780	100.000
2 - Carisbrooke Road South		ONE HOUR	✓	361	100.000
3 - Wellington Road		ONE HOUR	✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	646	133
	2 - Carisbrooke Road South	323	0	38
	3 - Wellington Road	132	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	0	0
	2 - Carisbrooke Road South	0	0	0
	3 - Wellington Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke Road North	0.88	29.35	6.6	D	715	1073
2 - Carisbrooke Road South	0.45	7.47	0.8	A	331	496
3 - Wellington Road	0.29	6.78	0.4	A	177	265

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	587	147	45	988	0.594	581	340	0.0	1.4	8.728	A
2 - Carisbrooke Road South	272	68	99	909	0.299	270	527	0.0	0.4	5.622	A
3 - Wellington Road	145	36	241	817	0.178	144	128	0.0	0.2	5.348	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	701	175	54	982	0.714	697	408	1.4	2.4	12.455	B
2 - Carisbrooke Road South	324	81	119	896	0.362	324	632	0.4	0.6	6.281	A
3 - Wellington Road	173	43	290	786	0.221	173	153	0.2	0.3	5.874	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	858	215	67	974	0.881	844	499	2.4	6.0	25.180	D
2 - Carisbrooke Road South	397	99	144	880	0.451	396	766	0.6	0.8	7.418	A
3 - Wellington Road	212	53	354	744	0.285	212	186	0.3	0.4	6.760	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	858	215	67	974	0.881	856	501	6.0	6.6	29.348	D
2 - Carisbrooke Road South	397	99	146	879	0.452	397	777	0.8	0.8	7.467	A
3 - Wellington Road	212	53	355	743	0.286	212	188	0.4	0.4	6.778	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	701	175	55	982	0.714	717	410	6.6	2.6	14.306	B
2 - Carisbrooke Road South	324	81	123	894	0.363	325	649	0.8	0.6	6.341	A
3 - Wellington Road	173	43	291	785	0.221	174	157	0.4	0.3	5.898	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	587	147	46	988	0.594	591	343	2.6	1.5	9.176	A
2 - Carisbrooke Road South	272	68	101	907	0.299	272	536	0.6	0.4	5.670	A
3 - Wellington Road	145	36	243	815	0.178	145	130	0.3	0.2	5.377	A

2034 Link Road, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wellington Road/Carisbrook Road	Mini-roundabout		1, 2, 3	56.13	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

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	2034 Link Road	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke Road North		ONE HOUR	✓	768	100.000
2 - Carisbrooke Road South		ONE HOUR	✓	685	100.000
3 - Wellington Road		ONE HOUR	✓	374	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	441	327
	2 - Carisbrooke Road South	561	0	124
	3 - Wellington Road	264	110	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	0	0
	2 - Carisbrooke Road South	0	0	0
	3 - Wellington Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke Road North	0.90	35.23	7.7	E	705	1057
2 - Carisbrooke Road South	1.01	99.22	20.8	F	628	942
3 - Wellington Road	0.70	20.17	2.2	C	343	515

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	578	145	82	964	0.600	572	614	0.0	1.5	9.069	A
2 - Carisbrooke Road South	515	129	244	818	0.630	509	411	0.0	1.6	11.407	B
3 - Wellington Road	282	70	417	704	0.400	279	336	0.0	0.7	8.426	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	690	173	98	953	0.725	686	735	1.5	2.5	13.299	B
2 - Carisbrooke Road South	615	154	292	788	0.781	609	492	1.6	3.3	19.422	C
3 - Wellington Road	336	84	499	651	0.517	335	402	0.7	1.0	11.326	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	846	211	120	938	0.901	828	869	2.5	6.9	28.846	D
2 - Carisbrooke Road South	754	188	353	750	1.005	710	595	3.3	14.2	59.134	F
3 - Wellington Road	412	103	581	598	0.689	408	481	1.0	2.1	18.543	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	846	211	121	938	0.902	842	886	6.9	7.7	35.227	E
2 - Carisbrooke Road South	754	188	359	746	1.010	727	605	14.2	20.8	99.219	F
3 - Wellington Road	412	103	596	589	0.700	411	490	2.1	2.2	20.169	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	690	173	100	952	0.726	710	798	7.7	2.8	15.994	C
2 - Carisbrooke Road South	615	154	302	782	0.787	682	508	20.8	4.2	48.049	E
3 - Wellington Road	336	84	558	613	0.549	340	426	2.2	1.3	13.395	B

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	578	145	83	963	0.601	583	631	2.8	1.5	9.604	A
2 - Carisbrooke Road South	515	129	248	815	0.632	525	418	4.2	1.8	12.800	B
3 - Wellington Road	282	70	430	695	0.405	284	343	1.3	0.7	8.802	A

2034 Link Road, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 82% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wellington Road/Carisbrook Road	Mini-roundabout		1, 2, 3	24.89	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

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	2034 Link Road	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke Road North		ONE HOUR	✓	806	100.000
2 - Carisbrooke Road South		ONE HOUR	✓	365	100.000
3 - Wellington Road		ONE HOUR	✓	240	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	631	175
	2 - Carisbrooke Road South	323	0	42
	3 - Wellington Road	175	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	0	0
	2 - Carisbrooke Road South	0	0	0
	3 - Wellington Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke Road North	0.91	37.70	8.7	E	740	1109
2 - Carisbrooke Road South	0.47	8.01	0.9	A	335	502
3 - Wellington Road	0.36	7.51	0.5	A	220	330

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	607	152	49	986	0.615	601	372	0.0	1.6	9.196	A
2 - Carisbrooke Road South	274	69	130	889	0.309	273	519	0.0	0.4	5.824	A
3 - Wellington Road	181	45	241	817	0.221	180	162	0.0	0.3	5.642	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	725	181	58	980	0.740	720	447	1.6	2.7	13.622	B
2 - Carisbrooke Road South	328	82	156	873	0.375	327	622	0.4	0.6	6.589	A
3 - Wellington Road	216	54	289	786	0.275	215	194	0.3	0.4	6.308	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	887	222	71	971	0.914	868	546	2.7	7.6	30.225	D
2 - Carisbrooke Road South	401	100	188	853	0.471	400	751	0.6	0.9	7.934	A
3 - Wellington Road	264	66	354	744	0.355	264	234	0.4	0.5	7.482	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	887	222	72	971	0.914	883	548	7.6	8.7	37.701	E
2 - Carisbrooke Road South	401	100	192	851	0.472	401	763	0.9	0.9	8.009	A
3 - Wellington Road	264	66	355	743	0.355	264	238	0.5	0.5	7.512	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	725	181	59	979	0.740	747	449	8.7	3.0	16.824	C
2 - Carisbrooke Road South	328	82	162	869	0.377	329	644	0.9	0.6	6.677	A
3 - Wellington Road	216	54	291	785	0.275	216	200	0.5	0.4	6.343	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	607	152	49	986	0.615	612	375	3.0	1.6	9.773	A
2 - Carisbrooke Road South	274	69	133	888	0.309	275	528	0.6	0.5	5.886	A
3 - Wellington Road	181	45	243	815	0.222	181	165	0.4	0.3	5.678	A

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
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Filename: A090129-99-1_Clatterford Rd-Priory Rd Mini Rbt.j9
Path: X:\2012\A090000\A090129-99-1 Carisbrooke College\30 Technical\31 Modelling
Report generation date: 20/12/2019 16:42:04

- »2019, AM
- »2019, PM
- »2034, AM
- »2034, PM
- »2034 Link Road, AM
- »2034 Link Road, PM

Summary of junction performance

	AM		PM	
	Queue (Veh)	RFC	Queue (Veh)	RFC
2019				
1 - Carisbrooke High Street East	1.4	0.58	2.9	0.75
2 - Clatterford Road	0.5	0.31	0.2	0.19
3 - Carisbrook High Street West	1.2	0.55	0.4	0.31
4 - Priory Road	0.9	0.48	1.0	0.49
2034				
1 - Carisbrooke High Street East	2.3	0.70	7.4	0.90
2 - Clatterford Road	0.7	0.41	0.3	0.25
3 - Carisbrook High Street West	2.5	0.72	0.6	0.39
4 - Priory Road	1.7	0.63	1.6	0.61
2034 Link Road				
1 - Carisbrooke High Street East	2.4	0.71	6.7	0.89
2 - Clatterford Road	0.7	0.43	0.3	0.24
3 - Carisbrook High Street West	2.8	0.75	0.6	0.39
4 - Priory Road	1.8	0.65	1.4	0.59

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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	(untitled)
Location	
Site number	
Date	12/12/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\clara.evans
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	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	Relationship type	Relationship
D1	2019	AM	ONE HOUR	08:00	09:30	15	✓		
D2	2019	PM	ONE HOUR	17:00	18:30	15	✓		
D3	2034	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*1.1929
D4	2034	PM	ONE HOUR	17:00	18:30	15	✓	Simple	D2*1.1904
D5	2034 Link Road	AM	ONE HOUR	08:00	09:30	15	✓		
D6	2034 Link Road	PM	ONE HOUR	17:00	18:30	15	✓		

Analysis Set Details

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

2019, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	10.02	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Carisbrooke High Street East	
2	Clatterford Road	
3	Carisbrook High Street West	
4	Priory Road	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Carisbrooke High Street East	2.94	2.94	4.44	2.3	10.87	7.53	0.0	
2 - Clatterford Road	3.57	3.57	3.57	0.0	9.97	6.10	0.0	
3 - Carisbrook High Street West	3.00	3.00	3.20	2.0	8.30	4.46	0.0	
4 - Priory Road	3.81	3.81	4.33	0.8	8.72	8.70	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Carisbrooke High Street East	0.607	957
2 - Clatterford Road	0.612	985
3 - Carisbrook High Street West	0.596	930
4 - Priory Road	0.628	993

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

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	2019	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke High Street East		ONE HOUR	✓	492	100.000
2 - Clatterford Road		ONE HOUR	✓	195	100.000
3 - Carisbrook High Street West		ONE HOUR	✓	323	100.000
4 - Priory Road		ONE HOUR	✓	306	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road
From	1 - Carisbrooke High Street East	0	57	188	247
	2 - Clatterford Road	136	0	3	56
	3 - Carisbrook High Street West	285	9	0	29
	4 - Priory Road	273	25	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road
From	1 - Carisbrooke High Street East	0	0	0	0
	2 - Clatterford Road	0	0	0	0
	3 - Carisbrook High Street West	0	0	0	0
	4 - Priory Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke High Street East	0.58	9.28	1.4	A	451	677
2 - Clatterford Road	0.31	7.63	0.5	A	179	268
3 - Carisbrook High Street West	0.55	12.57	1.2	B	296	445
4 - Priory Road	0.48	10.03	0.9	B	281	421

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	370	93	31	938	0.395	368	519	0.0	0.6	6.284	A
2 - Clatterford Road	147	37	331	782	0.188	146	68	0.0	0.2	5.647	A
3 - Carisbrook High Street West	243	61	328	734	0.331	241	149	0.0	0.5	7.269	A
4 - Priory Road	230	58	321	791	0.291	229	248	0.0	0.4	6.384	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	442	111	38	934	0.473	441	622	0.6	0.9	7.284	A
2 - Clatterford Road	175	44	397	742	0.236	175	82	0.2	0.3	6.347	A
3 - Carisbrook High Street West	290	73	394	695	0.418	290	179	0.5	0.7	8.856	A
4 - Priory Road	275	69	386	751	0.366	274	298	0.4	0.6	7.546	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	542	135	46	929	0.583	540	761	0.9	1.4	9.192	A
2 - Clatterford Road	215	54	486	688	0.312	214	100	0.3	0.4	7.592	A
3 - Carisbrook High Street West	356	89	482	643	0.553	354	218	0.7	1.2	12.369	B
4 - Priory Road	337	84	471	697	0.483	336	364	0.6	0.9	9.923	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	542	135	46	929	0.583	542	764	1.4	1.4	9.282	A
2 - Clatterford Road	215	54	488	687	0.313	215	100	0.4	0.5	7.626	A
3 - Carisbrook High Street West	356	89	483	642	0.554	356	219	1.2	1.2	12.566	B
4 - Priory Road	337	84	473	696	0.484	337	365	0.9	0.9	10.033	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	442	111	38	934	0.473	444	627	1.4	0.9	7.374	A
2 - Clatterford Road	175	44	400	740	0.237	176	82	0.5	0.3	6.385	A
3 - Carisbrook High Street West	290	73	396	694	0.419	292	180	1.2	0.7	9.011	A
4 - Priory Road	275	69	389	749	0.367	276	300	0.9	0.6	7.646	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	370	93	32	938	0.395	371	524	0.9	0.7	6.363	A
2 - Clatterford Road	147	37	334	780	0.188	147	69	0.3	0.2	5.688	A
3 - Carisbrook High Street West	243	61	331	732	0.332	244	150	0.7	0.5	7.385	A
4 - Priory Road	230	58	325	789	0.292	231	251	0.6	0.4	6.462	A

2019, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 76% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	11.61	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

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	2019	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke High Street East		ONE HOUR	✓	623	100.000
2 - Clatterford Road		ONE HOUR	✓	107	100.000
3 - Carisbrook High Street West		ONE HOUR	✓	198	100.000
4 - Priory Road		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road
From	1 - Carisbrooke High Street East	0	126	262	235
	2 - Clatterford Road	79	0	0	28
	3 - Carisbrook High Street West	177	1	0	20
	4 - Priory Road	308	36	21	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road
From	1 - Carisbrooke High Street East	0	0	0	0
	2 - Clatterford Road	0	0	0	0
	3 - Carisbrook High Street West	0	0	0	0
	4 - Priory Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke High Street East	0.75	15.44	2.9	C	572	858
2 - Clatterford Road	0.19	6.95	0.2	A	98	147
3 - Carisbrook High Street West	0.31	7.39	0.4	A	182	273
4 - Priory Road	0.49	8.73	1.0	A	336	504

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	469	117	44	931	0.504	465	422	0.0	1.0	7.670	A
2 - Clatterford Road	81	20	387	748	0.108	80	122	0.0	0.1	5.386	A
3 - Carisbrook High Street West	149	37	256	777	0.192	148	211	0.0	0.2	5.715	A
4 - Priory Road	276	69	192	872	0.316	274	212	0.0	0.5	5.997	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	560	140	53	925	0.605	558	506	1.0	1.5	9.750	A
2 - Clatterford Road	96	24	465	701	0.137	96	146	0.1	0.2	5.953	A
3 - Carisbrook High Street West	178	44	307	747	0.238	178	254	0.2	0.3	6.325	A
4 - Priory Road	329	82	231	848	0.388	328	254	0.5	0.6	6.918	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	686	171	65	918	0.747	681	619	1.5	2.8	14.848	B
2 - Clatterford Road	118	29	567	638	0.185	118	178	0.2	0.2	6.914	A
3 - Carisbrook High Street West	218	55	375	706	0.309	217	309	0.3	0.4	7.360	A
4 - Priory Road	403	101	282	816	0.494	402	311	0.6	1.0	8.667	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	686	171	65	918	0.747	686	621	2.8	2.9	15.435	C
2 - Clatterford Road	118	29	571	636	0.185	118	179	0.2	0.2	6.951	A
3 - Carisbrook High Street West	218	55	378	705	0.309	218	311	0.4	0.4	7.393	A
4 - Priors Road	403	101	283	815	0.494	403	313	1.0	1.0	8.730	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	560	140	53	925	0.605	565	509	2.9	1.6	10.142	B
2 - Clatterford Road	96	24	471	697	0.138	96	148	0.2	0.2	5.998	A
3 - Carisbrook High Street West	178	44	311	745	0.239	179	257	0.4	0.3	6.362	A
4 - Priors Road	329	82	232	847	0.388	330	257	1.0	0.6	6.981	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	469	117	45	930	0.504	471	426	1.6	1.0	7.879	A
2 - Clatterford Road	81	20	393	745	0.108	81	123	0.2	0.1	5.420	A
3 - Carisbrook High Street West	149	37	259	775	0.192	149	214	0.3	0.2	5.755	A
4 - Priors Road	276	69	194	871	0.316	276	215	0.6	0.5	6.057	A

2034, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	15.20	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

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	Relationship type	Relationship
D3	2034	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*1.1929

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke High Street East		ONE HOUR	✓	587	100.000
2 - Clatterford Road		ONE HOUR	✓	233	100.000
3 - Carisbrook High Street West		ONE HOUR	✓	385	100.000
4 - Priory Road		ONE HOUR	✓	365	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road	
From	1 - Carisbrooke High Street East	0	68	224	295
	2 - Clatterford Road	162	0	4	67
	3 - Carisbrook High Street West	340	11	0	35
	4 - Priory Road	326	30	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road
From	1 - Carisbrooke High Street East	0	0	0	0
	2 - Clatterford Road	0	0	0	0
	3 - Carisbrook High Street West	0	0	0	0
	4 - Priory Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke High Street East	0.70	12.93	2.3	B	539	808
2 - Clatterford Road	0.41	9.65	0.7	A	213	320
3 - Carisbrook High Street West	0.72	22.01	2.5	C	354	530
4 - Priory Road	0.63	15.18	1.7	C	335	502

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	442	110	37	935	0.473	438	618	0.0	0.9	7.204	A
2 - Clatterford Road	175	44	395	744	0.236	174	81	0.0	0.3	6.307	A
3 - Carisbrook High Street West	290	73	391	697	0.416	287	177	0.0	0.7	8.736	A
4 - Priory Road	275	69	383	753	0.365	273	296	0.0	0.6	7.467	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	528	132	45	930	0.567	526	741	0.9	1.3	8.872	A
2 - Clatterford Road	209	52	474	695	0.301	209	97	0.3	0.4	7.389	A
3 - Carisbrook High Street West	346	87	470	650	0.533	345	213	0.7	1.1	11.728	B
4 - Priory Road	328	82	459	704	0.466	327	355	0.6	0.9	9.509	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	646	162	55	924	0.699	642	904	1.3	2.2	12.606	B
2 - Clatterford Road	256	64	578	631	0.406	255	119	0.4	0.7	9.548	A
3 - Carisbrook High Street West	424	106	574	588	0.722	419	260	1.1	2.4	20.708	C
4 - Priory Road	402	100	559	642	0.627	399	433	0.9	1.6	14.652	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	646	162	55	924	0.699	646	911	2.2	2.3	12.930	B
2 - Clatterford Road	256	64	582	629	0.407	256	119	0.7	0.7	9.647	A
3 - Carisbrook High Street West	424	106	576	586	0.724	424	261	2.4	2.5	22.013	C
4 - Priory Road	402	100	564	638	0.630	402	436	1.6	1.7	15.181	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	528	132	46	930	0.568	531	752	2.3	1.3	9.119	A
2 - Clatterford Road	209	52	478	692	0.302	210	98	0.7	0.4	7.479	A
3 - Carisbrook High Street West	346	87	474	648	0.535	352	215	2.5	1.2	12.372	B
4 - Priory Road	328	82	467	700	0.469	331	359	1.7	0.9	9.845	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	442	110	38	934	0.473	444	626	1.3	0.9	7.363	A
2 - Clatterford Road	175	44	399	741	0.236	176	82	0.4	0.3	6.378	A
3 - Carisbrook High Street West	290	73	396	694	0.418	292	179	1.2	0.7	8.992	A
4 - Priory Road	275	69	388	749	0.367	276	299	0.9	0.6	7.629	A

2034, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 76% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	22.21	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

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	Relationship type	Relationship
D4	2034	PM	ONE HOUR	17:00	18:30	15	✓	Simple	D2*1.1904

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke High Street East		ONE HOUR	✓	742	100.000
2 - Clatterford Road		ONE HOUR	✓	127	100.000
3 - Carisbrook High Street West		ONE HOUR	✓	236	100.000
4 - Priory Road		ONE HOUR	✓	436	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road
From	1 - Carisbrooke High Street East	0	150	312	280
	2 - Clatterford Road	94	0	0	33
	3 - Carisbrook High Street West	211	1	0	24
	4 - Priory Road	367	43	25	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road
From	1 - Carisbrooke High Street East	0	0	0	0
	2 - Clatterford Road	0	0	0	0
	3 - Carisbrook High Street West	0	0	0	0
	4 - Priory Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke High Street East	0.90	34.86	7.4	D	681	1021
2 - Clatterford Road	0.25	8.37	0.3	A	117	175
3 - Carisbrook High Street West	0.39	8.93	0.6	A	216	324
4 - Priory Road	0.61	11.92	1.6	B	400	600

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	558	140	52	925	0.603	552	502	0.0	1.5	9.505	A
2 - Clatterford Road	96	24	460	703	0.136	95	145	0.0	0.2	5.913	A
3 - Carisbrook High Street West	177	44	305	748	0.237	176	251	0.0	0.3	6.280	A
4 - Priory Road	328	82	229	849	0.386	326	252	0.0	0.6	6.843	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	667	167	63	919	0.725	663	602	1.5	2.5	13.806	B
2 - Clatterford Road	115	29	552	647	0.177	114	173	0.2	0.2	6.750	A
3 - Carisbrook High Street West	212	53	365	712	0.298	211	301	0.3	0.4	7.184	A
4 - Priory Road	392	98	274	821	0.477	391	302	0.6	0.9	8.350	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	817	204	77	911	0.897	800	736	2.5	6.6	28.902	D
2 - Clatterford Road	140	35	667	577	0.243	140	210	0.2	0.3	8.227	A
3 - Carisbrook High Street West	260	65	443	666	0.390	259	364	0.4	0.6	8.822	A
4 - Priory Road	480	120	336	782	0.613	477	366	0.9	1.5	11.710	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	817	204	77	910	0.897	813	739	6.6	7.4	34.856	D
2 - Clatterford Road	140	35	678	570	0.246	140	213	0.3	0.3	8.369	A
3 - Carisbrook High Street West	260	65	448	663	0.392	259	370	0.6	0.6	8.928	A
4 - Priory Road	480	120	337	781	0.614	480	371	1.5	1.6	11.917	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	667	167	64	919	0.726	685	607	7.4	2.8	16.478	C
2 - Clatterford Road	115	29	570	636	0.180	115	178	0.3	0.2	6.914	A
3 - Carisbrook High Street West	212	53	374	707	0.300	213	311	0.6	0.4	7.301	A
4 - Priory Road	392	98	276	820	0.478	394	311	1.6	0.9	8.512	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	558	140	53	925	0.604	563	507	2.8	1.6	10.080	B
2 - Clatterford Road	96	24	469	698	0.137	96	147	0.2	0.2	5.985	A
3 - Carisbrook High Street West	177	44	309	745	0.238	178	256	0.4	0.3	6.348	A
4 - Priory Road	328	82	231	848	0.387	329	256	0.9	0.6	6.957	A

2034 Link Road, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	16.26	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

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	2034 Link Road	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke High Street East		ONE HOUR	✓	597	100.000
2 - Clatterford Road		ONE HOUR	✓	241	100.000
3 - Carisbrook High Street West		ONE HOUR	✓	390	100.000
4 - Priory Road		ONE HOUR	✓	375	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road
From	1 - Carisbrooke High Street East	0	68	224	305
	2 - Clatterford Road	162	0	4	75
	3 - Carisbrook High Street West	340	11	0	39
	4 - Priory Road	332	32	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road
From	1 - Carisbrooke High Street East	0	0	0	0
	2 - Clatterford Road	0	0	0	0
	3 - Carisbrook High Street West	0	0	0	0
	4 - Priory Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke High Street East	0.71	13.60	2.4	B	548	822
2 - Clatterford Road	0.43	10.10	0.7	B	221	331
3 - Carisbrook High Street West	0.75	24.49	2.8	C	358	536
4 - Priory Road	0.65	15.90	1.8	C	344	516

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	450	112	40	933	0.482	446	623	0.0	0.9	7.339	A
2 - Clatterford Road	181	45	403	738	0.246	180	83	0.0	0.3	6.435	A
3 - Carisbrook High Street West	293	73	405	688	0.426	290	178	0.0	0.7	8.983	A
4 - Priory Road	282	71	383	753	0.375	280	313	0.0	0.6	7.579	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	537	134	48	928	0.579	535	747	0.9	1.3	9.120	A
2 - Clatterford Road	216	54	484	689	0.314	216	99	0.3	0.5	7.605	A
3 - Carisbrook High Street West	350	88	486	640	0.547	349	214	0.7	1.2	12.268	B
4 - Priory Road	337	84	459	704	0.479	336	375	0.6	0.9	9.734	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	658	164	59	922	0.713	653	910	1.3	2.4	13.211	B
2 - Clatterford Road	265	66	591	623	0.425	264	121	0.5	0.7	9.987	A
3 - Carisbrook High Street West	429	107	594	576	0.745	423	261	1.2	2.7	22.710	C
4 - Priory Road	413	103	559	642	0.643	410	458	0.9	1.7	15.276	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	658	164	59	921	0.714	657	918	2.4	2.4	13.599	B
2 - Clatterford Road	265	66	595	621	0.427	265	122	0.7	0.7	10.104	B
3 - Carisbrook High Street West	429	107	597	574	0.747	429	263	2.7	2.8	24.493	C
4 - Priors Road	413	103	564	638	0.647	413	461	1.7	1.8	15.904	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	537	134	49	928	0.579	541	759	2.4	1.4	9.405	A
2 - Clatterford Road	216	54	489	686	0.316	218	100	0.7	0.5	7.708	A
3 - Carisbrook High Street West	350	88	491	637	0.550	357	216	2.8	1.3	13.080	B
4 - Priors Road	337	84	467	699	0.482	340	380	1.8	1.0	10.123	B

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	450	112	41	933	0.482	451	631	1.4	0.9	7.512	A
2 - Clatterford Road	181	45	408	735	0.247	182	84	0.5	0.3	6.514	A
3 - Carisbrook High Street West	293	73	410	686	0.428	295	181	1.3	0.8	9.269	A
4 - Priors Road	282	71	388	749	0.377	284	317	1.0	0.6	7.759	A

2034 Link Road, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 75% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	20.69	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

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	2034 Link Road	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke High Street East		ONE HOUR	✓	731	100.000
2 - Clatterford Road		ONE HOUR	✓	128	100.000
3 - Carisbrook High Street West		ONE HOUR	✓	236	100.000
4 - Priory Road		ONE HOUR	✓	422	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road
From	1 - Carisbrooke High Street East	0	150	312	269
	2 - Clatterford Road	94	0	0	34
	3 - Carisbrook High Street West	210	1	0	25
	4 - Priory Road	351	44	26	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carisbrooke High Street East	2 - Clatterford Road	3 - Carisbrook High Street West	4 - Priory Road
From	1 - Carisbrooke High Street East	0	0	0	0
	2 - Clatterford Road	0	0	0	0
	3 - Carisbrook High Street West	0	0	0	0
	4 - Priory Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke High Street East	0.89	32.10	6.7	D	671	1006
2 - Clatterford Road	0.24	8.26	0.3	A	117	176
3 - Carisbrook High Street West	0.39	8.80	0.6	A	217	325
4 - Priory Road	0.59	11.34	1.4	B	387	581

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	550	138	54	925	0.595	545	490	0.0	1.4	9.340	A
2 - Clatterford Road	96	24	453	708	0.136	96	146	0.0	0.2	5.875	A
3 - Carisbrook High Street West	178	44	297	753	0.236	177	252	0.0	0.3	6.236	A
4 - Priory Road	318	79	228	850	0.374	315	245	0.0	0.6	6.710	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	657	164	65	918	0.716	653	587	1.4	2.4	13.394	B
2 - Clatterford Road	115	29	544	653	0.176	115	175	0.2	0.2	6.692	A
3 - Carisbrook High Street West	212	53	356	717	0.296	212	302	0.3	0.4	7.114	A
4 - Priory Road	380	95	274	821	0.462	379	294	0.6	0.8	8.111	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	805	201	79	909	0.885	790	718	2.4	6.1	27.210	D
2 - Clatterford Road	141	35	658	583	0.242	141	212	0.2	0.3	8.134	A
3 - Carisbrook High Street West	260	65	433	672	0.387	259	366	0.4	0.6	8.703	A
4 - Priory Road	465	116	335	783	0.594	463	357	0.8	1.4	11.170	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	805	201	80	909	0.885	802	721	6.1	6.7	32.100	D
2 - Clatterford Road	141	35	668	577	0.244	141	214	0.3	0.3	8.263	A
3 - Carisbrook High Street West	260	65	438	669	0.389	260	371	0.6	0.6	8.799	A
4 - Priors Road	465	116	336	782	0.595	465	362	1.4	1.4	11.343	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	657	164	65	918	0.716	673	592	6.7	2.7	15.618	C
2 - Clatterford Road	115	29	560	643	0.179	116	179	0.3	0.2	6.837	A
3 - Carisbrook High Street West	212	53	364	713	0.298	213	311	0.6	0.4	7.217	A
4 - Priors Road	380	95	275	820	0.463	382	302	1.4	0.9	8.257	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke High Street East	550	138	55	924	0.595	555	495	2.7	1.5	9.865	A
2 - Clatterford Road	96	24	461	703	0.137	97	148	0.2	0.2	5.943	A
3 - Carisbrook High Street West	178	44	302	750	0.237	178	256	0.4	0.3	6.303	A
4 - Priors Road	318	79	230	848	0.375	319	250	0.9	0.6	6.816	A



Appendix C TRICS OUTPUTS

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	EX ESSEX	1 days
	HC HAMPSHIRE	3 days
	HF HERTFORDSHIRE	1 days
	KC KENT	6 days
	SC SURREY	1 days
	WS WEST SUSSEX	7 days
03	SOUTH WEST	
	DC DORSET	1 days
	DV DEVON	3 days
	SM SOMERSET	3 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	3 days
	NF NORFOLK	3 days
	SF SUFFOLK	4 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
	LE LEICESTERSHIRE	1 days
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	2 days
	ST STAFFORDSHIRE	2 days
	WK WARWICKSHIRE	2 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
	NY NORTH YORKSHIRE	7 days
	SY SOUTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	4 days
	GM GREATER MANCHESTER	2 days
	LC LANCASHIRE	1 days
	MS MERSEYSIDE	1 days
09	NORTH	
	DH DURHAM	3 days
	TW TYNE & WEAR	2 days
10	WALES	
	PS POWYS	1 days
	VG VALE OF GLAMORGAN	1 days
11	SCOTLAND	
	AG ANGUS	1 days
	FA FALKIRK	2 days
	HI HIGHLAND	1 days
	PK PERTH & KINROSS	1 days

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

Secondary 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: Number of dwellings
Actual Range: 6 to 918 (units:)
Range Selected by User: 5 to 4334 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 08/07/19

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	17 days
Tuesday	17 days
Wednesday	18 days
Thursday	15 days
Friday	13 days

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

Selected survey types:

Manual count	80 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:

Suburban Area (PPS6 Out of Centre)	32
Edge of Town	35
Neighbourhood Centre (PPS6 Local Centre)	13

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	68
Village	9
No Sub Category	3

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

Secondary Filtering selection:

Use Class:

C3	80 days
----	---------

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

Population within 1 mile:

1,000 or Less	2 days
1,001 to 5,000	13 days
5,001 to 10,000	15 days
10,001 to 15,000	19 days
15,001 to 20,000	14 days
20,001 to 25,000	8 days
25,001 to 50,000	8 days
50,001 to 100,000	1 days

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

Secondary Filtering selection (Cont.):

Population within 5 miles:

5,001 to 25,000	9 days
25,001 to 50,000	8 days
50,001 to 75,000	12 days
75,001 to 100,000	17 days
100,001 to 125,000	3 days
125,001 to 250,000	21 days
250,001 to 500,000	8 days
500,001 or More	2 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	23 days
1.1 to 1.5	54 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	14 days
No	66 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	79 days
2 Poor	1 days

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

LIST OF SITES relevant to selection parameters

1	AG-03-A-01 KEPTIE ROAD ARBROATH	BUNGALOWS/DET.	ANGUS
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 7 <i>Survey date: TUESDAY 22/05/12</i>		<i>Survey Type: MANUAL</i>
2	CA-03-A-04 DETACHED	PETERBOROUGH THORPE PARK ROAD	CAMBRI D G E S H I R E
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 9 <i>Survey date: TUESDAY 18/10/11</i>		<i>Survey Type: MANUAL</i>
3	CA-03-A-05 EASTFIELD ROAD PETERBOROUGH	DETACHED HOUSES	CAMBRI D G E S H I R E
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 28 <i>Survey date: MONDAY 17/10/16</i>		<i>Survey Type: MANUAL</i>
4	CA-03-A-06 CRAFT'S WAY NEAR CAMBRIDGE BAR HILL	MIXED HOUSES	CAMBRI D G E S H I R E
	Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings: 207 <i>Survey date: FRIDAY 22/06/18</i>		<i>Survey Type: MANUAL</i>
5	CH-03-A-08 WHITCHURCH ROAD CHESTER	DETACHED	C H E S H I R E
	BOUGHTON HEATH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 11 <i>Survey date: TUESDAY 22/05/12</i>		<i>Survey Type: MANUAL</i>
6	CH-03-A-09 GREYSTOKE ROAD MACCLESFIELD HURDSFIELD	TERRACED HOUSES	C H E S H I R E
	Edge of Town Residential Zone Total Number of dwellings: 24 <i>Survey date: MONDAY 24/11/14</i>		<i>Survey Type: MANUAL</i>
7	CH-03-A-10 MEADOW DRIVE NORTHWICH BARNTON	SEMI-DETACHED & TERRACED	C H E S H I R E
	Edge of Town Residential Zone Total Number of dwellings: 40 <i>Survey date: TUESDAY 04/06/19</i>		<i>Survey Type: MANUAL</i>
8	CH-03-A-11 LONDON ROAD NORTHWICH LEFTWICH	TOWN HOUSES	C H E S H I R E
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 24 <i>Survey date: THURSDAY 06/06/19</i>		<i>Survey Type: MANUAL</i>
9	DC-03-A-08 HURSTDENE ROAD BOURNEMOUTH CASTLE LANE WEST	BUNGALOWS	DORSET
	Edge of Town Residential Zone Total Number of dwellings: 28 <i>Survey date: MONDAY 24/03/14</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

10	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCKLAND	SEMI DETACHED		DURHAM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 50 <i>Survey date: TUESDAY 28/03/17</i>			
11	DH-03-A-02 LEAZES LANE BISHOP AUCKLAND ST HELEN AUCKLAND	MIXED HOUSES		DURHAM
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Number of dwellings: 125 <i>Survey date: MONDAY 27/03/17</i>			
12	DH-03-A-03 PILGRIMS WAY DURHAM	SEMI-DETACHED & TERRACED		DURHAM
	Edge of Town Residential Zone Total Number of dwellings: 57 <i>Survey date: FRIDAY 19/10/18</i>			
13	DS-03-A-02 RADBOURNE LANE DERBY	MIXED HOUSES		DERBYSHIRE
	Edge of Town Residential Zone Total Number of dwellings: 371 <i>Survey date: TUESDAY 10/07/18</i>			
14	DV-03-A-01 BRONSHILL ROAD TORQUAY	TERRACED HOUSES		DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 37 <i>Survey date: WEDNESDAY 30/09/15</i>			
15	DV-03-A-02 MILLHEAD ROAD HONITON	HOUSES & BUNGALOWS		DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 116 <i>Survey date: FRIDAY 25/09/15</i>			
16	DV-03-A-03 LOWER BRAND LANE HONITON	TERRACED & SEMI DETACHED		DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 70 <i>Survey date: MONDAY 28/09/15</i>			
17	ES-03-A-02 SOUTH COAST ROAD PEACEHAVEN	PRIVATE HOUSING		EAST SUSSEX
	Edge of Town Residential Zone Total Number of dwellings: 37 <i>Survey date: FRIDAY 18/11/11</i>			

LIST OF SITES relevant to selection parameters (Cont.)

18	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total Number of dwellings: 212 <i>Survey date: MONDAY 11/07/16</i>		<i>Survey Type: MANUAL</i>
19	ES-03-A-04 NEW LYDD ROAD CAMBER	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total Number of dwellings: 134 <i>Survey date: FRIDAY 15/07/16</i>		<i>Survey Type: MANUAL</i>
20	EX-03-A-02 MANOR ROAD CHIGWELL GRANGE HILL	DETACHED & SEMI-DETACHED	ESSEX
	Edge of Town Residential Zone Total Number of dwellings: 97 <i>Survey date: MONDAY 27/11/17</i>		<i>Survey Type: MANUAL</i>
21	FA-03-A-01 MANDELA AVENUE FALKIRK	SEMI-DETACHED/TERRACED	FALKIRK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 37 <i>Survey date: THURSDAY 30/05/13</i>		<i>Survey Type: MANUAL</i>
22	FA-03-A-02 ROSEBANK AVENUE & SPRINGFIELD DRIVE FALKIRK	MIXED HOUSES	FALKIRK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 161 <i>Survey date: WEDNESDAY 29/05/13</i>		<i>Survey Type: MANUAL</i>
23	GM-03-A-10 BUTT HILL DRIVE MANCHESTER PRESTWICH	DETACHED/SEMI	GREATER MANCHESTER
	Edge of Town Residential Zone Total Number of dwellings: 29 <i>Survey date: WEDNESDAY 12/10/11</i>		<i>Survey Type: MANUAL</i>
24	GM-03-A-11 RUSHFORD STREET MANCHESTER LEVENSHULME	TERRACED & SEMI-DETACHED	GREATER MANCHESTER
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Number of dwellings: 37 <i>Survey date: MONDAY 26/09/16</i>		<i>Survey Type: MANUAL</i>
25	HC-03-A-20 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 62 <i>Survey date: TUESDAY 20/11/18</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

26	HC-03-A-21 PRIESTLEY ROAD BASINGSTOKE HOUNDMILLS Edge of Town Residential Zone Total Number of dwellings: <i>Survey date: TUESDAY</i>	TERRACED & SEMI -DETACHED 39 <i>13/11/18</i>	HAMPSHIRE <i>Survey Type: MANUAL</i>
27	HC-03-A-22 BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE Edge of Town Residential Zone Total Number of dwellings: <i>Survey date: WEDNESDAY</i>	MIXED HOUSES 40 <i>31/10/18</i>	HAMPSHIRE <i>Survey Type: MANUAL</i>
28	HF-03-A-03 HARE STREET ROAD BUNTINGFORD Edge of Town Residential Zone Total Number of dwellings: <i>Survey date: MONDAY</i>	MIXED HOUSES 160 <i>08/07/19</i>	HERTFORDSHIRE <i>Survey Type: MANUAL</i>
29	HI-03-A-14 KING BRUDE ROAD INVERNESS SCORGUIE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: <i>Survey date: WEDNESDAY</i>	SEMI -DETACHED & TERRACED 40 <i>23/03/16</i>	HIGHLAND <i>Survey Type: MANUAL</i>
30	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: <i>Survey date: THURSDAY</i>	MIXED HOUSES & FLATS 51 <i>14/07/16</i>	KENT <i>Survey Type: MANUAL</i>
31	KC-03-A-04 KILN BARN ROAD AYLESFORD DITTON Edge of Town Residential Zone Total Number of dwellings: <i>Survey date: FRIDAY</i>	SEMI -DETACHED & TERRACED 110 <i>22/09/17</i>	KENT <i>Survey Type: MANUAL</i>
32	KC-03-A-05 ROCHESTER ROAD NEAR CHATHAM BURHAM Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings: <i>Survey date: FRIDAY</i>	DETACHED & SEMI -DETACHED 8 <i>22/09/17</i>	KENT <i>Survey Type: MANUAL</i>
33	KC-03-A-06 MARGATE ROAD HERNE BAY Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: <i>Survey date: WEDNESDAY</i>	MIXED HOUSES & FLATS 363 <i>27/09/17</i>	KENT <i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

34	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES		KENT
	Edge of Town Residential Zone Total Number of dwellings:		288	
	<i>Survey date: WEDNESDAY</i>		<i>27/09/17</i>	<i>Survey Type: MANUAL</i>
35	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES		KENT
	Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings:		159	
	<i>Survey date: TUESDAY</i>		<i>22/05/18</i>	<i>Survey Type: MANUAL</i>
36	LC-03-A-31 GREENSIDE PRESTON COTTAM	DETACHED HOUSES		LANCASHIRE
	Edge of Town Residential Zone Total Number of dwellings:		32	
	<i>Survey date: FRIDAY</i>		<i>17/11/17</i>	<i>Survey Type: MANUAL</i>
37	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings:		85	
	<i>Survey date: THURSDAY</i>		<i>28/06/18</i>	<i>Survey Type: MANUAL</i>
38	LN-03-A-03 ROOKERY LANE LINCOLN BOULTHAM	SEMI DETACHED		LINCOLNSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		22	
	<i>Survey date: TUESDAY</i>		<i>18/09/12</i>	<i>Survey Type: MANUAL</i>
39	MS-03-A-03 BEMPTON ROAD LIVERPOOL OTTERSPOOL	DETACHED		MERSEYSIDE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		15	
	<i>Survey date: FRIDAY</i>		<i>21/06/13</i>	<i>Survey Type: MANUAL</i>
40	NE-03-A-02 HANOVER WALK SCUNTHORPE	SEMI DETACHED & DETACHED		NORTH EAST LINCOLNSHIRE
	Edge of Town No Sub Category Total Number of dwellings:		432	
	<i>Survey date: MONDAY</i>		<i>12/05/14</i>	<i>Survey Type: MANUAL</i>
41	NF-03-A-01 YARMOUTH ROAD CAISTER-ON-SEA	SEMI DET. & BUNGALOWS		NORFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		27	
	<i>Survey date: TUESDAY</i>		<i>16/10/12</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

42	NF-03-A-02 DEREHAM ROAD NORWICH	HOUSES & FLATS		NORFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 98 <i>Survey date: MONDAY 22/10/12</i>			
43	NF-03-A-03 HALING WAY THETFORD	DETACHED HOUSES		NORFOLK
	Edge of Town Residential Zone Total Number of dwellings: 10 <i>Survey date: WEDNESDAY 16/09/15</i>			
44	NY-03-A-06 HORSEFAIR BOROUGHBRIDGE	BUNGALOWS & SEMI DET.		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 <i>Survey date: FRIDAY 14/10/11</i>			
45	NY-03-A-07 CRAVEN WAY BOROUGHBRIDGE	DETACHED & SEMI DET.		NORTH YORKSHIRE
	Edge of Town No Sub Category Total Number of dwellings: 23 <i>Survey date: TUESDAY 18/10/11</i>			
46	NY-03-A-08 NICHOLAS STREET YORK	TERRACED HOUSES		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 21 <i>Survey date: MONDAY 16/09/13</i>			
47	NY-03-A-09 GRAMMAR SCHOOL LANE NORTHALLERTON	MIXED HOUSING		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 <i>Survey date: MONDAY 16/09/13</i>			
48	NY-03-A-10 BOROUGHBRIDGE ROAD RIPON	HOUSES AND FLATS		NORTH YORKSHIRE
	Edge of Town No Sub Category Total Number of dwellings: 71 <i>Survey date: TUESDAY 17/09/13</i>			
49	NY-03-A-11 HORSEFAIR BOROUGHBRIDGE	PRIVATE HOUSING		NORTH YORKSHIRE
	Edge of Town Residential Zone Total Number of dwellings: 23 <i>Survey date: WEDNESDAY 18/09/13</i>			

LIST OF SITES relevant to selection parameters (Cont.)

50	NY-03-A-13 CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPOUND Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 10 <i>Survey date: WEDNESDAY 10/05/17</i>	TERRACED HOUSES	NORTH YORKSHIRE	<i>Survey Type: MANUAL</i>
51	PK-03-A-01 TULLYLUMB TERRACE PERTH CORNHILL Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 36 <i>Survey date: WEDNESDAY 11/05/11</i>	DETAC. & BUNGALOWS	PERTH & KINROSS	<i>Survey Type: MANUAL</i>
52	PS-03-A-02 GUNROG ROAD WELSHPOOL Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 28 <i>Survey date: MONDAY 11/05/15</i>	DETACHED/SEMI-DETACHED	POWYS	<i>Survey Type: MANUAL</i>
53	SC-03-A-04 HIGH ROAD BYFLEET Edge of Town Residential Zone Total Number of dwellings: 71 <i>Survey date: THURSDAY 23/01/14</i>	DETACHED & TERRACED	SURREY	<i>Survey Type: MANUAL</i>
54	SF-03-A-04 NORMANSTON DRIVE LOWESTOFT Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 7 <i>Survey date: TUESDAY 23/10/12</i>	DETACHED & BUNGALOWS	SUFFOLK	<i>Survey Type: MANUAL</i>
55	SF-03-A-05 VALE LANE BURY ST EDMUNDS Edge of Town Residential Zone Total Number of dwellings: 18 <i>Survey date: WEDNESDAY 09/09/15</i>	DETACHED HOUSES	SUFFOLK	<i>Survey Type: MANUAL</i>
56	SF-03-A-06 BURY ROAD KENTFORD Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings: 38 <i>Survey date: FRIDAY 22/09/17</i>	DETACHED & SEMI-DETACHED	SUFFOLK	<i>Survey Type: MANUAL</i>
57	SF-03-A-07 FOXHALL ROAD IPSWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 73 <i>Survey date: THURSDAY 09/05/19</i>	MIXED HOUSES	SUFFOLK	<i>Survey Type: MANUAL</i>
58	SH-03-A-05 SANDCROFT TELFORD SUTTON HILL Edge of Town Residential Zone Total Number of dwellings: 54 <i>Survey date: THURSDAY 24/10/13</i>	SEMI-DETACHED/TERRACED	SHROPSHIRE	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

59	SH-03-A-06 ELLESMERE ROAD SHREWSBURY	BUNGALOWS		SHROPSHIRE
	Edge of Town Residential Zone Total Number of dwellings:		16	
	<i>Survey date: THURSDAY</i>		<i>22/05/14</i>	<i>Survey Type: MANUAL</i>
60	SM-03-A-01 WEMBDON ROAD BRIDGWATER NORTHFIELD	DETACHED & SEMI		SOMERSET
	Edge of Town Residential Zone Total Number of dwellings:		33	
	<i>Survey date: THURSDAY</i>		<i>24/09/15</i>	<i>Survey Type: MANUAL</i>
61	SM-03-A-02 HYDE LANE NEAR TAUNTON CREECH SAINT MICHAEL	MIXED HOUSES		SOMERSET
	Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings:		42	
	<i>Survey date: TUESDAY</i>		<i>25/09/18</i>	<i>Survey Type: MANUAL</i>
62	SM-03-A-03 HYDE LANE NEAR TAUNTON CREECH ST MICHAEL	MIXED HOUSES		SOMERSET
	Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings:		41	
	<i>Survey date: TUESDAY</i>		<i>25/09/18</i>	<i>Survey Type: MANUAL</i>
63	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE	DETACHED & SEMI-DETACHED		STAFFORDSHIRE
	Edge of Town Residential Zone Total Number of dwellings:		248	
	<i>Survey date: WEDNESDAY</i>		<i>22/11/17</i>	<i>Survey Type: MANUAL</i>
64	ST-03-A-08 SILKMORE CRESCENT STAFFORD MEADOWCROFT PARK	DETACHED HOUSES		STAFFORDSHIRE
	Edge of Town Residential Zone Total Number of dwellings:		26	
	<i>Survey date: WEDNESDAY</i>		<i>22/11/17</i>	<i>Survey Type: MANUAL</i>
65	SY-03-A-01 A19 BENTLEY ROAD DONCASTER BENTLEY RISE	SEMI DETACHED HOUSES		SOUTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		54	
	<i>Survey date: WEDNESDAY</i>		<i>18/09/13</i>	<i>Survey Type: MANUAL</i>
66	TW-03-A-02 WEST PARK ROAD GATESHEAD	SEMI-DETACHED		TYNE & WEAR
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		16	
	<i>Survey date: MONDAY</i>		<i>07/10/13</i>	<i>Survey Type: MANUAL</i>
67	TW-03-A-03 STATION ROAD NEAR NEWCASTLE BACKWORTH	MIXED HOUSES		TYNE & WEAR
	Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings:		33	
	<i>Survey date: FRIDAY</i>		<i>13/11/15</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

68	VG-03-A-01 ARTHUR STREET BARRY	SEMI -DETACHED & TERRACED		VALE OF GLAMORGAN
	Edge of Town Residential Zone Total Number of dwellings:		12	
	<i>Survey date: MONDAY</i>		<i>08/05/17</i>	<i>Survey Type: MANUAL</i>
69	WK-03-A-01 ARLINGTON AVENUE LEAMINGTON SPA	TERRACED/SEMI /DET.		WARWICKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		6	
	<i>Survey date: FRIDAY</i>		<i>21/10/11</i>	<i>Survey Type: MANUAL</i>
70	WK-03-A-02 NARBERTH WAY COVENTRY POTTERS GREEN	BUNGALOWS		WARWICKSHIRE
	Edge of Town Residential Zone Total Number of dwellings:		17	
	<i>Survey date: THURSDAY</i>		<i>17/10/13</i>	<i>Survey Type: MANUAL</i>
71	WL-03-A-02 HEADLANDS GROVE SWINDON	SEMI DETACHED		WILTSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		27	
	<i>Survey date: THURSDAY</i>		<i>22/09/16</i>	<i>Survey Type: MANUAL</i>
72	WM-03-A-04 OSBORNE ROAD COVENTRY EARLSDON	TERRACED HOUSES		WEST MIDLANDS
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Number of dwellings:		39	
	<i>Survey date: MONDAY</i>		<i>21/11/16</i>	<i>Survey Type: MANUAL</i>
73	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone Total Number of dwellings:		151	
	<i>Survey date: THURSDAY</i>		<i>11/12/14</i>	<i>Survey Type: MANUAL</i>
74	WS-03-A-05 UPPER SHOREHAM ROAD SHOREHAM BY SEA	TERRACED & FLATS		WEST SUSSEX
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		48	
	<i>Survey date: WEDNESDAY</i>		<i>18/04/12</i>	<i>Survey Type: MANUAL</i>
75	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS		WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings:		57	
	<i>Survey date: THURSDAY</i>		<i>19/10/17</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

76	WS-03-A-08	MIXED HOUSES		WEST SUSSEX
	ROUNDSTONE LANE ANGMERING			
	Edge of Town Residential Zone			
	Total Number of dwellings:		180	
	<i>Survey date: THURSDAY</i>		<i>19/04/18</i>	<i>Survey Type: MANUAL</i>
77	WS-03-A-09	MIXED HOUSES & FLATS		WEST SUSSEX
	LITTLEHAMPTON ROAD WORTHING WEST DURRINGTON			
	Edge of Town Residential Zone			
	Total Number of dwellings:		197	
	<i>Survey date: THURSDAY</i>		<i>05/07/18</i>	<i>Survey Type: MANUAL</i>
78	WS-03-A-10	MIXED HOUSES		WEST SUSSEX
	TODDINGTON LANE LITTLEHAMPTON WICK			
	Edge of Town Residential Zone			
	Total Number of dwellings:		79	
	<i>Survey date: WEDNESDAY</i>		<i>07/11/18</i>	<i>Survey Type: MANUAL</i>
79	WS-03-A-11	MIXED HOUSES		WEST SUSSEX
	ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH			
	Edge of Town Residential Zone			
	Total Number of dwellings:		918	
	<i>Survey date: TUESDAY</i>		<i>02/04/19</i>	<i>Survey Type: MANUAL</i>
80	WY-03-A-01	MIXED HOUSING		WEST YORKSHIRE
	SPRING VALLEY CRESCENT LEEDS BRAMLEY			
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone			
	Total Number of dwellings:		46	
	<i>Survey date: WEDNESDAY</i>		<i>21/09/16</i>	<i>Survey Type: MANUAL</i>

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
VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	80	86	0.067	80	86	0.282	80	86	0.349
08:00 - 09:00	80	86	0.130	80	86	0.366	80	86	0.496
09:00 - 10:00	80	86	0.140	80	86	0.166	80	86	0.306
10:00 - 11:00	80	86	0.121	80	86	0.151	80	86	0.272
11:00 - 12:00	80	86	0.130	80	86	0.144	80	86	0.274
12:00 - 13:00	80	86	0.152	80	86	0.142	80	86	0.294
13:00 - 14:00	80	86	0.154	80	86	0.153	80	86	0.307
14:00 - 15:00	80	86	0.161	80	86	0.180	80	86	0.341
15:00 - 16:00	80	86	0.245	80	86	0.168	80	86	0.413
16:00 - 17:00	80	86	0.270	80	86	0.160	80	86	0.430
17:00 - 18:00	80	86	0.330	80	86	0.151	80	86	0.481
18:00 - 19:00	80	86	0.272	80	86	0.157	80	86	0.429
19:00 - 20:00	1	97	0.062	1	97	0.052	1	97	0.114
20:00 - 21:00	1	97	0.031	1	97	0.021	1	97	0.052
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.265			2.293			4.558

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: 6 - 918 (units:)
 Survey date range: 01/01/11 - 08/07/19
 Number of weekdays (Monday-Friday): 80
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 4
 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 shown. 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

TAXI S

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	80	86	0.002	80	86	0.002	80	86	0.004
08:00 - 09:00	80	86	0.004	80	86	0.004	80	86	0.008
09:00 - 10:00	80	86	0.003	80	86	0.002	80	86	0.005
10:00 - 11:00	80	86	0.002	80	86	0.003	80	86	0.005
11:00 - 12:00	80	86	0.002	80	86	0.002	80	86	0.004
12:00 - 13:00	80	86	0.002	80	86	0.002	80	86	0.004
13:00 - 14:00	80	86	0.003	80	86	0.002	80	86	0.005
14:00 - 15:00	80	86	0.002	80	86	0.003	80	86	0.005
15:00 - 16:00	80	86	0.004	80	86	0.004	80	86	0.008
16:00 - 17:00	80	86	0.003	80	86	0.003	80	86	0.006
17:00 - 18:00	80	86	0.002	80	86	0.002	80	86	0.004
18:00 - 19:00	80	86	0.002	80	86	0.002	80	86	0.004
19:00 - 20:00	1	97	0.031	1	97	0.041	1	97	0.072
20:00 - 21:00	1	97	0.021	1	97	0.010	1	97	0.031
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.083			0.082			0.165

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	80	86	0.001	80	86	0.001	80	86	0.002
08:00 - 09:00	80	86	0.002	80	86	0.002	80	86	0.004
09:00 - 10:00	80	86	0.003	80	86	0.002	80	86	0.005
10:00 - 11:00	80	86	0.003	80	86	0.003	80	86	0.006
11:00 - 12:00	80	86	0.001	80	86	0.001	80	86	0.002
12:00 - 13:00	80	86	0.002	80	86	0.002	80	86	0.004
13:00 - 14:00	80	86	0.002	80	86	0.001	80	86	0.003
14:00 - 15:00	80	86	0.001	80	86	0.002	80	86	0.003
15:00 - 16:00	80	86	0.002	80	86	0.002	80	86	0.004
16:00 - 17:00	80	86	0.001	80	86	0.001	80	86	0.002
17:00 - 18:00	80	86	0.001	80	86	0.001	80	86	0.002
18:00 - 19:00	80	86	0.000	80	86	0.000	80	86	0.000
19:00 - 20:00	1	97	0.000	1	97	0.000	1	97	0.000
20:00 - 21:00	1	97	0.000	1	97	0.000	1	97	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.018			0.037

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	80	86	0.000	80	86	0.000	80	86	0.000
08:00 - 09:00	80	86	0.001	80	86	0.001	80	86	0.002
09:00 - 10:00	80	86	0.000	80	86	0.000	80	86	0.000
10:00 - 11:00	80	86	0.000	80	86	0.000	80	86	0.000
11:00 - 12:00	80	86	0.000	80	86	0.000	80	86	0.000
12:00 - 13:00	80	86	0.000	80	86	0.000	80	86	0.000
13:00 - 14:00	80	86	0.000	80	86	0.000	80	86	0.000
14:00 - 15:00	80	86	0.000	80	86	0.000	80	86	0.000
15:00 - 16:00	80	86	0.001	80	86	0.001	80	86	0.002
16:00 - 17:00	80	86	0.000	80	86	0.000	80	86	0.000
17:00 - 18:00	80	86	0.000	80	86	0.000	80	86	0.000
18:00 - 19:00	80	86	0.000	80	86	0.000	80	86	0.000
19:00 - 20:00	1	97	0.000	1	97	0.000	1	97	0.000
20:00 - 21:00	1	97	0.000	1	97	0.000	1	97	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	80	86	0.004	80	86	0.011	80	86	0.015
08:00 - 09:00	80	86	0.005	80	86	0.016	80	86	0.021
09:00 - 10:00	80	86	0.001	80	86	0.005	80	86	0.006
10:00 - 11:00	80	86	0.002	80	86	0.004	80	86	0.006
11:00 - 12:00	80	86	0.003	80	86	0.003	80	86	0.006
12:00 - 13:00	80	86	0.005	80	86	0.004	80	86	0.009
13:00 - 14:00	80	86	0.003	80	86	0.002	80	86	0.005
14:00 - 15:00	80	86	0.003	80	86	0.003	80	86	0.006
15:00 - 16:00	80	86	0.010	80	86	0.003	80	86	0.013
16:00 - 17:00	80	86	0.010	80	86	0.005	80	86	0.015
17:00 - 18:00	80	86	0.013	80	86	0.008	80	86	0.021
18:00 - 19:00	80	86	0.011	80	86	0.007	80	86	0.018
19:00 - 20:00	2	52	0.029	2	52	0.000	2	52	0.029
20:00 - 21:00	2	52	0.029	2	52	0.010	2	52	0.039
21:00 - 22:00	1	7	0.000	1	7	0.000	1	7	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.128			0.081			0.209

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

CENSUS DATA – TRIP DISTRIBUTION

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

ONS Crown Copyright Reserved [from Nomis on 19 December 2019]

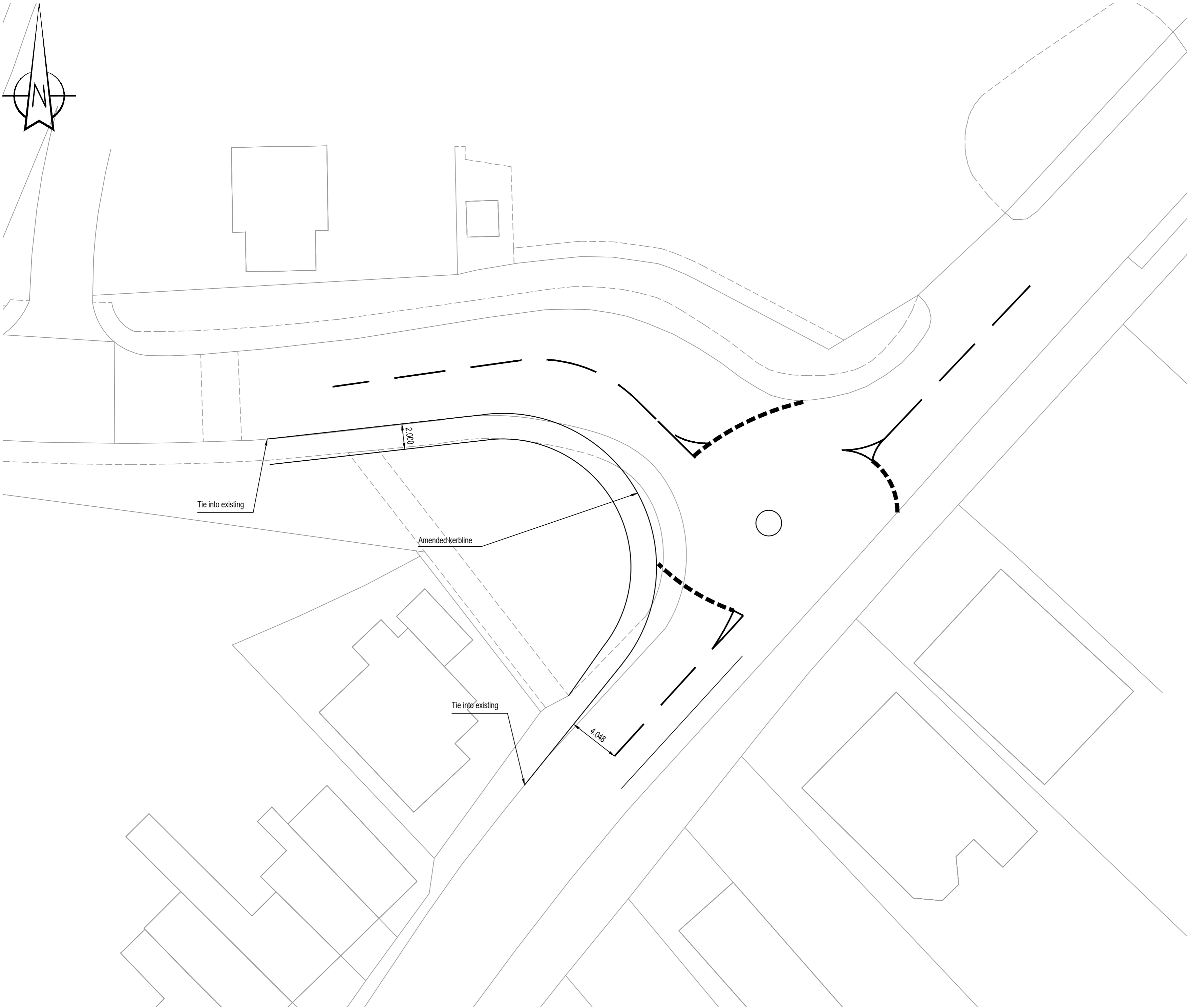
population All usual residents aged 16 and over in employment the week before the census
 units Persons
 date 2011
 usual residence E02003591 : Isle of Wight 011 (2011 super output area - middle layer)

Total selected		1,926			Route Choice								Route Choice																																																							
place of work : 2011 super output area - middle layer	Location	All categories: Method of travel to work (2001 specification)	Driving a car or van	Percentage of Overall Area	Route Choice								Route Choice																																																							
					Mountbatten Drive	Wellington Road	Gunville Road North	Gunville Road South	Clatterford Road	Carisbroke High Street	B3401 West	Carisbrooke Road	Mountbatten Drive	Wellington Road	Gunville Road North	Gunville Road South	Clatterford Road	Carisbroke High Street	B3401 West	Carisbrooke Road																																																
E02003588 : Isle of Wight 008	East and North of Newport	831	528	27%	33%	33%	33%	0%	0%	0%	0%	0%	33%	9%	9%	9%	0%	0%	0%	0%	0%	9%																																														
E02003589 : Isle of Wight 009	North and West of Newport	852	282	15%	33%	33%	33%	0%	0%	0%	0%	33%	5%	5%	5%	0%	0%	0%	0%	0%	5%	5%																																														
E02003591 : Isle of Wight 011	South of Newport	521	237	12%	0%	50%	0%	50%	0%	0%	50%	50%	0%	6%	6%	0%	6%	0%	0%	6%	0%	6%																																														
E02003583 : Isle of Wight 003	Osborne	155	121	6%	0%	100%	0%	0%	0%	0%	0%	100%	0%	6%	6%	0%	0%	0%	0%	0%	0%	6%																																														
E02003582 : Isle of Wight 002	Northwood and West of Cowes	139	116	6%	25%	0%	75%	0%	0%	0%	0%	0%	2%	0%	5%	0%	0%	0%	0%	0%	0%	0%																																														
E02003584 : Isle of Wight 004	Ryde	100	83	4%	50%	50%	0%	0%	0%	0%	0%	50%	2%	2%	0%	0%	0%	0%	0%	0%	2%	2%																																														
E02003593 : Isle of Wight 013	West of Newport	132	81	4%	0%	0%	50%	50%	17%	17%	17%	0%	0%	0%	0%	2%	2%	1%	1%	1%	1%	0%																																														
E02003581 : Isle of Wight 001	Cowes	96	62	3%	25%	0%	75%	0%	0%	0%	0%	0%	1%	0%	2%	0%	0%	0%	0%	0%	0%	0%																																														
E02003595 : Isle of Wight 015	Sandown	75	57	3%	0%	100%	0%	0%	0%	0%	50%	0%	0%	3%	0%	0%	0%	0%	1%	0%	0%	1%																																														
E02003587 : Isle of Wight 007	Ryde and Elmfield	63	52	3%	50%	50%	0%	0%	0%	0%	0%	50%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%																																														
E02003590 : Isle of Wight 010	East of Ryde	64	50	3%	50%	50%	0%	0%	0%	0%	0%	50%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%																																														
E02003594 : Isle of Wight 014	Brading	57	47	2%	50%	50%	0%	0%	0%	0%	0%	50%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%																																														
E02003592 : Isle of Wight 012	Yarmouth	68	45	2%	0%	0%	50%	50%	0%	0%	50%	0%	0%	0%	1%	1%	0%	0%	0%	0%	1%	0%																																														
E02003596 : Isle of Wight 016	Shanklin	58	45	2%	0%	100%	0%	0%	0%	50%	0%	50%	0%	2%	0%	0%	0%	0%	1%	0%	0%	1%																																														
E02003585 : Isle of Wight 005	Fishbourne	45	35	2%	50%	50%	0%	0%	0%	0%	0%	50%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%																																														
E02003597 : Isle of Wight 017	South of island	48	30	2%	0%	50%	0%	50%	17%	17%	0%	17%	0%	1%	1%	0%	1%	0%	0%	0%	0%	0%																																														
E02003586 : Isle of Wight 006	West of Ryde	35	28	1%	50%	50%	0%	0%	0%	0%	0%	50%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%																																														
E02003598 : Isle of Wight 018	South of Shanklin	32	27	1%	0%	100%	0%	0%	0%	0%	50%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	1%																																														
					24%								41%								24%								10%								1%								10%								2%								38%							



Appendix E

PROPOSED MITIGATION – WELLINGTON ROAD / CARISBROOKE ROAD



Notes:

General

1. Do not scale from drawing.
2. All dimensions are in metres, unless stated otherwise.
3. This drawing is to be read & printed in colour.
4. This drawing is for illustrative purposes only.

Disclaimer

1. The information contained in this drawing is based on a combination of OS and data provided by others and WYG shall not be liable for any inaccuracies or deficiencies.

REV	DETAILS	DRAWN BY	CHECKED BY	DATE

CLIENT:
Isle of Wight Council

PROJECT:
**Carisbrooke College
Link Road Assessment**

DRAWING TITLE:
**Potential Mitigation Works
Carisbrooke Road/
Wellington Road Junction**

SCALES: **1:200** SHEET SIZE: **A2**

DRAWN: **GS** CHECKED: **MA** DATE: **29.01.2019**



The Pavilion, 1st Floor, Botleigh Grange Office
Campus, Hedge End, Southampton, SO30 2AF
t: 02382 022 800 e: transport@wyg.com

DRAWING NUMBER: **A090129-99-1-SK01** REVISION: **-**



Appendix F

PROPOSED MITIGATION SCHEME – JUNCTION MODELLING OUTPUTS

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: A090129-99-1_Wellington Rd-Carisbrook Rd Mini Rbt Jan 2020.j9
 Path: X:\2012\A090000\A090129-99-1 Carisbrooke College\30 Technical\31 Modelling
 Report generation date: 31/01/2020 16:47:45

- »2034 Link Road, AM
- »2034 Link Road, PM

Summary of junction performance

	AM		PM	
	Queue (Veh)	RFC	Queue (Veh)	RFC
2034 Link Road				
1 - Carisbrooke Road North	7.8	0.90	8.7	0.91
2 - Carisbrooke Road South	6.2	0.88	0.7	0.41
3 - Wellington Road	1.7	0.64	0.5	0.32

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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	(untitled)
Location	
Site number	
Date	11/12/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\clara.evans
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	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	Relationship type	Relationship
D1	2019	AM	ONE HOUR	08:00	09:30	15			
D2	2019	PM	ONE HOUR	17:00	18:30	15			
D3	2034	AM	ONE HOUR	08:00	09:30	15		Simple	D1*1.1929
D4	2034	PM	ONE HOUR	17:00	18:30	15		Simple	D2*1.1904
D5	2034 Link Road	AM	ONE HOUR	08:00	09:30	15	✓		
D6	2034 Link Road	PM	ONE HOUR	17:00	18:30	15	✓		

Analysis Set Details

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

2034 Link Road, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wellington Road/Carisbrook Road	Mini-roundabout		1, 2, 3	29.74	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Carisbrooke Road North	
2	Carisbrooke Road South	
3	Wellington Road	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Carisbrooke Road North	3.74	3.74	4.14	3.9	16.00	16.06	0.0	
2 - Carisbrooke Road South	3.59	3.59	6.35	3.6	13.51	8.70	0.0	
3 - Wellington Road	3.53	3.53	5.92	8.5	10.50	8.70	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Carisbrooke Road North	0.672	1019
2 - Carisbrooke Road South	0.644	1092
3 - Wellington Road	0.659	1048

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

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	2034 Link Road	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke Road North		ONE HOUR	✓	768	100.000
2 - Carisbrooke Road South		ONE HOUR	✓	685	100.000
3 - Wellington Road		ONE HOUR	✓	374	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	441	327
	2 - Carisbrooke Road South	561	0	124
	3 - Wellington Road	264	110	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	0	0
	2 - Carisbrooke Road South	0	0	0
	3 - Wellington Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke Road North	0.90	35.26	7.8	E	705	1057
2 - Carisbrooke Road South	0.88	31.30	6.2	D	628	942
3 - Wellington Road	0.64	15.56	1.7	C	343	515

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	578	145	82	964	0.600	572	615	0.0	1.5	9.071	A
2 - Carisbrooke Road South	515	129	244	935	0.551	511	411	0.0	1.2	8.388	A
3 - Wellington Road	282	70	418	772	0.365	279	336	0.0	0.6	7.272	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	690	173	99	953	0.725	686	738	1.5	2.5	13.302	B
2 - Carisbrooke Road South	615	154	292	904	0.681	612	493	1.2	2.1	12.188	B
3 - Wellington Road	336	84	501	717	0.469	335	403	0.6	0.9	9.386	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	846	211	120	938	0.901	828	894	2.5	6.9	28.878	D
2 - Carisbrooke Road South	754	188	353	865	0.871	740	596	2.1	5.5	26.220	D
3 - Wellington Road	412	103	606	648	0.635	409	487	0.9	1.7	14.814	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	846	211	121	938	0.902	842	906	6.9	7.8	35.256	E
2 - Carisbrooke Road South	754	188	359	861	0.875	751	605	5.5	6.2	31.298	D
3 - Wellington Road	412	103	615	642	0.641	412	495	1.7	1.7	15.565	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	690	173	100	952	0.725	710	756	7.8	2.8	15.989	C
2 - Carisbrooke Road South	615	154	302	897	0.686	631	508	6.2	2.3	14.228	B
3 - Wellington Road	336	84	517	707	0.475	339	417	1.7	0.9	9.877	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	578	145	83	963	0.600	583	625	2.8	1.5	9.599	A
2 - Carisbrooke Road South	515	129	248	932	0.553	520	418	2.3	1.3	8.806	A
3 - Wellington Road	282	70	425	767	0.367	283	342	0.9	0.6	7.451	A

2034 Link Road, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 82% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wellington Road/Carisbrook Road	Mini-roundabout		1, 2, 3	24.30	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

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	2034 Link Road	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Carisbrooke Road North		ONE HOUR	✓	806	100.000
2 - Carisbrooke Road South		ONE HOUR	✓	365	100.000
3 - Wellington Road		ONE HOUR	✓	240	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	631	175
	2 - Carisbrooke Road South	323	0	42
	3 - Wellington Road	175	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Carisbrooke Road North	2 - Carisbrooke Road South	3 - Wellington Road
From	1 - Carisbrooke Road North	0	0	0
	2 - Carisbrooke Road South	0	0	0
	3 - Wellington Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Carisbrooke Road North	0.91	37.70	8.7	E	740	1109
2 - Carisbrooke Road South	0.41	6.35	0.7	A	335	502
3 - Wellington Road	0.32	6.55	0.5	A	220	330

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	607	152	49	986	0.615	601	373	0.0	1.6	9.197	A
2 - Carisbrooke Road South	274	69	130	1008	0.272	273	519	0.0	0.4	4.887	A
3 - Wellington Road	181	45	242	888	0.203	180	162	0.0	0.3	5.072	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	725	181	58	980	0.740	720	447	1.6	2.7	13.623	B
2 - Carisbrooke Road South	328	82	156	991	0.331	327	622	0.4	0.5	5.417	A
3 - Wellington Road	216	54	290	857	0.252	215	194	0.3	0.3	5.610	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	887	222	71	971	0.914	868	547	2.7	7.6	30.228	D
2 - Carisbrooke Road South	401	100	188	971	0.414	401	751	0.5	0.7	6.304	A
3 - Wellington Road	264	66	354	814	0.325	264	235	0.3	0.5	6.534	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	887	222	72	971	0.914	883	548	7.6	8.7	37.703	E
2 - Carisbrooke Road South	401	100	192	969	0.414	401	763	0.7	0.7	6.346	A
3 - Wellington Road	264	66	355	814	0.325	264	238	0.5	0.5	6.552	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	725	181	59	979	0.740	747	448	8.7	3.0	16.821	C
2 - Carisbrooke Road South	328	82	162	988	0.332	329	644	0.7	0.5	5.470	A
3 - Wellington Road	216	54	291	856	0.252	216	200	0.5	0.3	5.633	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Carisbrooke Road North	607	152	49	986	0.615	612	375	3.0	1.6	9.771	A
2 - Carisbrooke Road South	274	69	133	1006	0.273	275	528	0.5	0.4	4.926	A
3 - Wellington Road	181	45	243	887	0.204	181	165	0.3	0.3	5.101	A