

TEY GARDENS  
LITTLE TEY  
CO6 1HX

---

PROPOSED RESIDENTIAL  
DEVELOPMENT

TRAFFIC IMPACT ASSESSMENT  
TECHNICAL NOTE

MAY 2025

TEY GARDENS  
CHURCH LANE, LITTLE TEY, COLCHESTER, CO6 1HX

---

TRAFFIC IMPACT ASSESSMENT TECHNICAL NOTE

DOCUMENT RECORD			
Tey Gardens, Little Tey – Traffic Impact Assessment Technical Note – May 2025			
Project No.	Author	Status	Date
FTP/2503/09	A Firmin	Final	23.05.25

**Disclaimer**

This document has been prepared in accordance with the scope of Firmin Transport Planning Ltd's appointment with its client and is subject to the terms of that appointment. It is addressed to and for the sole use and reliance of Firmin Transport Planning's clients. Firmin Transport Planning accepts no liability for any use of this document other than by its client and only for the purposes, stated in the document, for which it was prepared and provided. No person other than the client may copy (in whole or in part), use or rely on the contents of this document, without the prior written permission of a Director of Firmin Transport Planning. Any advice, opinions, or recommendations within this document should be read and relied upon only in the context of the document as a whole. The contents of this document are not to be construed as providing legal, business or tax advice or opinion.

© Firmin Transport Planning Ltd 2025

TEY GARDENS  
CHURCH LANE, LITTLE TEY, COLCHESTER, CO6 1HX

---

TRAFFIC IMPACT ASSESSMENT TECHNICAL NOTE

**CONTENTS**

---

1.	INTRODUCTION.....	3
2.	STUDY AREA AND TRAFFIC SURVEYS .....	4
3.	PROPOSED ACCESS .....	6
4.	TRIP GENERATION, DISTRIBUTION AND TRAFFIC GROWTH.....	8
5.	PRELIMINARY JUNCTION CAPACITY ASSESSMENTS.....	12
6.	SUMMARY AND CONCLUSIONS.....	21

**FIGURES**

---

Figure 1 – Traffic Survey Study Area

**APPENDICES**

- 
- Appendix A – Proposed Access Plans
  - Appendix B – Census Output
  - Appendix C – Traffic Flow Matrices
  - Appendix D – Proposed Site Access PICADY Output
  - Appendix E – Junction 1 PICADY Output (Existing)
  - Appendix F – Junction 1 PICADY Output (Proposed)
  - Appendix G – Junction 2 PICADY Output
  - Appendix H – Junction 3 ARCADY Output
  - Appendix I – Junction 4 ARCADY Output
  - Appendix J – Junction 5a PICADY Output
  - Appendix K – Junction 5b ARCADY Output
  - Appendix L – Junction 6 ARCADY Output

## 1. INTRODUCTION

---

- 1.1 **Firmin Transport Planning Ltd (FTP)** have been instructed by **Tey Gardens LLP** to prepare a Traffic Impact Assessment Technical Note (TN) in association with the proposed development of land at **Tey Gardens, Church Lane, Little Tey, Colchester, Essex, CO6 1HX**.
- 1.2 The proposals are for a C3 residential development consisting of up to 150 homes including vehicular, pedestrian and cycle access upgrades and upgrades to the Church Lane / A120 priority junction in keeping with the latest DMRB standards.
- 1.3 This TN has been prepared to assess the potential impact of the development proposals on the surrounding highway network in accordance with comments received from National Highways and Essex Highways during initial pre-application discussions.
- 1.4 National Highways (NH) have provided their initial pre-application response to the proposals in relation to the proposed access arrangements and general development proposals and outline the information that would be required to prepare a Transport Assessment. Overall, the pre-application response was positive both in terms of access arrangement (subject to all necessary junction capacity testing and safety audits) and general principle of development.
- 1.5 Whilst the site is accessed from the SRN, Essex Highways have also provided their pre-application comments on the development proposals and outlined the information that would be required to prepare a Transport Assessment.
- 1.6 This TN is structured in the following way:
- **Section 2 – Study Area and Traffic Surveys;**
  - **Section 3 – Proposed Access;**
  - **Section 4 – Trip Generation, Distribution and Traffic Growth;**
  - **Section 5 – Preliminary Junction Capacity Assessments; and**
  - **Section 6 – Summary and Conclusions.**

## 2. STUDY AREA AND TRAFFIC SURVEYS

### Study Area

- 2.1 As detailed within the National Highways (NH) Technical Note 01 (dated 24 January 2025) it was stated that *“If a material increase in traffic flows is predicted at any SRN junctions, the area intended to be assessed should include any junctions on the SRN where there is expected to be a material increase in traffic flows.”*
- 2.2 It is noted that there are no set guidelines by NH as to what percentage or number of vehicles forms a ‘material increase’ in traffic flows. The study area has therefore been set based on the likely trip distribution from the development site which is reviewed in detail at **Section 4** of this TN.
- 2.3 The proposed distribution of a residential development on the site is summarised below and confirms that the proposals are unlikely to have a material impact on any junctions to the west of the Church Lane / A120 priority junction, with the majority of vehicles travelling to and from the east.
- 70% to / from the East (Colchester direction); and
  - 30% to / from the West (Braintree direction).
- 2.4 This TN assesses the impact of the proposals on the study area summarised below and at **Figure 1**.



**Figure 1: Development Impact Study Area**

- **Junction 1:** Church Lane / A120 priority junction;
- **Junction 2:** Great Tey Road / A120 priority junction;
- **Junction 3:** Godmans Lane / A120 mini-roundabout junction;
- **Junction 4:** Ashbury Drive / A120 mini-roundabout junction;
- **Junction 5a:** Old London Road / A120 / commercial access priority junction;
- **Junction 5b:** A12 Junction 25 (Marks Tey Roundabout); and
- **Junction 6:** A12 Junction 25 (Prince of Wales Roundabout);

### Traffic Surveys

- 2.5 Classified Turning Count traffic surveys, including queue lengths, have been undertaken for the full study area on Thursday 27 March 2025 between 0700 – 1000 and 1500 – 1900 to cover the AM and PM peak periods. *The traffic survey results can be provided upon request and will be included with any Transport Assessment.*
- 2.6 The surveys were undertaken during a ‘neutral’ time period, when there were no roadworks on the surrounding network which could impact upon the results. The following AM and PM peak hours:
- **AM Peak Hour** – 0700 – 0800
  - **PM Peak Hour** – 1600 – 1700
- 2.7 Whilst the identified peak hours are slightly earlier than the ‘typical’ peak hours of 0800 – 0900 and 1700 – 1800 they have been used as the base position within this TN to ensure that a robust assessment is undertaken.
- 2.8 The base traffic surveys for each junction are presented within the traffic flow matrices included at **Appendix C**.

### Global Stone (Existing Development Traffic)

- 2.9 At the time of the traffic surveys, the development site was undergoing routine maintenance and there was very little / no traffic entering or exiting the site. As such, the baseline position for the surveys is without any existing site traffic.
- 2.10 The existing Global Stone site was subsequently surveyed the following week between 29<sup>th</sup> March – 4<sup>th</sup> April 2025. *The traffic survey results can be provided upon request and will be included with any Transport Assessment.*
- 2.11 The surveys of the existing site show an average of 12 movements during the typical AM peak hour (25% HGV) and 7 movements during the typical PM peak hour (0% HGV). A summary of the daily movements is included in **Table 1** below which confirms that the site generates an average of 142 vehicle movements per day with around 50% all movements being HGVs (rigid and articulated HGVs).

**Table 1: Existing Global Stone Vehicle Movements**

Date	Entry		Exit		Total	
	Total	HGV	Total	HGV	Total	HGV
<b>Monday</b>	67	32	67	32	134	64
<b>Tuesday</b>	72	41	70	41	142	82
<b>Wednesday</b>	83	43	82	43	165	86
<b>Thursday</b>	74	33	75	33	149	66
<b>Friday</b>	61	34	60	34	121	68
<b>Average</b>	<b>71</b>	<b>37</b>	<b>71</b>	<b>37</b>	<b>142</b>	<b>74</b>

### 3. PROPOSED ACCESS

---

#### Existing Church Lane Access

- 3.1 The existing Church Lane / A120 junction is a simple priority junction arrangement. Achievable visibility splays are **4.5m x 215m** to the west and **2.4m x 215m to the east**. The junction was upgraded in 2009 when the Global Stone site was developed and the upgrades included widening the carriageway and kerb radii on the eastern side to accommodate the increased number of HGVs associated with Global Stone.

#### Proposed Church Lane / A120 Access

- 3.2 The proposals will include improvements to the Church Lane / A120 priority junction in accordance with DMRB standards. As Church Lane will have an AADT in excess of 300 and the A120 will have an AADT in excess of 13,000 it is considered a requirement to upgrade the existing junction to include a ghost island right turn lane. This approach has been accepted in principle by both NH and Essex Highways at pre-application stage.
- 3.3 NH and Essex Highways have provided initial pre-application feedback in relation to the access proposals and revised drawings have been prepared taking into account the relevant comments for this stage. The amended proposed access drawings are attached at **Appendix A** and include the following amendments:
- Corner radii to A120 increased to 15m with a 1:6 taper;
  - Maximum achievable visibility splays shown (4.5m x 215m to the west and 9.0m x 215m to the east);
  - Existing kerblines included;
  - Inclusion of a 1.5m verge and 2.6m footway along the frontage of the site (A120);
  - Drop-kerb crossing point included for Church Lane;
  - Road markings shown (traffic signs to be included at a later stage);
  - Two options for A120 pedestrian crossing point shown, including visibility splays for both;
  - Swept path assessment shown for no.254 driveway access; and
  - Church Lane widened to 5.5m between the A120 and site access.
- 3.4 It should be noted that during the preparation of the plans attached at **Appendix A** and this TN, the section of the A120 along the site frontage had a speed limit reduction from national (60mph) to 50mph as part of the Marks Tey to Braintree average 50mph speed limit enforcement. On this basis, visibility splays could be reduced from 215m to 160m, however at this stage the visibility assessments are based on 215m visibility splays for robustness.
- 3.5 Preliminary junction capacity assessments of both the existing junction and the proposed junction have been undertaken and the results are discussed within **Section 5** of this TN.

### **Proposed Pedestrian Access**

- 3.6 The proposals include two options for a pedestrian crossing point for the A120 to provide a connection between the site and the bus stops on the southern side of the road. Both crossings would consist of drop kerbs, tactile paving and a central refuge island (western crossing option only). Direct access to the development site will also be provided from the A120 to ensure the most direct walking routes are available to key facilities.
- 3.7 The proposals will seek to provide a further dedicated pedestrian crossing point, either in the form of a central refuge island or a Puffin / Toucan crossing around 350m east of the site in the vicinity of the local facilities at Poplar Nursery. Further details will be provided with any subsequent planning submission.
- 3.8 The proposed crossing points will be of benefit to the wider community and highway users as they will provide a safe, dedicated, crossing point to the local bus stops on both sides of the road which does not currently exist.

## 4. TRIP GENERATION, DISTRIBUTION AND TRAFFIC GROWTH

### Overview

- 4.1 The proposals are for C3 residential development consisting of up to 150 homes including vehicular, pedestrian and cycle access upgrades and upgrades to the Church Lane / A120 priority junction.
- 4.2 The proposals would include the removal of the existing Global Stone site and any associated traffic and freight movements.

### Proposed Trip Generation – Residential

- 4.3 The proposed trip generation, as outlined within the pre-application Transport Statement, is summarised below and forms the basis of the ‘proposed development’ assessment scenarios.

**Table 2: Residential Vehicle Trip Rates - TRICS**

Time Period	Proposed Residential Vehicle Trips		
	Arrivals	Departures	Total
<b>AM Peak Hour</b> (0800 – 0900)	0.158	0.384	<b>0.542</b>
<b>PM Peak Hour</b> (1700 – 1800)	0.314	0.159	<b>0.473</b>
<b>Daily</b> (0700 – 1900)	2.114	2.156	<b>4.270</b>

- 4.4 The table below confirms the proposed number of vehicle movements for **150 dwellings**.

**Table 3: Proposed Residential Vehicle Movements**

Time Period	Proposed Residential Vehicle Movements (150 dwellings)		
	Arrivals	Departures	Total
<b>AM Peak Hour</b> (0800 – 0900)	24	57	<b>81</b>
<b>PM Peak Hour</b> (1700 – 1800)	47	24	<b>71</b>
<b>Daily</b> (0700 – 1900)	317	323	<b>640</b>

### Existing Trip Generation – Global Stone

- 4.5 As detailed within **Section 2**, traffic surveys of the existing Global Stone site were undertaken between 29th March – 4th April 2025. The results show an average of 12 movements during the typical AM peak hour (25% HGV) and 7 movements during the typical PM peak hour (0% HGV). A summary of the daily movements is included in **Table 1** which confirms that the site generates an average of 142 vehicle movements per day with around 50% all movements being HGVs (rigid and articulated HGVs).
- 4.6 At the time of the network surveys, the Global Stone site was undergoing routine maintenance and there was very little / no traffic entering or exiting the site. As such, the baseline position for the surveys is without any existing site traffic, and existing traffic from Global Stone has therefore not been manually removed when undertaking the proposed development scenarios.

### Net Traffic Impact

- 4.7 Based on the proposed vehicle movements within **Table 3** and the existing site movements detailed within **Section 2**, the net traffic impact of the proposals is outlined within **Table 4** below.

**Table 4: Net Traffic Impact**

Time Period	Proposed Residential Vehicle Movements (150 dwellings)		
	Arrivals	Departures	Total
<b>AM Peak Hour</b> (0800 – 0900)	16	53	<b>69</b>
<b>PM Peak Hour</b> (1700 – 1800)	47	17	<b>64</b>
<b>Daily</b> (0700 – 1900)	246	352	<b>498</b>

- 4.8 The table above demonstrates that the potential net increase in vehicle movements associated with the development proposals is between 64 – 69 movements per hour during peak times and 498 over the course of a standard weekday.
- 4.9 The net impact assessment is based on movements only, and does not take into account the removal of an average of 74 HGV movements per day. The removal of a large number of slow moving HGVs entering and exiting the site will have an additional benefit in terms of highway capacity, efficiency and safety which is not reflected when reviewing vehicle numbers alone.

### Vehicle Distribution

- 4.10 The 2011 Census includes details relating to the location of the place of work for residents within the surrounding MSOA (E02004515). The output results are attached at **Appendix B** and the distribution of vehicle movements from the site access are summarised below.

- To / From Braintree Direction - 30%
- To / From Colchester Direction - 70%
  - To / From Great Tey Road - 4%
  - To / From A12 (North) - 43%
  - To / From A12 (South) - 9%
  - To / From London Road (Copford) - 14%

- 4.11 Whilst updated Census information from 2021 is available, the effects of the Covid pandemic in relation to certain datasets, including method of travel and employment location, are considered to be unreliable and at this time the 2011 dataset for employment location is considered to form a more robust assessment.

### Opening and Future Year Scenarios

- 4.12 Base traffic surveys haven been undertaken in March 2025 and an opening year of 2030 has been selected for the assessments within this TN.
- 4.13 For the SRN network, it is acknowledged that a future assessment year should also be included which is typically ten years after the registration of the application, or until the end of the Local Plan period. As this TN has not been prepared to support an application, and the end of the current Colchester Local Plan is 2033, a future assessment year of 2035 has been selected.
- 4.14 Tempro 7.2 has been assessed to calculate the AM and PM peak hour growth factors for the surrounding MSOA (E02004515) which are summarised in **Table 5** below.

**Table 5: NTM Traffic Growth**

Time Period	Tempro 7.2 Growth Rates		
	Origin	Destination	NTM
2025 – 2030 AM	1.0191	1.0334	<b>1.0262</b>
2025 – 2030 PM	1.0316	1.0224	<b>1.0269</b>
2025 – 2035 AM	1.0399	1.0683	<b>1.0566</b>
2025 – 2035 PM	1.0643	1.0459	<b>1.0576</b>

- 4.15 The Tempro growth rates are based on the following assumptions:

**Table 6: NTM Assumptions**

Time Period	Tempro Assumptions		
	Base	Future	Increase
2025 – 2030 (Households)	3396	3506	<b>+ 110</b>
2025 – 2030 (Jobs)	5260	5328	<b>+ 68</b>
2025 – 2035 (Households)	3396	3611	<b>+ 215</b>
2025 – 2035 (Jobs)	5260	5406	<b>+ 146</b>

### Committed Development

- 4.16 The planning portal has been assessed to determine if there are any major developments currently approved, or under construction, in the vicinity of the site which could have an impact on base traffic levels.
- 4.17 The only consented scheme identified which could impact on traffic flows within the vicinity of the site is the Coggeshall Mill residential development around 3km west of the site. Whilst exact figures are not available, it is estimated that 75% of the approved development is currently constructed and occupied and the associated traffic is therefore included within the traffic surveys. On this basis, 25% of the approved

development traffic as detailed within the TA (dated December 2017) has been included as committed development.

- 4.18 As detailed above, the Temprow traffic growth figures apply around 2.6% of growth between 2025 – 2030 and around 5.7% of growth between 2025 – 2035 based on an increase of up to 215 new residential dwellings and 146 new jobs within the surrounding MSOA. The traffic growth contained within Temprow, along with the Coggeshall Mill development, is therefore considered to form a robust base scenario for the future assessment year scenarios.

#### **Traffic Flow Matrices**

- 4.19 Detailed Traffic Flow Matrices for all junctions within the study area have been prepared and are attached at **Appendix C**.

## 5. PRELIMINARY JUNCTION CAPACITY ASSESSMENTS

### Introduction

5.1 As detailed within **Section 2** of this TN, the following study area has been assessed to determine the impact of the development proposals on junctions between the site access and the SRN (A12 Junction 25).

- **Proposed Site Access:** Church Lane priority junction;
- **Junction 1:** Church Lane / A120 priority junction;
- **Junction 2:** Great Tey Road / A120 priority junction;
- **Junction 3:** Godmans Lane / A120 mini-roundabout junction;
- **Junction 4:** Ashbury Drive / A120 mini-roundabout junction;
- **Junction 5a:** Old London Road / A120 / commercial access priority junction;
- **Junction 5b:** A12 Junction 25 (Marks Tey Roundabout); and
- **Junction 6:** A12 Junction 25 (Prince of Wales Roundabout).

5.2 The table below details the percentage impact of the development proposals on each junction (excluding the proposed site access) based on the traffic flow matrices attached at **Appendix C**. The traffic flows include all turning and ahead movements during the AM and PM peak hours.

**Table 7: Net Impact Assessment**

Junction	2035 + Committed Development		2035 + Committed + Proposed Development		% Impact	
	AM	PM	AM	PM	AM	PM
1	2065	1938	2146	2009	3.9%	3.7%
2	2199	2122	2256	2172	2.6%	2.4%
3	2183	2101	2237	2148	2.5%	2.2%
4	2232	2281	2286	2328	2.4%	2.1%
5a	2331	2394	2385	2441	2.3%	2.0%
5b	2777	2817	2831	2864	1.9%	1.7%
6	2132	2171	2158	2203	1.2%	1.5%

5.3 The table above confirms that the development proposals will not have a 'severe' impact on the surrounding highway network in terms of percentage impact, and the development impact lessens for the junctions which are further from the site as the development traffic disperses across the surrounding highway network.

5.4 The percentage impact at all junctions within the study area (with the potential exception of Junction 1) is likely to be well within the natural daily, and hourly, traffic variations of the highway network which demonstrates that the proposals are unlikely to have a 'severe' impact in terms of the NPPF.

- 5.5 It should be noted that this TN has been prepared to ensure a robust assessment is undertaken for pre-application purposes and the peak hours of the surrounding highway network (0700 – 0800 and 1600 – 1700) have been combined with the peak hours of the proposed residential development (0800 – 0900 and 1700 – 1800). If residential trip generation for the earlier network peak hours was used, or the traffic data for the residential peak hours was used, the overall vehicle movements through the junctions would be significantly lower.

#### **Junction Capacity Assessment**

- 5.6 The following junction capacity assessments have been undertaken using the traffic flow matrices attached at **Appendix C**.
- 5.7 Junctions 9 PICADY and ARCADY capacity assessment software has been used to assess the impact of the development proposals on the priority and roundabout junctions within the study area. The results are presented in the tables below in terms of the Ratio of Flow to Capacity (RFC), mean-maximum queues (Q) and Delay. Generally, where the RFC of an arm is between 0.85 and 1.0 it is considered to be approaching its practical capacity and where the RFC of an arm exceeds 1.0 then that arm is considered to be operating over its theoretical capacity and will likely begin to experience increased queuing and delay.
- 5.8 Mean-maximum queue (Q) output is the average of the maximum queues modelled for each time period whilst the delay output is the average queuing delay experienced by a vehicle arriving during each time period.
- 5.9 It is widely acknowledged that the A120 between Braintree and the A12 at Marks Tey is operating over-capacity during peak periods and there are plans to provide a dual-carriageway bypass between the A120 (Galleys Corner at Braintree) and the A12, South of Kelvedon, although there are no recent updates in terms of funding or timescales. The traffic survey results from March 2025 show some moderate queue lengths forming at junctions 3, 4, 5a and 5b during the AM and PM peak hours. These queues are observed to be 'moving' with traffic generally clearing the junction with a slight delay.
- 5.10 It is important to note that Junctions 9 models can become unstable when assessing junctions with an RFC of more than 1.0 which can lead to an over-estimation in terms of queue lengths, delay and capacity. Results with an RFC of more than 1.0 should be treated with caution and the impacts of development traffic may not be as significant as the results alone would suggest.

#### **Proposed Site Access**

- 5.11 The proposed site access consists of a standard priority junction with a 5.5m access road width and 6m kerb radii. The PICADY output report, along with the PICADY parameters, are included at **Appendix D** and summarised in the table below.
- 5.12 The results demonstrate that Church Lane is a lightly trafficked road and the proposed site access junction would function without any material delay or queueing during both the AM and PM peak hours.

**Table 8: Proposed Site Access PICADY Summary**

Site Access	2035 + Committed + Proposed AM Peak Hour			2035 + Committed + Proposed PM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
Site Access	0.10	0	6.44	0.04	0	6.08
Church Lane	0.04	0	5.99	0.09	0	6.39

**Junction 1 – Existing Layout**

- 5.13 The existing layout of Junction 1 consists of a standard priority junction with no right turn lane. The PICADY output report, along with the PICADY parameters, are included at **Appendix E** and summarised in the table below.

**Table 9: Junction 1 - Church Lane / A120 Existing Layout PICADY Summary**

Junction 1	2035 + Committed AM Peak Hour			2035 + Committed + Proposed AM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
Church Lane	0.05	0	24.36	0.40	1	34.58
A120 W/B	0.22	1	3.60	0.41	3	4.59
Junction 1	2035 + Committed PM Peak Hour			2035 + Committed + Proposed PM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
Church Lane	0.06	0	11.93	0.17	0	16.48
A120 W/B	0.04	0	3.49	0.28	1	4.00

- 5.14 The PICADY results above confirm that the existing junction will continue to operate with significant spare capacity during the future year scenario including background traffic growth, committed development and proposed development traffic flows. The proposals are therefore not likely to result in any material impact in terms of junction capacity or queuing.

**Junction 1 – Proposed Layout**

- 5.15 Whilst the existing junction layout will continue to operate with significant spare capacity during both the AM and PM peak hours it is considered appropriate to upgrade the junction to meet the latest design standards as outlined within the DMRB and as detailed within **Section 3** of this TN.
- 5.16 The PICADY output report, along with the PICADY parameters, are included at **Appendix F** and summarised in the table below.

**Table 10: Junction 1 - Church Lane / A120 Proposed Layout PICADY Summary**

Junction 1	2035 + Committed AM Peak Hour			2035 + Committed + Proposed AM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
Church Lane	0.07	0	34.41	0.57	1	67.07
A120 W/B	0.05	0	9.35	0.09	0	9.14
Junction 1	2035 + Committed PM Peak Hour			2035 + Committed + Proposed PM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
Church Lane	0.07	0	13.29	0.20	0	19.70
A120 W/B	0.01	0	7.56	0.09	0	8.27

- 5.17 The PICADY results above confirm that the proposed site access junction, including a ghost island right turn lane, will operate with a maximum RFC of 0.57 during the AM peak hour and 0.20 during the PM peak hour and can therefore accommodate the proposed development traffic.

**Junction 2 – Great Tey Road / A120**

- 5.18 The PICADY output report, along with the PICADY parameters, are included at **Appendix G** and summarised in the table below.

**Table 11: Junction 2 – Great Tey Road / A120 PICADY Summary**

Junction 2	2035 + Committed AM Peak Hour			2035 + Committed + Proposed AM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
Great Tey Road	0.78	2	221.30	1.12	8	318.19
A120 W/B	0.22	0	11.84	0.23	0	12.30
Junction 2	2035 + Committed PM Peak Hour			2035 + Committed + Proposed PM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
Great Tey Road	0.60	1	116.90	0.71	2	164.97
A120 W/B	0.29	0	12.74	0.29	0	12.97

- 5.19 The PICADY results above confirm that the existing junction will begin to operate above its theoretical capacity during the AM peak hour for the future year scenario including background traffic growth, committed development and proposed development traffic flows. The proposals would not result in any changes to the delay or capacity of the A120 link but would increase the RFC of the Great Tey Road arm from 0.78 to 1.12 with an associated queue increase from 2 vehicles to 8 vehicles.

5.20 The full PICADY output report attached at **Appendix G** demonstrates that the junction will continue to operate with spare capacity during the opening year (2030) with a maximum RFC of 0.81 during the AM peak hour and 0.58 during the PM peak hour.

**Junction 3 – Godmans Lane / A120 mini-roundabout**

5.21 The ARCADY output report, along with the ARCADY parameters, are including at **Appendix H** and the future year scenario is summarised in the table below.

5.22 It should be noted that the junction is operating at its theoretical capacity during the base 2025 scenario with queueing observed on all approaches to the junction at peak times. On-site observations show that the existing queues are ‘moving’ with traffic generally clearing the junction with a slight delay.

5.23 As the junction is operating at its theoretical capacity during the base scenario, with a maximum RFC of 0.99 during the AM peak hour and 1.00 during the PM peak hour, the queue lengths and delay for future year assessments should be treated with caution as Junctions 9 can become unstable when assessing junctions with an RFC exceeding 1.0.

**Table 12: Junction 3 – Godmans Lane / A120 ARCADY Summary**

Junction 3	2035 + Committed AM Peak Hour			2035 + Committed + Proposed AM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
A120 East	1.00	25	71.38	1.00	27	74.38
Godmans Lane	0.97	5	191.60	0.99	5	203.87
A120 West	1.06	42	137.74	1.09	57	176.07
Junction 3	2035 + Committed PM Peak Hour			2035 + Committed + Proposed PM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
A120 East	0.89	8	24.14	0.92	10	29.98
Godmans Lane	0.26	0	26.05	0.29	0	30.73
A120 West	1.06	42	131.47	1.07	50	1.07

5.24 The ARCADY results outlined above demonstrate that the development proposals result in a slight increase in RFC (maximum increase of 0.03) during both the AM and PM peak periods with queue length increases of between 2 and 15 vehicles. As the junction is already operating at its theoretical capacity during the base scenario, the impact of the development proposals is not considered to be ‘severe’ in the context of the NPPF.

**Junction 4 – Ashbury Drive / A120 mini-roundabout**

5.25 The ARCADY output report, along with the ARCADY parameters, are including at **Appendix I** and the future year scenario is summarised in the table below.

- 5.26 It should be noted that the junction is operating close to its theoretical capacity during the base 2025 scenario with queueing observed on all approaches to the junction at peak times. On-site observations show that the existing queues are 'moving' with traffic generally clearing the junction with a slight delay.
- 5.27 As the junction is operating close to its theoretical capacity during the base scenario, with a maximum RFC of 0.95 during the AM peak hour and 0.94 during the PM peak hour, the queue lengths and delay for future year assessments should be treated with caution as Junctions 9 can become unstable when assessing junctions with an RFC exceeding 1.0.

**Table 13: Junction 4 – Ashbury Drive / A120 ARCADY Summary**

Junction 4	2035 + Committed AM Peak Hour			2035 + Committed + Proposed AM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
A120 East	1.00	25	68.17	1.01	29	78.73
Ashbury Drive	1.15	10	285.42	1.22	12	336.39
A120 West	0.99	19	68.84	1.02	27	90.18
Junction 4	2035 + Committed PM Peak Hour			2035 + Committed + Proposed PM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
A120 East	0.99	21	59.17	1.01	30	77.96
Ashbury Drive	0.55	1	44.08	0.59	1	51.46
A120 West	0.99	21	72.60	1.01	26	84.88

- 5.28 The ARCADY results outlined above demonstrate that the development proposals result in a slight increase in RFC with a maximum increase of 0.07 during the AM peak hour and 0.04 during the PM peak hour with queue length increases of between 2 and 9 vehicles. As the junction is already operating close to its theoretical capacity during the base scenario, the impact of the development proposals is not considered to be 'severe' in the context of the NPPF.

**Junction 5a – Old London Road / A120 / Access Road priority junction**

- 5.29 The PICADY output report, along with the PICADY parameters, are including at **Appendix J** and the future year scenario is summarised in the table below.
- 5.30 It should be noted that the junction is operating at its theoretical capacity during the opening year 2030 scenario (excluding development traffic) with a maximum RFC of 0.98 during the AM peak hour and 1.00 during the PM peak hour, the queue lengths and delay for future year assessments should be treated with caution as Junctions 9 can become unstable when assessing junctions with an RFC exceeding 1.0.

**Table 14: Junction 5a – Old London Road / A120 PICADY Summary**

Junction 5a	2035 + Committed AM Peak Hour			2035 + Committed + Proposed AM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
Old London Road	1.32	5	606.55	2.27	8	2398.21
A120 West	0.08	0	13.73	0.08	0	13.96
Junction 5a	2035 + Committed PM Peak Hour			2035 + Committed + Proposed PM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
Old London Road	1.25	7	436.71	1.70	11	1298.21
A120 West	0.03	0	13.80	0.03	0	14.18

- 5.31 The junction is shown to be operating significantly above capacity during the future year scenario, excluding development traffic, with a maximum RFC of 1.32 during the AM peak hour and 1.25 during the PM peak hour on the Old Kent Road arm. The development proposals show a modest increase in vehicle movements at the junction of 54 (2.3%) during the AM peak hour and 47 (2.0%) during the PM peak hour which is not considered to be reflective of the modelled increase in RFC values.
- 5.32 Overall, the PICADY model demonstrates that the junction will be operating at a level in excess of its theoretical capacity during the future year scenario, without including the development traffic, and the development impact in percentage terms is considered to be slight at 2.0% - 2.3%. The PICADY results also demonstrate that the development proposals will have no impact on the capacity of the A120 arms of the junction and will not therefore result in any delay to the SRN. On this basis, the impact of the development proposals is not considered to be 'severe' in the context of the NPPF.

**Junction 5b – A120 / A12 Marks Tey Roundabout**

- 5.33 The ARCADY output report, along with the ARCADY parameters, are including at **Appendix K** and the future year scenario is summarised in the table below.
- 5.34 It should be noted that the traffic survey results and on-site observations show that queuing does occur on the A120 East and A120 West arms of the junction during both AM and PM peak hours, however the queues are typically 'rolling' queues with limited delay through the junction. The ARCADY model results attached at **Appendix K** are therefore considered to be representative of the existing junction operation.
- 5.35 The ARCADY results detailed in the table below demonstrate that the development proposals do not result in any material impact on the RFC, queue lengths or delay through the junction during the AM or PM peak periods. As such, the impact of the development proposals is not considered to be 'severe' in the context of the NPPF.

**Table 15: Junction 5b – A120 / A12 Marks Tey Roundabout ARCADY Summary**

Junction 5b	2035 + Committed AM Peak Hour			2035 + Committed + Proposed AM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
A120 East	0.69	2	5.44	0.70	2	5.57
A12 Off-Slip	0.22	0	4.01	0.23	0	4.05
A120 West	0.83	5	15.53	0.85	6	17.71
Station Road	0.23	0	5.42	0.23	0	5.56
Junction 5b	2035 + Committed PM Peak Hour			2035 + Committed + Proposed PM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
A120 East	0.63	2	4.38	0.64	2	4.43
A12 Off-Slip	0.27	0	3.78	0.27	0	3.83
A120 West	0.88	7	20.35	0.89	7	22.39
Station Road	0.18	0	5.70	0.18	0	5.78

**Junction 6 – A120 / A12 Prince of Wales Roundabout**

- 5.36 The ARCADY output report, along with the ARCADY parameters, are including at **Appendix L** and the future year scenario is summarised in the table below.
- 5.37 The ARCADY results detailed in the table below demonstrate that the development proposals do not result in any material impact on the RFC, queue lengths or delay through the junction during the AM or PM peak periods. As such, the impact of the development proposals is not considered to be 'severe' in the context of the NPPF.

**Table 16: Junction 6 – A120 / A12 Prince of Wales Roundabout ARCADY Summary**

Junction 6	2035 + Committed AM Peak Hour			2035 + Committed + Proposed AM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
London Road	0.54	1	6.74	0.55	1	6.90
Access Road	0.00	0	0.00	0.00	0	0.00
London Road (A12)	0.08	0	3.92	0.08	0	3.96
A120 West	0.21	0	1.86	0.21	0	1.87
A12 Off-Slip	0.59	1	4.57	0.60	2	4.69

Junction 6	2035 + Committed PM Peak Hour			2035 + Committed + Proposed PM Peak Hour		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
London Road	0.45	1	5.19	0.46	1	5.35
Access Road	0.00	0	0.00	0.00	0	0.00
London Road (A12)	0.12	0	3.58	0.12	0	3.64
A120 West	0.26	0	1.92	0.26	0	1.93
A12 Off-Slip	0.55	1	4.17	0.56	1	4.30

## 6. SUMMARY AND CONCLUSIONS

---

- 6.1 This Traffic Impact Assessment Technical Note (TN) has been prepared in association with the proposed development of land at **Tey Gardens, Church Lane, Little Tey, Colchester, Essex, CO6 1HX**.
- 6.2 The proposals are for a C3 residential development consisting of up to 150 homes including vehicular, pedestrian and cycle access upgrades and follow on from initial pre-application submissions to both National Highways (NH) and Essex Highways.
- 6.3 This TN demonstrates that the proposed access arrangements for the site can be provided in accordance with standards outlined within the Essex Design Guide and that a suitable site access can be provided from Church Lane which operates with significant spare capacity and meets the minimum visibility requirements. Further details, including a Stage 1 Road Safety Audit, will be submitted with any future planning application.
- 6.4 This TN also seeks to address some of the initial comments from NH and Essex Highways in relation to the proposed upgrade of the Church Lane / A120 priority junction and provides an updated version of the proposed junction layout incorporating the critical measures identified. All other comments, including but not limited to vertical sections and a Stage 1 Road Safety Audit will be submitted with any future planning application.
- 6.5 This TN demonstrates that the proposed Church Lane / A120 junction operates satisfactorily during the future design year including background growth, committed development traffic flows and the proposed development.
- 6.6 This TN includes the results of extensive traffic surveys covering the study area between the site and the A120 / A12 Junction 25 (Marks Tey and Prince of Wales roundabout junctions) and provides traffic flow matrices for all junctions along the study area corridor including TEMPRO traffic growth, committed development traffic flows and proposed development traffic flows based on TRICS information and a site-specific traffic distribution assessment.
- 6.7 This TN confirms that whilst some of the junctions within the study area are already operating at, or above, their theoretical capacity during either their base or future year scenarios (excluding the proposed development traffic flows) the proposed development is unlikely to have a material impact on any junctions within the study area and is not therefore considered to have 'severe' impact in the context of the NPPF.
- 6.8 This TN consists of preliminary traffic impact assessments based on a robust assessment of both the baseline traffic conditions, background traffic growth and proposed development traffic flows. All assessments are subject to review and agreement by both NH and Essex Highways and may be subject to further detailed assessments.

# APPENDIX A

---

## PROPOSED ACCESS PLANS



Proposed A120 / Church Lane priority junction proposed upgrades include provision of 3.5m ghost island right turn lane designed in accordance with DMRB CD123 for a standard single lane carriageway with a 60mph / 100kph design speed.

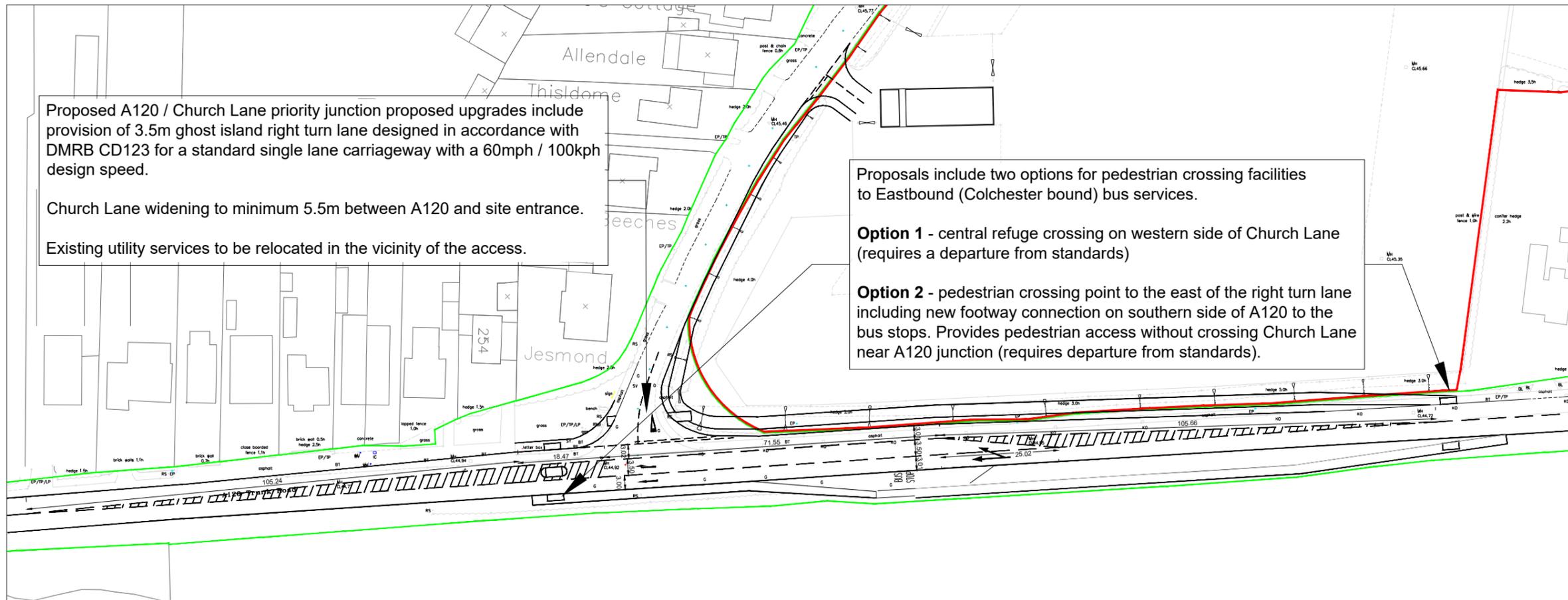
Church Lane widening to minimum 5.5m between A120 and site entrance.

Existing utility services to be relocated in the vicinity of the access.

Proposals include two options for pedestrian crossing facilities to Eastbound (Colchester bound) bus services.

**Option 1** - central refuge crossing on western side of Church Lane (requires a departure from standards)

**Option 2** - pedestrian crossing point to the east of the right turn lane including new footway connection on southern side of A120 to the bus stops. Provides pedestrian access without crossing Church Lane near A120 junction (requires departure from standards).



**KEY:**

Visibility Splays (as noted on plan) ---

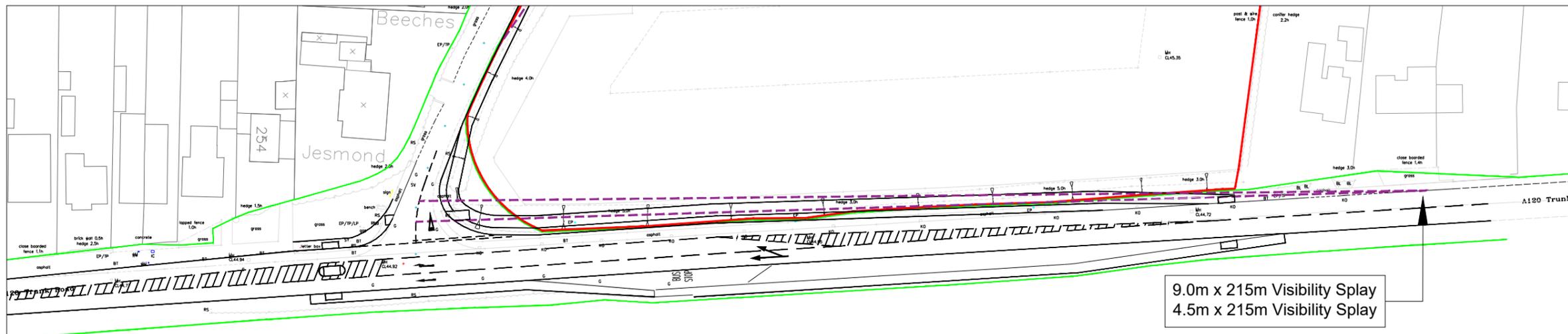
Indicative Site Boundary ---

Highway Boundary Extent ---

**NOTE:**  
Based on Topographical Survey.  
Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval.  
Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd.  
These drawings are intended for planning application purposes only, they are not to be used for construction.



4.5m x 215m Visibility Splay (maximum achievable within highway boundary)



9.0m x 215m Visibility Splay  
4.5m x 215m Visibility Splay



Client

**TEY GARDENS LLP**

Project

**TEY GARDENS, LITTLE TEY**

Title

**PROPOSED SITE ACCESS AND A120 / CHURCH LANE IMPROVEMENT OPTION**

Drawn **A FIRMIN**

Checked **AF**

Scale **1:1000 @ A3**

Date **MAY 2025**

Drawing No. **2503/09 - 01 RevA**

Firmin Transport Planning Ltd. accept no responsibility for any unauthorised amendments to this drawing. Only figured dimensions are to be worked to.

COPYRIGHT RESERVED



Proposed residential site access in the same location as existing and designed in accordance with the latest version of the Essex Design Guide Highways Technical Manual as an Access Road.

5.5m carriageway with 2 x 2m footways.

2.4m x 43m visibility splays.

Church Lane widened to 5.5m between site access and A120 including 2m footway on eastern side of Church Lane.

**KEY:**

- Visibility Splays (as noted on plan) ---
- Indicative Site Boundary ---
- Highway Boundary Extent ---

**NOTE:**  
Based on Topographical Survey.  
Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval.  
Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd.  
These drawings are intended for planning application purposes only, they are not to be used for construction.



Client

**TEY GARDENS LLP**

Project

**TEY GARDENS, LITTLE TEY**

Title

**PROPOSED SITE ACCESS  
CHURCH LANE**

Drawn

**A FIRMIN**

Checked

**AF**

Scale

**1:500 @ A3**

Date

**MAY 2025**

Drawing No.

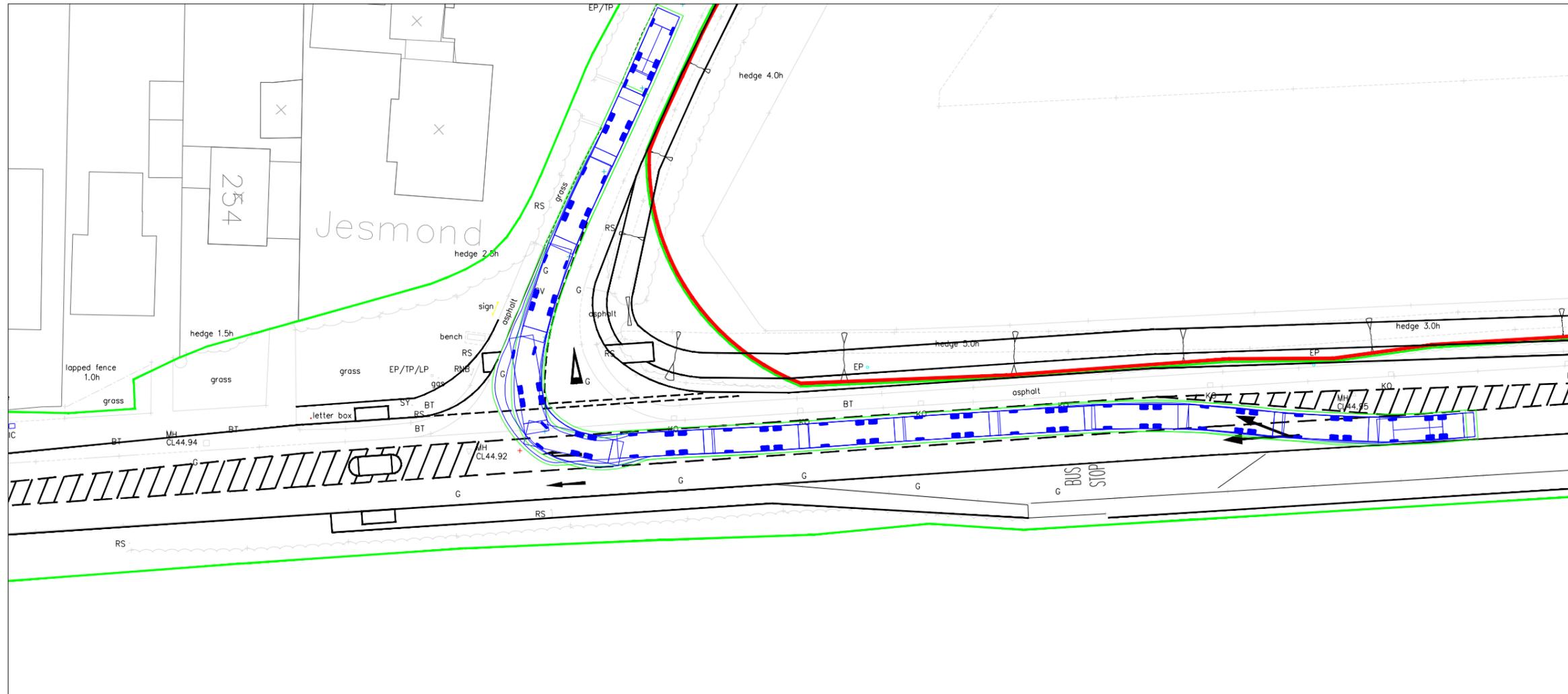
**2503/09 - 02 RevA**

Firmin Transport Planning Ltd. accept no responsibility for any unauthorised amendments to this drawing. Only figured dimensions are to be worked to.

COPYRIGHT RESERVED



**DESIGN VEHICLE:**

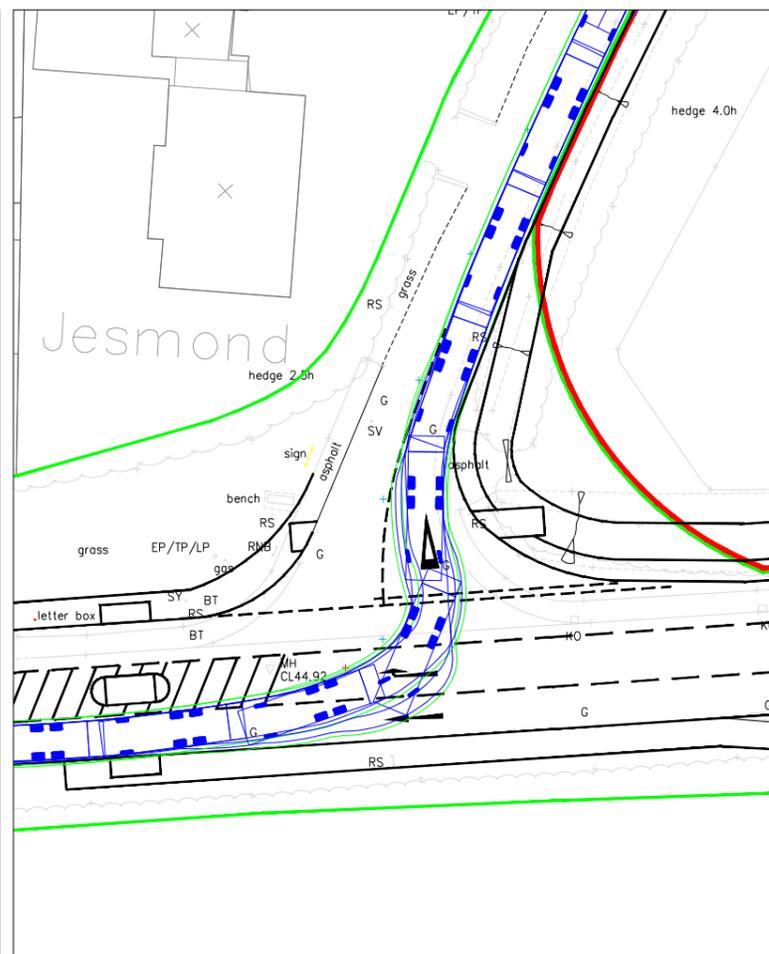
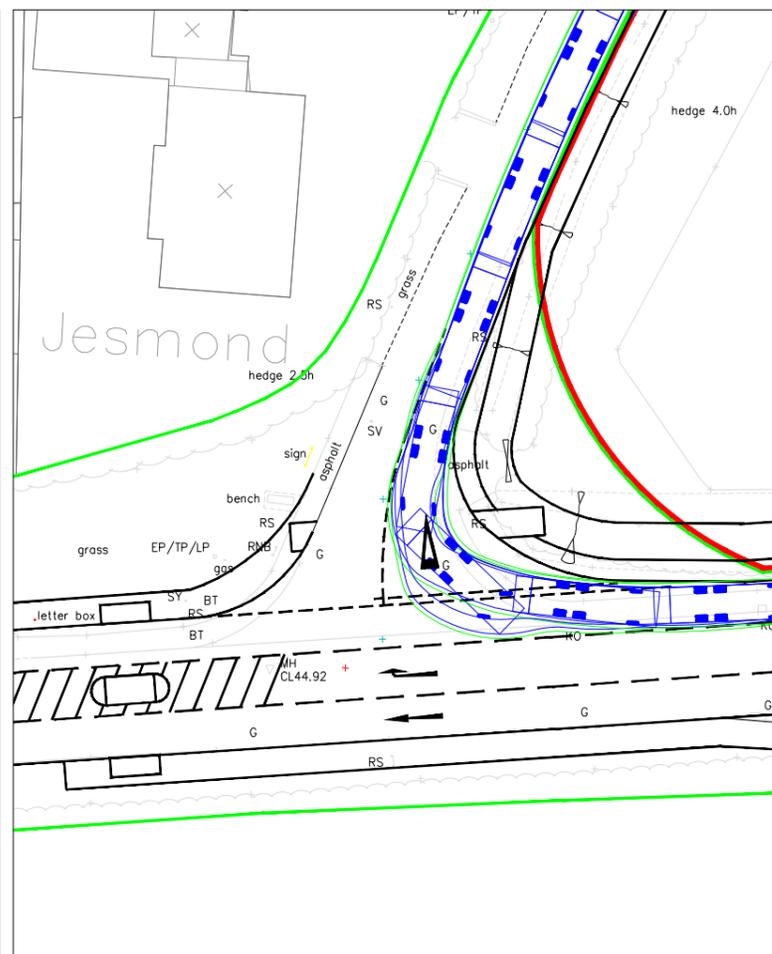
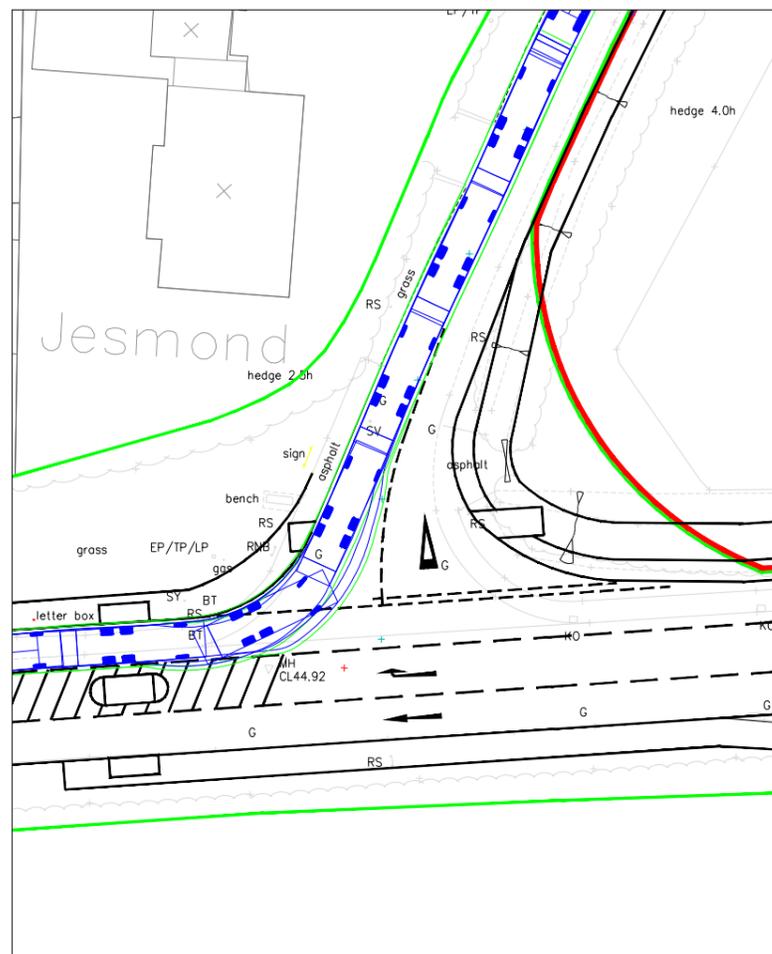


**KEY:**

- Visibility Spays (as noted on plan)** ---
- Indicative Site Boundary** ---
- Highway Boundary Extent** ---

**NOTE:**

Based on Topographical Survey.  
Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval.  
Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd.  
These drawings are intended for planning application purposes only, they are not to be used for construction.



Client

**TEY GARDENS LLP**

Project

**TEY GARDENS, LITTLE TEY**

Title

**PROPOSED CHURCH LANE /  
A120 JUNCTION IMPROVEMENT  
SWEEP PATH ASSESSMENT**

Drawn

A FIRMIN

Checked

AF

Scale

1:500 @ A3

Date

MAY 2025

Drawing No.

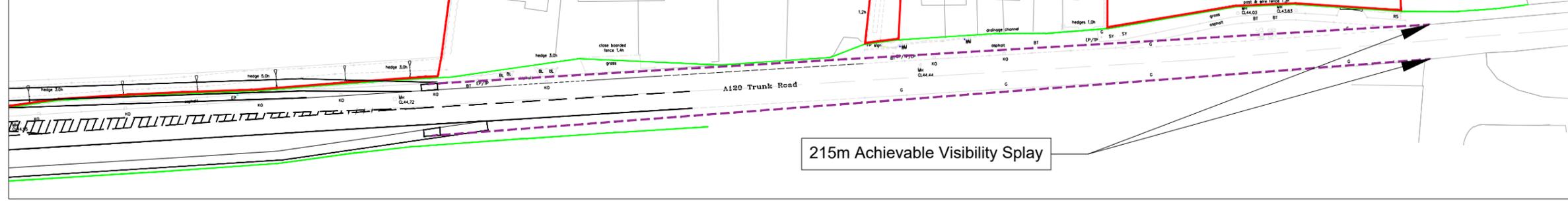
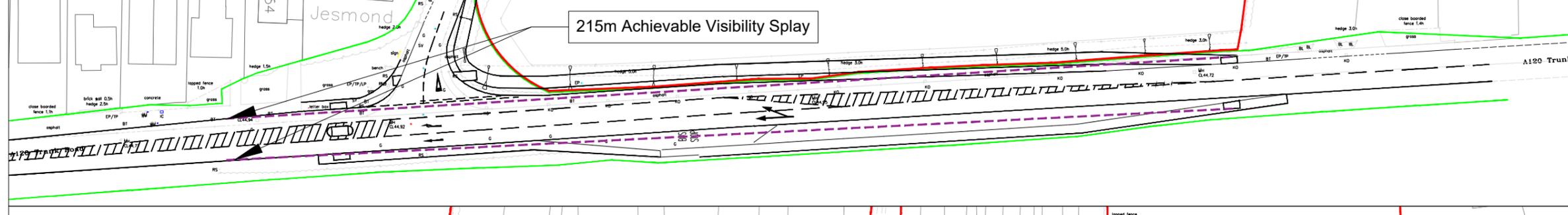
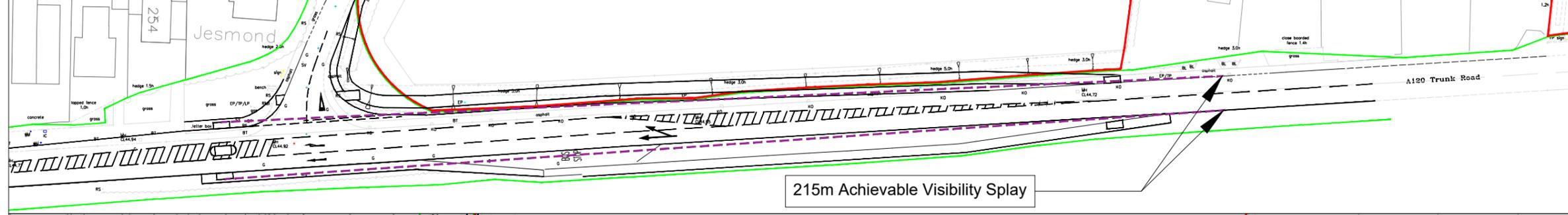
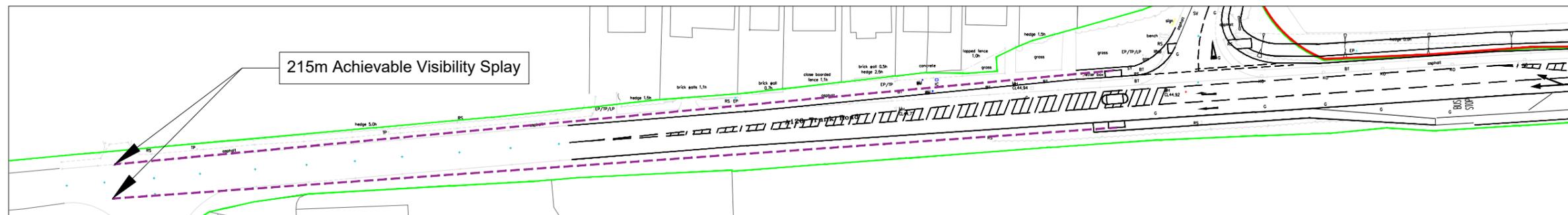
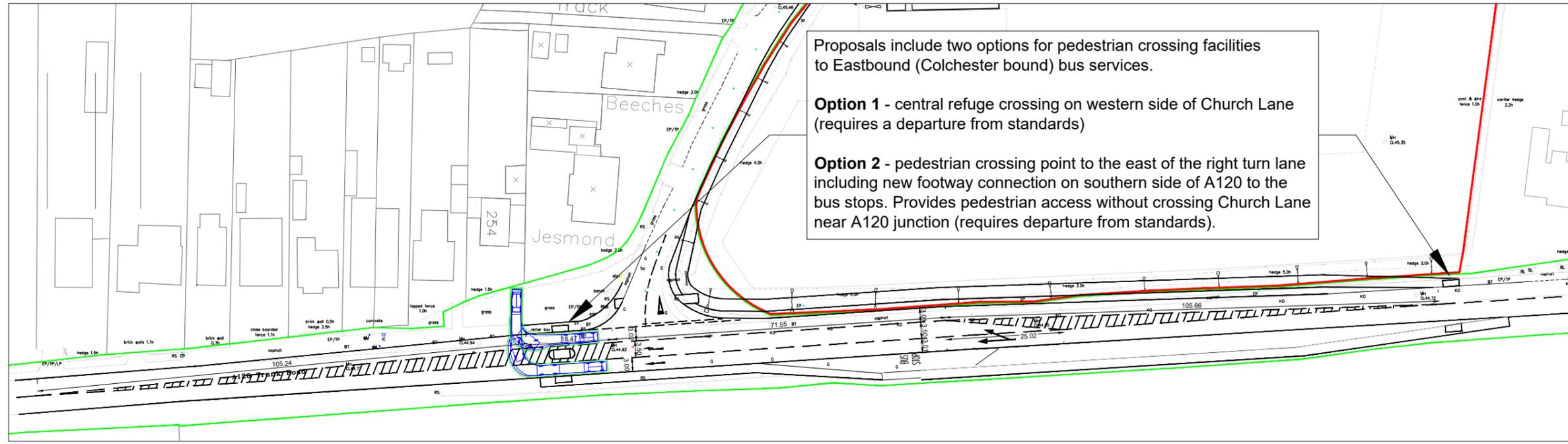
2503/09 - 03 RevA



Proposals include two options for pedestrian crossing facilities to Eastbound (Colchester bound) bus services.

**Option 1** - central refuge crossing on western side of Church Lane (requires a departure from standards)

**Option 2** - pedestrian crossing point to the east of the right turn lane including new footway connection on southern side of A120 to the bus stops. Provides pedestrian access without crossing Church Lane near A120 junction (requires departure from standards).



**KEY:**

- Visibility Splays (as noted on plan) ---
- Indicative Site Boundary ---
- Highway Boundary Extent ---

**NOTE:**  
Based on Topographical Survey. Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval. Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd. These drawings are intended for planning application purposes only, they are not to be used for construction.



Client		TEY GARDENS LLP	
Project		TEY GARDENS, LITTLE TEY	
Title		PROPOSED A120 PEDESTRIAN CROSSING OPTIONS	
Drawn	A FIRMIN	Checked	AF
Scale	1:1000 @ A3	Date	MAY 2025
Drawing No.	2503/09 - 04 RevA		

# APPENDIX B

---

CENSUS OUTPUT

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

ONS Crown Copyright Reserved [from Nomis on 25 October 2024]

population All usual residents aged 16 and over in employment the week before the census  
 units Persons  
 date 2011  
 method of travel to work Driving a car or van

**usual residence**

**place of work : 2011 census merged local authority district E02004515 : Colchester 010**

Colchester	1,119	57% see separate table
Braintree	327	17% West via A120
Chelmsford	140	7% 50% West via A120 - 50% South A12
Tendring	76	4% North A12
Babergh	54	3% North A12
Ipswich	46	2% North A12
Uttlesford	42	2% West via A120
Maldon	36	2% 50% West via A120 - 50% South A12
Basildon	27	1% South A12
Brentwood	20	1% South A12
Havering	16	1% South A12
Suffolk Coastal	16	1% North A12
Westminster,City of London	15	1% South A12
East Hertfordshire	13	1% West via A120
Barking and Dagenham	10	1% South A12

Any results lower than 10 have been removed from the assessment

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

ONS Crown Copyright Reserved [from Nomis on 6 May 2025]

population All usual residents aged 16 and over in employment the week before the census  
 units Persons  
 date 2011  
 method of travel to work Driving a car or van

**usual residence**

place of work : 2011 super output area - middle layer	Location Description	E02004515 : Colchester 010	
E02004506 : Colchester 001	North of Colchester	29	3% North A12
E02004507 : Colchester 002	Highwoods	96	9% North A12
E02004508 : Colchester 003	West Bergholt / Eight Ash Green	37	3% North A12
E02004509 : Colchester 004	Myland	95	8% North A12
E02004512 : Colchester 007	Colchester City	208	19% North A12
E02004513 : Colchester 008	Greenstead	18	2% North A12
E02004514 : Colchester 009	Lexden	40	4% North A12
E02004515 : Colchester 010	Marks Tey, Great Tey, Wakes Colne	273	24% 30% West A120 - 30% Great Tey Road - 30% East A120 / Copford Road
E02004516 : Colchester 011	Hythe	27	2% North A12
E02004517 : Colchester 012	Stanway	81	7% Copford
E02004518 : Colchester 013	New Town	44	4% North A12
E02004519 : Colchester 014	Prettygate	17	2% Copford
E02004520 : Colchester 015	Berechurch	32	3% Copford
E02004521 : Colchester 016	Old Heath	23	2% Copford
E02004522 : Colchester 017	Wivenhoe	20	2% North A12
E02004523 : Colchester 018	Monkwick	5	0% Copford
E02004524 : Colchester 019	Mersea Island	21	2% Copford
E02004525 : Colchester 020	Tiptree	25	2% West A120
E02004526 : Colchester 021	Mersea Island	9	1% Copford
E02006922 : Colchester 022	East Colchester	19	2% North A12
		1,119	

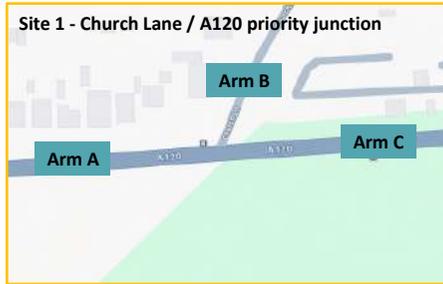
In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

# APPENDIX C

---

## TRAFFIC FLOW MATRICES

Tey Gardens, Little Tey  
AM Peak Hour



**Notes**  
 Network AM Peak hour - 0700 - 0800  
 Committed Development AM Peak Hour - 0800 - 0900  
 Proposed Residential Development AM Peak Hour - 0800 - 0900  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0262  
 Tempo Growth - 2025 - 2035 = 1.0566

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements	A	B	C
A	0	2	850
B	3	0	4
C	1065	17	0

HGV Movements	A	B	C
A	0	0	81
B	0	0	0
C	100	3	0

HGV %	A	B	C
A	0%	0%	10%
B	0%	0%	0%
C	9%	18%	0%

PCU	A	B	C
A	0	2	921
B	3	0	4
C	1166	21	0

Opening Year (2030)

Total Vehicle Movements	A	B	C
A	0	2	872
B	3	0	4
C	1093	17	0

HGV Movements	A	B	C
A	0	0	81
B	0	0	0
C	100	3	0

HGV %	A	B	C
A	0%	0%	9%
B	0%	0%	0%
C	9%	17%	0%

PCU	A	B	C
A	0	2	945
B	3	0	4
C	1197	22	0

Future Assessment Year (2035)

Total Vehicle Movements	A	B	C
A	0	2	898
B	3	0	4
C	1125	18	0

HGV Movements	A	B	C
A	0	0	81
B	0	0	0
C	100	3	0

HGV %	A	B	C
A	0%	0%	9%
B	0%	0%	0%
C	9%	17%	0%

PCU	A	B	C
A	0	2	973
B	3	0	4
C	1232	22	0

Committed Development

Total Vehicle Movements	A	B	C
A	0	0	9
B	0	0	0
C	5	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	9
B	0	0	0
C	5	0	0

Proposed Development

Total Vehicle Movements	A	B	C
A	0	7	0
B	17	0	40
C	0	17	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	7	0
B	17	0	40
C	0	17	0

Opening Year (2030) + Committed

Total Vehicle Movements	A	B	C
A	0	2	881
B	3	0	4
C	1098	17	0

HGV Movements	A	B	C
A	0	0	81
B	0	0	0
C	100	3	0

HGV %	A	B	C
A	0%	0%	9%
B	0%	0%	0%
C	9%	17%	0%

PCU	A	B	C
A	0	2	954
B	3	0	4
C	1202	22	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements	A	B	C
A	0	9	881
B	20	0	44
C	1098	34	0

HGV Movements	A	B	C
A	0	0	81
B	0	0	0
C	100	3	0

HGV %	A	B	C
A	0%	0%	9%
B	0%	0%	0%
C	9%	9%	0%

PCU	A	B	C
A	0	9	954
B	20	0	44
C	1202	39	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements	A	B	C
A	0	2	907
B	3	0	4
C	1130	18	0

HGV Movements	A	B	C
A	0	0	81
B	0	0	0
C	100	3	0

HGV %	A	B	C
A	0%	0%	9%
B	0%	0%	0%
C	9%	17%	0%

PCU	A	B	C
A	0	2	982
B	3	0	4
C	1237	22	0

Future Assessment Year (2035) + Committed + Proposed

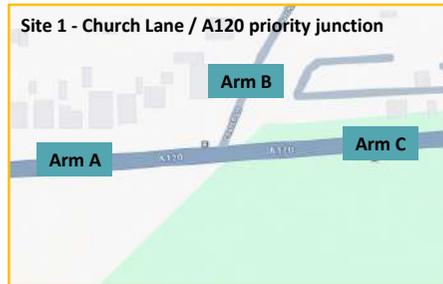
Total Vehicle Movements	A	B	C
A	0	9	907
B	20	0	44
C	1130	35	0

HGV Movements	A	B	C
A	0	0	81
B	0	0	0
C	100	3	0

HGV %	A	B	C
A	0%	0%	9%
B	0%	0%	0%
C	9%	9%	0%

PCU	A	B	C
A	0	9	982
B	20	0	44
C	1237	39	0

Tey Gardens, Little Tey  
PM Peak Hour



**Notes**  
 Network PM Peak hour - 1600 - 1700  
 Committed Development PM Peak Hour - 1700 - 1800  
 Proposed Residential Development PM Peak Hour - 1700 - 1800  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0269  
 Tempo Growth - 2025 - 2035 = 1.0576

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements				
	A	B	C	
A	0	1	854	
B	3	0	14	
C	941	6	0	

HGV Movements				
	A	B	C	
A	0	0	53	
B	0	0	0	
C	55	0	0	

HGV %				
	A	B	C	
A	0%	0%	6%	
B	0%	0%	0%	
C	6%	0%	0%	

PCU				
	A	B	C	
A	0	1	901	
B	2	0	14	
C	988	6	0	

Opening Year (2030)

Total Vehicle Movements				
	A	B	C	
A	0	1	877	
B	3	0	14	
C	966	6	0	

HGV Movements				
	A	B	C	
A	0	0	53	
B	0	0	0	
C	55	0	0	

HGV %				
	A	B	C	
A	0%	0%	6%	
B	0%	0%	0%	
C	6%	0%	0%	

PCU				
	A	B	C	
A	0	1	925	
B	2	0	14	
C	1015	6	0	

Future Assessment Year (2035)

Total Vehicle Movements				
	A	B	C	
A	0	1	903	
B	3	0	15	
C	995	6	0	

HGV Movements				
	A	B	C	
A	0	0	53	
B	0	0	0	
C	55	0	0	

HGV %				
	A	B	C	
A	0%	0%	6%	
B	0%	0%	0%	
C	6%	0%	0%	

PCU				
	A	B	C	
A	0	1	953	
B	2	0	15	
C	1045	6	0	

Committed Development

Total Vehicle Movements				
	A	B	C	
A	0	0	6	
B	0	0	0	
C	8	0	0	

HGV Movements				
	A	B	C	
A	0	0	0	
B	0	0	0	
C	0	0	0	

HGV %				
	A	B	C	
A	0%	0%	0%	
B	0%	0%	0%	
C	0%	0%	0%	

PCU				
	A	B	C	
A	0	0	6	
B	0	0	0	
C	8	0	0	

Proposed Development

Total Vehicle Movements				
	A	B	C	
A	0	14	0	
B	7	0	17	
C	0	33	0	

HGV Movements				
	A	B	C	
A	0	0	0	
B	0	0	0	
C	0	0	0	

HGV %				
	A	B	C	
A	0%	0%	0%	
B	0%	0%	0%	
C	0%	0%	0%	

PCU				
	A	B	C	
A	0	14	0	
B	7	0	17	
C	0	33	0	

Opening Year (2030) + Committed

Total Vehicle Movements				
	A	B	C	
A	0	1	883	
B	3	0	14	
C	974	6	0	

HGV Movements				
	A	B	C	
A	0	0	53	
B	0	0	0	
C	55	0	0	

HGV %				
	A	B	C	
A	0%	0%	6%	
B	0%	0%	0%	
C	6%	0%	0%	

PCU				
	A	B	C	
A	0	1	931	
B	2	0	14	
C	1023	6	0	

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements				
	A	B	C	
A	0	15	883	
B	10	0	31	
C	974	39	0	

HGV Movements				
	A	B	C	
A	0	0	53	
B	0	0	0	
C	55	0	0	

HGV %				
	A	B	C	
A	0%	0%	6%	
B	0%	0%	0%	
C	6%	0%	0%	

PCU				
	A	B	C	
A	0	15	931	
B	9	0	31	
C	1023	39	0	

Future Assessment Year (2035) + Committed

Total Vehicle Movements				
	A	B	C	
A	0	1	909	
B	3	0	15	
C	1003	6	0	

HGV Movements				
	A	B	C	
A	0	0	53	
B	0	0	0	
C	55	0	0	

HGV %				
	A	B	C	
A	0%	0%	6%	
B	0%	0%	0%	
C	6%	0%	0%	

PCU				
	A	B	C	
A	0	1	959	
B	2	0	15	
C	1053	6	0	

Future Assessment Year (2035) + Committed + Proposed

Total Vehicle Movements				
	A	B	C	
A	0	15	909	
B	10	0	32	
C	1003	39	0	

HGV Movements				
	A	B	C	
A	0	0	53	
B	0	0	0	
C	55	0	0	

HGV %				
	A	B	C	
A	0%	0%	6%	
B	0%	0%	0%	
C	5%	0%	0%	

PCU				
	A	B	C	
A	0	15	959	
B	9	0	32	
C	1053	39	0	

Tey Gardens, Little Tey  
AM Peak Hour



**Notes**  
 Network AM Peak hour - 0700 - 0800  
 Committed Development AM Peak Hour - 0800 - 0900  
 Proposed Residential Development AM Peak Hour - 0800 - 0900  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0262  
 Tempo Growth - 2025 - 2035 = 1.0566

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements			
	A	B	C
A	0	17	816
B	36	0	66
C	1057	76	0

HGV Movements			
	A	B	C
A	0	0	82
B	0	0	3
C	106	4	0

HGV %			
	A	B	C
A	0%	0%	10%
B	0%	0%	5%
C	10%	5%	0%

PCU			
	A	B	C
A	0	17	887
B	35	0	68
C	1165	79	0

Opening Year (2030)

Total Vehicle Movements			
	A	B	C
A	0	17	837
B	37	0	68
C	1085	78	0

HGV Movements			
	A	B	C
A	0	0	82
B	0	0	3
C	106	4	0

HGV %			
	A	B	C
A	0%	0%	10%
B	0%	0%	4%
C	10%	5%	0%

PCU			
	A	B	C
A	0	17	910
B	36	0	70
C	1196	81	0

Future Assessment Year (2035)

Total Vehicle Movements			
	A	B	C
A	0	18	862
B	38	0	70
C	1117	80	0

HGV Movements			
	A	B	C
A	0	0	82
B	0	0	3
C	106	4	0

HGV %			
	A	B	C
A	0%	0%	10%
B	0%	0%	4%
C	9%	5%	0%

PCU			
	A	B	C
A	0	18	937
B	37	0	72
C	1231	83	0

Committed Development

Total Vehicle Movements			
	A	B	C
A	0	0	9
B	0	0	0
C	5	0	0

HGV Movements			
	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %			
	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU			
	A	B	C
A	0	0	9
B	0	0	0
C	5	0	0

Proposed Development

Total Vehicle Movements			
	A	B	C
A	0	2	38
B	1	0	0
C	16	0	0

HGV Movements			
	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %			
	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU			
	A	B	C
A	0	2	38
B	1	0	0
C	16	0	0

Opening Year (2030) + Committed

Total Vehicle Movements			
	A	B	C
A	0	17	846
B	37	0	68
C	1090	78	0

HGV Movements			
	A	B	C
A	0	0	82
B	0	0	3
C	106	4	0

HGV %			
	A	B	C
A	0%	0%	10%
B	0%	0%	4%
C	10%	5%	0%

PCU			
	A	B	C
A	0	17	919
B	36	0	70
C	1201	81	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements			
	A	B	C
A	0	19	884
B	38	0	68
C	1106	78	0

HGV Movements			
	A	B	C
A	0	0	82
B	0	0	3
C	106	4	0

HGV %			
	A	B	C
A	0%	0%	9%
B	0%	0%	4%
C	10%	5%	0%

PCU			
	A	B	C
A	0	19	957
B	37	0	70
C	1217	81	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements			
	A	B	C
A	0	18	871
B	38	0	70
C	1122	80	0

HGV Movements			
	A	B	C
A	0	0	82
B	0	0	3
C	106	4	0

HGV %			
	A	B	C
A	0%	0%	9%
B	0%	0%	4%
C	9%	5%	0%

PCU			
	A	B	C
A	0	18	946
B	37	0	72
C	1236	83	0

Future Assessment Year (2035) + Committed + Proposed

Total Vehicle Movements			
	A	B	C
A	0	20	909
B	39	0	70
C	1138	80	0

HGV Movements			
	A	B	C
A	0	0	82
B	0	0	3
C	106	4	0

HGV %			
	A	B	C
A	0%	0%	9%
B	0%	0%	4%
C	9%	5%	0%

PCU			
	A	B	C
A	0	20	984
B	38	0	72
C	1252	83	0

Tey Gardens, Little Tey  
PM Peak Hour



**Notes**  
 Network PM Peak hour - 1600 - 1700  
 Committed Development PM Peak Hour - 1700 - 1800  
 Proposed Residential Development PM Peak Hour - 1700 - 1800  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0269  
 Tempo Growth - 2025 - 2035 = 1.0576

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements	A	B	C
A	0	28	852
B	37	0	55
C	923	98	0

HGV Movements	A	B	C
A	0	1	51
B	0	0	1
C	55	2	0

HGV %	A	B	C
A	0%	4%	6%
B	0%	0%	2%
C	6%	2%	0%

PCU	A	B	C
A	0	29	899
B	37	0	55
C	970	100	0

Opening Year (2030)

Total Vehicle Movements	A	B	C
A	0	29	875
B	38	0	56
C	948	101	0

HGV Movements	A	B	C
A	0	1	51
B	0	0	1
C	55	2	0

HGV %	A	B	C
A	0%	3%	6%
B	0%	0%	2%
C	6%	2%	0%

PCU	A	B	C
A	0	30	923
B	38	0	56
C	996	103	0

Future Assessment Year (2035)

Total Vehicle Movements	A	B	C
A	0	30	901
B	39	0	58
C	976	104	0

HGV Movements	A	B	C
A	0	1	51
B	0	0	1
C	55	2	0

HGV %	A	B	C
A	0%	3%	6%
B	0%	0%	2%
C	6%	2%	0%

PCU	A	B	C
A	0	31	951
B	39	0	58
C	1026	106	0

Committed Development

Total Vehicle Movements	A	B	C
A	0	0	6
B	0	0	0
C	8	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	6
B	0	0	0
C	8	0	0

Proposed Development

Total Vehicle Movements	A	B	C
A	0	1	16
B	2	0	0
C	31	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	1	16
B	2	0	0
C	31	0	0

Opening Year (2030) + Committed

Total Vehicle Movements	A	B	C
A	0	29	881
B	38	0	56
C	956	101	0

HGV Movements	A	B	C
A	0	1	51
B	0	0	1
C	55	2	0

HGV %	A	B	C
A	0%	3%	6%
B	0%	0%	2%
C	6%	2%	0%

PCU	A	B	C
A	0	30	929
B	38	0	56
C	1004	103	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements	A	B	C
A	0	30	897
B	40	0	56
C	987	101	0

HGV Movements	A	B	C
A	0	1	51
B	0	0	1
C	55	2	0

HGV %	A	B	C
A	0%	3%	6%
B	0%	0%	2%
C	6%	2%	0%

PCU	A	B	C
A	0	31	945
B	40	0	56
C	1035	103	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements	A	B	C
A	0	30	907
B	39	0	58
C	984	104	0

HGV Movements	A	B	C
A	0	1	51
B	0	0	1
C	55	2	0

HGV %	A	B	C
A	0%	3%	6%
B	0%	0%	2%
C	6%	2%	0%

PCU	A	B	C
A	0	31	957
B	39	0	58
C	1034	106	0

Future Assessment Year (2035) + Committed + Proposed

Total Vehicle Movements	A	B	C
A	0	31	923
B	41	0	58
C	1015	104	0

HGV Movements	A	B	C
A	0	1	51
B	0	0	1
C	55	2	0

HGV %	A	B	C
A	0%	3%	6%
B	0%	0%	2%
C	5%	2%	0%

PCU	A	B	C
A	0	32	973
B	41	0	58
C	1065	106	0

Tey Gardens, Little Tey  
AM Peak Hour



**Notes**  
 Network AM Peak hour - 0700 - 0800  
 Committed Development AM Peak Hour - 0800 - 0900  
 Proposed Residential Development AM Peak Hour - 0800 - 0900  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempro Growth - 2025 - 2030 = 1.0262  
 Tempro Growth - 2025 - 2035 = 1.0566

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements			
	A	B	C
A	0	13	1084
B	30	0	51
C	857	16	2

HGV Movements			
	A	B	C
A	0	0	110
B	1	0	2
C	79	2	0

HGV %			
	A	B	C
A	0%	0%	10%
B	3%	0%	4%
C	9%	13%	0%

PCU			
	A	B	C
A	0	13	1194
B	31	0	53
C	927	18	2

Opening Year (2030)

Total Vehicle Movements			
	A	B	C
A	0	13	1112
B	31	0	52
C	879	16	2

HGV Movements			
	A	B	C
A	0	0	110
B	1	0	2
C	79	2	0

HGV %			
	A	B	C
A	0%	0%	10%
B	3%	0%	4%
C	9%	12%	0%

PCU			
	A	B	C
A	0	13	1225
B	32	0	54
C	951	18	2

Future Assessment Year (2035)

Total Vehicle Movements			
	A	B	C
A	0	14	1145
B	32	0	54
C	906	17	2

HGV Movements			
	A	B	C
A	0	0	110
B	1	0	2
C	79	2	0

HGV %			
	A	B	C
A	0%	0%	10%
B	3%	0%	4%
C	9%	12%	0%

PCU			
	A	B	C
A	0	14	1262
B	33	0	56
C	979	19	2

Committed Development

Total Vehicle Movements			
	A	B	C
A	0	0	5
B	0	0	0
C	9	0	0

HGV Movements			
	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %			
	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU			
	A	B	C
A	0	0	5
B	0	0	0
C	9	0	0

Proposed Development

Total Vehicle Movements			
	A	B	C
A	0	0	16
B	0	0	0
C	38	0	0

HGV Movements			
	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %			
	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU			
	A	B	C
A	0	0	16
B	0	0	0
C	38	0	0

Opening Year (2030) + Committed

Total Vehicle Movements			
	A	B	C
A	0	13	1117
B	31	0	52
C	888	16	2

HGV Movements			
	A	B	C
A	0	0	110
B	1	0	2
C	79	2	0

HGV %			
	A	B	C
A	0%	0%	10%
B	3%	0%	4%
C	9%	12%	0%

PCU			
	A	B	C
A	0	13	1230
B	32	0	54
C	960	18	2

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements			
	A	B	C
A	0	13	1133
B	31	0	52
C	926	16	2

HGV Movements			
	A	B	C
A	0	0	110
B	1	0	2
C	79	2	0

HGV %			
	A	B	C
A	0%	0%	10%
B	3%	0%	4%
C	9%	12%	0%

PCU			
	A	B	C
A	0	13	1246
B	32	0	54
C	998	18	2

Future Assessment Year (2035) + Committed

Total Vehicle Movements			
	A	B	C
A	0	14	1150
B	32	0	54
C	915	17	2

HGV Movements			
	A	B	C
A	0	0	110
B	1	0	2
C	79	2	0

HGV %			
	A	B	C
A	0%	0%	10%
B	3%	0%	4%
C	9%	12%	0%

PCU			
	A	B	C
A	0	14	1267
B	33	0	56
C	988	19	2

Future Assessment Year (2035) + Committed + Proposed

Total Vehicle Movements			
	A	B	C
A	0	14	1166
B	32	0	54
C	953	17	2

HGV Movements			
	A	B	C
A	0	0	110
B	1	0	2
C	79	2	0

HGV %			
	A	B	C
A	0%	0%	9%
B	3%	0%	4%
C	8%	12%	0%

PCU			
	A	B	C
A	0	14	1283
B	33	0	56
C	1026	19	2

Tey Gardens, Little Tey  
PM Peak Hour



**Notes**  
 Network PM Peak hour - 1600 - 1700  
 Committed Development PM Peak Hour - 1700 - 1800  
 Proposed Residential Development PM Peak Hour - 1700 - 1800  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0269  
 Tempo Growth - 2025 - 2035 = 1.0576

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements			
	A	B	C
A	1	32	980
B	13	0	27
C	886	34	0

HGV Movements			
	A	B	C
A	0	0	52
B	0	0	3
C	51	0	0

HGV %			
	A	B	C
A	0%	0%	5%
B	0%	0%	11%
C	6%	0%	0%

PCU			
	A	B	C
A	1	32	1023
B	13	0	30
C	933	34	0

Opening Year (2030)

Total Vehicle Movements			
	A	B	C
A	1	33	1006
B	13	0	28
C	910	35	0

HGV Movements			
	A	B	C
A	0	0	52
B	0	0	3
C	51	0	0

HGV %			
	A	B	C
A	0%	0%	5%
B	0%	0%	11%
C	6%	0%	0%

PCU			
	A	B	C
A	1	33	1051
B	13	0	31
C	958	35	0

Future Assessment Year (2035)

Total Vehicle Movements			
	A	B	C
A	1	34	1036
B	14	0	29
C	937	36	0

HGV Movements			
	A	B	C
A	0	0	52
B	0	0	3
C	51	0	0

HGV %			
	A	B	C
A	0%	0%	5%
B	0%	0%	11%
C	5%	0%	0%

PCU			
	A	B	C
A	1	34	1082
B	14	0	32
C	987	36	0

Committed Development

Total Vehicle Movements			
	A	B	C
A	0	0	8
B	0	0	0
C	6	0	0

HGV Movements			
	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %			
	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU			
	A	B	C
A	0	0	8
B	0	0	0
C	6	0	0

Proposed Development

Total Vehicle Movements			
	A	B	C
A	0	0	31
B	0	0	0
C	16	0	0

HGV Movements			
	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %			
	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU			
	A	B	C
A	0	0	31
B	0	0	0
C	16	0	0

Opening Year (2030) + Committed

Total Vehicle Movements			
	A	B	C
A	1	33	1014
B	13	0	28
C	916	35	0

HGV Movements			
	A	B	C
A	0	0	52
B	0	0	3
C	51	0	0

HGV %			
	A	B	C
A	0%	0%	5%
B	0%	0%	11%
C	6%	0%	0%

PCU			
	A	B	C
A	1	33	1059
B	13	0	31
C	964	35	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements			
	A	B	C
A	1	33	1045
B	13	0	28
C	932	35	0

HGV Movements			
	A	B	C
A	0	0	52
B	0	0	3
C	51	0	0

HGV %			
	A	B	C
A	0%	0%	5%
B	0%	0%	11%
C	5%	0%	0%

PCU			
	A	B	C
A	1	33	1090
B	13	0	31
C	980	35	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements			
	A	B	C
A	1	34	1044
B	14	0	29
C	943	36	0

HGV Movements			
	A	B	C
A	0	0	52
B	0	0	3
C	51	0	0

HGV %			
	A	B	C
A	0%	0%	5%
B	0%	0%	11%
C	5%	0%	0%

PCU			
	A	B	C
A	1	34	1090
B	14	0	32
C	993	36	0

Future Assessment Year (2035) + Committed + Proposed

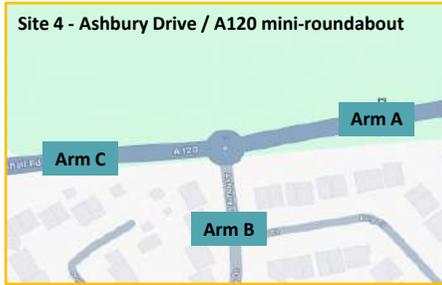
Total Vehicle Movements			
	A	B	C
A	1	34	1075
B	14	0	29
C	959	36	0

HGV Movements			
	A	B	C
A	0	0	52
B	0	0	3
C	51	0	0

HGV %			
	A	B	C
A	0%	0%	5%
B	0%	0%	11%
C	5%	0%	0%

PCU			
	A	B	C
A	1	34	1121
B	14	0	32
C	1009	36	0

Tey Gardens, Little Tey  
AM Peak Hour



**Notes**  
 Network AM Peak hour - 0700 - 0800  
 Committed Development AM Peak Hour - 0800 - 0900  
 Proposed Residential Development AM Peak Hour - 0800 - 0900  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempro Growth - 2025 - 2030 = 1.0262  
 Tempro Growth - 2025 - 2035 = 1.0566

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements			
	A	B	C
A	0	33	1085
B	102	0	4
C	874	1	0

HGV Movements			
	A	B	C
A	0	2	108
B	1	0	0
C	80	0	0

HGV %			
	A	B	C
A	0%	6%	10%
B	1%	0%	0%
C	9%	0%	0%

PCU			
	A	B	C
A	0	35	1195
B	103	0	4
C	945	1	0

Opening Year (2030)

Total Vehicle Movements			
	A	B	C
A	0	34	1113
B	105	0	4
C	897	1	0

HGV Movements			
	A	B	C
A	0	2	108
B	1	0	0
C	80	0	0

HGV %			
	A	B	C
A	0%	6%	10%
B	1%	0%	0%
C	9%	0%	0%

PCU			
	A	B	C
A	0	36	1226
B	106	0	4
C	970	1	0

Future Assessment Year (2035)

Total Vehicle Movements			
	A	B	C
A	0	35	1146
B	108	0	4
C	923	1	0

HGV Movements			
	A	B	C
A	0	2	108
B	1	0	0
C	80	0	0

HGV %			
	A	B	C
A	0%	6%	9%
B	1%	0%	0%
C	9%	0%	0%

PCU			
	A	B	C
A	0	37	1263
B	109	0	4
C	998	1	0

Committed Development

Total Vehicle Movements			
	A	B	C
A	0	0	5
B	0	0	0
C	9	0	0

HGV Movements			
	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %			
	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU			
	A	B	C
A	0	0	5
B	0	0	0
C	9	0	0

Proposed Development

Total Vehicle Movements			
	A	B	C
A	0	0	16
B	0	0	0
C	38	0	0

HGV Movements			
	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %			
	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU			
	A	B	C
A	0	0	16
B	0	0	0
C	38	0	0

Opening Year (2030) + Committed

Total Vehicle Movements			
	A	B	C
A	0	34	1118
B	105	0	4
C	906	1	0

HGV Movements			
	A	B	C
A	0	2	108
B	1	0	0
C	80	0	0

HGV %			
	A	B	C
A	0%	6%	10%
B	1%	0%	0%
C	9%	0%	0%

PCU			
	A	B	C
A	0	36	1231
B	106	0	4
C	979	1	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements			
	A	B	C
A	0	34	1134
B	105	0	4
C	944	1	0

HGV Movements			
	A	B	C
A	0	2	108
B	1	0	0
C	80	0	0

HGV %			
	A	B	C
A	0%	6%	10%
B	1%	0%	0%
C	8%	0%	0%

PCU			
	A	B	C
A	0	36	1247
B	106	0	4
C	1017	1	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements			
	A	B	C
A	0	35	1151
B	108	0	4
C	932	1	0

HGV Movements			
	A	B	C
A	0	2	108
B	1	0	0
C	80	0	0

HGV %			
	A	B	C
A	0%	6%	9%
B	1%	0%	0%
C	9%	0%	0%

PCU			
	A	B	C
A	0	37	1268
B	109	0	4
C	1007	1	0

Future Assessment Year (2035) + Committed + Proposed

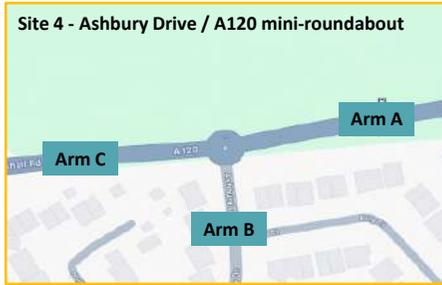
Total Vehicle Movements			
	A	B	C
A	0	35	1167
B	108	0	4
C	970	1	0

HGV Movements			
	A	B	C
A	0	2	108
B	1	0	0
C	80	0	0

HGV %			
	A	B	C
A	0%	6%	9%
B	1%	0%	0%
C	8%	0%	0%

PCU			
	A	B	C
A	0	37	1284
B	109	0	4
C	1045	1	0

Tey Gardens, Little Tey  
PM Peak Hour



**Notes**  
 Network PM Peak hour - 1600 - 1700  
 Committed Development PM Peak Hour - 1700 - 1800  
 Proposed Residential Development PM Peak Hour - 1700 - 1800  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempro Growth - 2025 - 2030 = 1.0269  
 Tempro Growth - 2025 - 2035 = 1.0576

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements			
	A	B	C
A	0	124	1017
B	83	0	2
C	915	2	1

HGV Movements			
	A	B	C
A	0	4	51
B	1	0	0
C	51	2	1

HGV %			
	A	B	C
A	0%	3%	5%
B	1%	0%	0%
C	6%	100%	100%

PCU			
	A	B	C
A	0	128	1058
B	83	0	2
C	963	2	1

Opening Year (2030)

Total Vehicle Movements			
	A	B	C
A	0	127	1044
B	85	0	2
C	940	2	1

HGV Movements			
	A	B	C
A	0	4	51
B	1	0	0
C	51	2	1

HGV %			
	A	B	C
A	0%	3%	5%
B	1%	0%	0%
C	5%	97%	97%

PCU			
	A	B	C
A	0	131	1086
B	85	0	2
C	989	2	1

Future Assessment Year (2035)

Total Vehicle Movements			
	A	B	C
A	0	131	1076
B	88	0	2
C	968	2	1

HGV Movements			
	A	B	C
A	0	4	51
B	1	0	0
C	51	2	1

HGV %			
	A	B	C
A	0%	3%	5%
B	1%	0%	0%
C	5%	95%	95%

PCU			
	A	B	C
A	0	135	1119
B	88	0	2
C	1018	2	1

Committed Development

Total Vehicle Movements			
	A	B	C
A	0	0	8
B	0	0	0
C	6	0	0

HGV Movements			
	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %			
	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU			
	A	B	C
A	0	0	8
B	0	0	0
C	6	0	0

Proposed Development

Total Vehicle Movements			
	A	B	C
A	0	0	31
B	0	0	0
C	16	0	0

HGV Movements			
	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %			
	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU			
	A	B	C
A	0	0	31
B	0	0	0
C	16	0	0

Opening Year (2030) + Committed

Total Vehicle Movements			
	A	B	C
A	0	127	1052
B	85	0	2
C	946	2	1

HGV Movements			
	A	B	C
A	0	4	51
B	1	0	0
C	51	2	1

HGV %			
	A	B	C
A	0%	3%	5%
B	1%	0%	0%
C	5%	97%	97%

PCU			
	A	B	C
A	0	131	1094
B	85	0	2
C	995	2	1

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements			
	A	B	C
A	0	127	1083
B	85	0	2
C	962	2	1

HGV Movements			
	A	B	C
A	0	4	51
B	1	0	0
C	51	2	1

HGV %			
	A	B	C
A	0%	3%	5%
B	1%	0%	0%
C	5%	97%	97%

PCU			
	A	B	C
A	0	131	1125
B	85	0	2
C	1011	2	1

Future Assessment Year (2035) + Committed

Total Vehicle Movements			
	A	B	C
A	0	131	1084
B	88	0	2
C	974	2	1

HGV Movements			
	A	B	C
A	0	4	51
B	1	0	0
C	51	2	1

HGV %			
	A	B	C
A	0%	3%	5%
B	1%	0%	0%
C	5%	95%	95%

PCU			
	A	B	C
A	0	135	1127
B	88	0	2
C	1024	2	1

Future Assessment Year (2035) + Committed + Proposed

Total Vehicle Movements			
	A	B	C
A	0	131	1115
B	88	0	2
C	990	2	1

HGV Movements			
	A	B	C
A	0	4	51
B	1	0	0
C	51	2	1

HGV %			
	A	B	C
A	0%	3%	5%
B	1%	0%	0%
C	5%	95%	95%

PCU			
	A	B	C
A	0	135	1158
B	88	0	2
C	1040	2	1

Tey Gardens, Little Tey  
AM Peak Hour



**Notes**  
 Network AM Peak hour - 0700 - 0900  
 Committed Development AM Peak Hour - 0800 - 0900  
 Proposed Residential Development AM Peak Hour - 0800 - 0900  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0262  
 Tempo Growth - 2025 - 2035 = 1.0566

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements				
	A	B	C	D
A	0	50	1122	8
B	22	0	15	0
C	949	20	0	4
D	2	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	115	0
B	7	0	1	0
C	81	0	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	2%	10%	0%
B	32%	0%	7%	0%
C	9%	0%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	50	1237	8
B	26	0	16	0
C	1021	20	0	4
D	2	0	1	0

Opening Year (2030)

Total Vehicle Movements				
	A	B	C	D
A	0	51	1151	8
B	23	0	15	0
C	974	21	0	4
D	2	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	115	0
B	7	0	1	0
C	81	0	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	2%	10%	0%
B	31%	0%	6%	0%
C	8%	0%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	51	1269	8
B	27	0	16	0
C	1048	21	0	4
D	2	0	1	0

Future Assessment Year (2035)

Total Vehicle Movements				
	A	B	C	D
A	0	53	1186	8
B	23	0	16	0
C	1003	21	0	4
D	2	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	115	0
B	7	0	1	0
C	81	0	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	2%	10%	0%
B	30%	0%	6%	0%
C	8%	0%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	53	1307	8
B	27	0	17	0
C	1079	21	0	4
D	2	0	1	0

Committed Development

Total Vehicle Movements				
	A	B	C	D
A	0	0	5	0
B	0	0	0	0
C	9	0	0	0
D	0	0	0	0

HGV Movements				
	A	B	C	D
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	0%	0%	0%
B	0%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	0	5	0
B	0	0	0	0
C	9	0	0	0
D	0	0	0	0

Proposed Development

Total Vehicle Movements				
	A	B	C	D
A	0	0	16	0
B	0	0	0	0
C	38	0	0	0
D	0	0	0	0

HGV Movements				
	A	B	C	D
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	0%	0%	0%
B	0%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	0	16	0
B	0	0	0	0
C	38	0	0	0
D	0	0	0	0

Opening Year (2030) + Committed

Total Vehicle Movements				
	A	B	C	D
A	0	51	1156	8
B	23	0	15	0
C	983	21	0	4
D	2	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	115	0
B	7	0	1	0
C	81	0	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	2%	10%	0%
B	31%	0%	6%	0%
C	8%	0%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	51	1274	8
B	27	0	16	0
C	1057	21	0	4
D	2	0	1	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements				
	A	B	C	D
A	0	51	1172	8
B	23	0	15	0
C	1021	21	0	4
D	2	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	115	0
B	7	0	1	0
C	81	0	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	2%	10%	0%
B	31%	0%	6%	0%
C	8%	0%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	51	1290	8
B	27	0	16	0
C	1095	21	0	4
D	2	0	1	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements				
	A	B	C	D
A	0	53	1191	8
B	23	0	16	0
C	1012	21	0	4
D	2	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	115	0
B	7	0	1	0
C	81	0	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	2%	10%	0%
B	30%	0%	6%	0%
C	8%	0%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	53	1312	8
B	27	0	17	0
C	1088	21	0	4
D	2	0	1	0

Future Assessment Year (2035) + Committed + Proposed

Total Vehicle Movements				
	A	B	C	D
A	0	53	1207	8
B	23	0	16	0
C	1050	21	0	4
D	2	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	115	0
B	7	0	1	0
C	81	0	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	2%	10%	0%
B	30%	0%	6%	0%
C	8%	0%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	53	1328	8
B	27	0	17	0
C	1126	21	0	4
D	2	0	1	0

Tey Gardens, Little Tey  
PM Peak Hour



**Notes**  
 Network PM Peak hour - 1600 - 1700  
 Committed Development PM Peak Hour - 1700 - 1800  
 Proposed Residential Development PM Peak Hour - 1700 - 1800  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0269  
 Tempo Growth - 2025 - 2035 = 1.0576

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements				
	A	B	C	D
A	0	33	1132	3
B	42	0	29	0
C	994	8	0	3
D	5	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	56	0
B	0	0	2	0
C	52	1	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	3%	5%	0%
B	0%	0%	7%	0%
C	5%	13%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	34	1180	3
B	42	0	30	0
C	1041	9	0	2
D	5	0	1	0

Opening Year (2030)

Total Vehicle Movements				
	A	B	C	D
A	0	34	1162	3
B	43	0	30	0
C	1021	8	0	3
D	5	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	56	0
B	0	0	2	0
C	52	1	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	3%	5%	0%
B	0%	0%	7%	0%
C	5%	12%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	35	1212	3
B	43	0	31	0
C	1069	9	0	2
D	5	0	1	0

Future Assessment Year (2035)

Total Vehicle Movements				
	A	B	C	D
A	0	35	1197	3
B	44	0	31	0
C	1051	8	0	3
D	5	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	56	0
B	0	0	2	0
C	52	1	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	3%	5%	0%
B	0%	0%	7%	0%
C	5%	12%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	36	1248	3
B	44	0	32	0
C	1101	10	0	2
D	5	0	1	0

Committed Development

Total Vehicle Movements				
	A	B	C	D
A	0	0	8	0
B	0	0	0	0
C	6	0	0	0
D	0	0	0	0

HGV Movements				
	A	B	C	D
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	0%	0%	0%
B	0%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	0	8	0
B	0	0	0	0
C	6	0	0	0
D	0	0	0	0

Proposed Development

Total Vehicle Movements				
	A	B	C	D
A	0	0	31	0
B	0	0	0	0
C	16	0	0	0
D	0	0	0	0

HGV Movements				
	A	B	C	D
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	0%	0%	0%
B	0%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	0	31	0
B	0	0	0	0
C	16	0	0	0
D	0	0	0	0

Opening Year (2030) + Committed

Total Vehicle Movements				
	A	B	C	D
A	0	34	1170	3
B	43	0	30	0
C	1027	8	0	3
D	5	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	56	0
B	0	0	2	0
C	52	1	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	3%	5%	0%
B	0%	0%	7%	0%
C	5%	12%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	35	1220	3
B	43	0	31	0
C	1075	9	0	2
D	5	0	1	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements				
	A	B	C	D
A	0	34	1201	3
B	43	0	30	0
C	1043	8	0	3
D	5	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	56	0
B	0	0	2	0
C	52	1	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	3%	5%	0%
B	0%	0%	7%	0%
C	5%	12%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	35	1251	3
B	43	0	31	0
C	1091	9	0	2
D	5	0	1	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements				
	A	B	C	D
A	0	35	1205	3
B	44	0	31	0
C	1057	8	0	3
D	5	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	56	0
B	0	0	2	0
C	52	1	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	3%	5%	0%
B	0%	0%	7%	0%
C	5%	12%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	36	1256	3
B	44	0	32	0
C	1107	10	0	2
D	5	0	1	0

Future Assessment Year (2035) + Committed + Proposed

Total Vehicle Movements				
	A	B	C	D
A	0	35	1236	3
B	44	0	31	0
C	1073	8	0	3
D	5	0	1	0

HGV Movements				
	A	B	C	D
A	0	1	56	0
B	0	0	2	0
C	52	1	0	0
D	0	0	0	0

HGV %				
	A	B	C	D
A	0%	3%	5%	0%
B	0%	0%	7%	0%
C	5%	12%	0%	0%
D	0%	0%	0%	0%

PCU				
	A	B	C	D
A	0	36	1287	3
B	44	0	32	0
C	1123	10	0	2
D	5	0	1	0

Tey Gardens, Little Tey  
AM Peak Hour



**Notes**  
 Network AM Peak hour - 0700 - 0800  
 Committed Development AM Peak Hour - 0800 - 0900  
 Proposed Residential Development AM Peak Hour - 0800 - 0900  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0262  
 Tempo Growth - 2025 - 2035 = 1.0566

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements	A	B	C	D
A	58	0	1082	128
B	115	0	71	32
C	932	0	1	28
D	125	0	43	0

HGV Movements	A	B	C	D
A	5	0	101	0
B	6	0	16	0
C	87	0	0	0
D	0	0	0	0

HGV %	A	B	C	D
A	9%	0%	9%	0%
B	5%	0%	23%	0%
C	9%	0%	0%	0%
D	0%	0%	0%	0%

PCU	A	B	C	D
A	62	0	1183	127
B	119	0	86	32
C	1008	0	1	28
D	125	0	43	0

Opening Year (2030)

Total Vehicle Movements	A	B	C	D
A	60	0	1110	131
B	118	0	73	33
C	956	0	1	29
D	128	0	44	0

HGV Movements	A	B	C	D
A	5	0	101	0
B	6	0	16	0
C	87	0	0	0
D	0	0	0	0

HGV %	A	B	C	D
A	8%	0%	9%	0%
B	5%	0%	22%	0%
C	9%	0%	0%	0%
D	0%	0%	0%	0%

PCU	A	B	C	D
A	64	0	1214	130
B	122	0	88	33
C	1034	0	1	29
D	128	0	44	0

Future Assessment Year (2035)

Total Vehicle Movements	A	B	C	D
A	61	0	1143	135
B	122	0	75	34
C	985	0	1	30
D	132	0	45	0

HGV Movements	A	B	C	D
A	5	0	101	0
B	6	0	16	0
C	87	0	0	0
D	0	0	0	0

HGV %	A	B	C	D
A	8%	0%	9%	0%
B	5%	0%	21%	0%
C	9%	0%	0%	0%
D	0%	0%	0%	0%

PCU	A	B	C	D
A	66	0	1250	134
B	126	0	91	34
C	1065	0	1	30
D	132	0	45	0

Committed Development

Total Vehicle Movements	A	B	C	D
A	0	0	3	0
B	0	0	2	0
C	9	0	0	0
D	0	0	0	0

HGV Movements	A	B	C	D
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
D	0	0	0	0

HGV %	A	B	C	D
A	0%	0%	0%	0%
B	0%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

PCU	A	B	C	D
A	0	0	3	0
B	0	0	2	0
C	9	0	0	0
D	0	0	0	0

Proposed Development

Total Vehicle Movements	A	B	C	D
A	0	0	14	0
B	0	0	2	0
C	38	0	0	0
D	0	0	0	0

HGV Movements	A	B	C	D
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
D	0	0	0	0

HGV %	A	B	C	D
A	0%	0%	0%	0%
B	0%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

PCU	A	B	C	D
A	0	0	14	0
B	0	0	2	0
C	38	0	0	0
D	0	0	0	0

Opening Year (2030) + Committed

Total Vehicle Movements	A	B	C	D
A	60	0	1113	131
B	118	0	75	33
C	965	0	1	29
D	128	0	44	0

HGV Movements	A	B	C	D
A	5	0	101	0
B	6	0	16	0
C	87	0	0	0
D	0	0	0	0

HGV %	A	B	C	D
A	8%	0%	9%	0%
B	5%	0%	21%	0%
C	9%	0%	0%	0%
D	0%	0%	0%	0%

PCU	A	B	C	D
A	64	0	1217	130
B	122	0	90	33
C	1043	0	1	29
D	128	0	44	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements	A	B	C	D
A	60	0	1127	131
B	118	0	77	33
C	1003	0	1	29
D	128	0	44	0

HGV Movements	A	B	C	D
A	5	0	101	0
B	6	0	16	0
C	87	0	0	0
D	0	0	0	0

HGV %	A	B	C	D
A	8%	0%	9%	0%
B	5%	0%	21%	0%
C	9%	0%	0%	0%
D	0%	0%	0%	0%

PCU	A	B	C	D
A	64	0	1231	130
B	122	0	92	33
C	1081	0	1	29
D	128	0	44	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements	A	B	C	D
A	61	0	1146	135
B	122	0	77	34
C	994	0	1	30
D	132	0	45	0

HGV Movements	A	B	C	D
A	5	0	101	0
B	6	0	16	0
C	87	0	0	0
D	0	0	0	0

HGV %	A	B	C	D
A	8%	0%	9%	0%
B	5%	0%	21%	0%
C	9%	0%	0%	0%
D	0%	0%	0%	0%

PCU	A	B	C	D
A	66	0	1253	134
B	126	0	93	34
C	1074	0	1	30
D	132	0	45	0

Future Assessment Year (2035) + Committed + Proposed

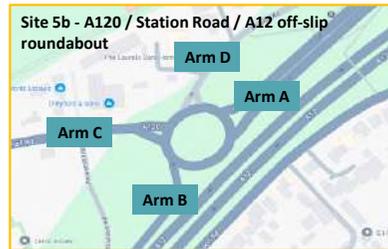
Total Vehicle Movements	A	B	C	D
A	61	0	1160	135
B	122	0	79	34
C	1032	0	1	30
D	132	0	45	0

HGV Movements	A	B	C	D
A	5	0	101	0
B	6	0	16	0
C	87	0	0	0
D	0	0	0	0

HGV %	A	B	C	D
A	8%	0%	9%	0%
B	5%	0%	20%	0%
C	8%	0%	0%	0%
D	0%	0%	0%	0%

PCU	A	B	C	D
A	66	0	1267	134
B	126	0	95	34
C	1112	0	1	30
D	132	0	45	0

Tey Gardens, Little Tey  
PM Peak Hour



**Notes**  
 Network PM Peak hour - 1600 - 1700  
 Committed Development PM Peak Hour - 1700 - 1800  
 Proposed Residential Development PM Peak Hour - 1700 - 1800  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0269  
 Tempo Growth - 2025 - 2035 = 1.0576

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements	A	B	C	D
A	84	0	1048	57
B	169	0	85	44
C	1020	0	1	22
D	91	0	29	0

HGV Movements	A	B	C	D
A	4	0	51	2
B	8	0	7	0
C	52	0	1	0
D	2	0	0	0

HGV %	A	B	C	D
A	5%	0%	5%	4%
B	5%	0%	8%	0%
C	5%	0%	100%	0%
D	2%	0%	0%	0%

PCU	A	B	C	D
A	88	0	1090	2
B	175	0	92	44
C	1068	0	1	21
D	92	0	29	0

Opening Year (2030)

Total Vehicle Movements	A	B	C	D
A	86	0	1076	59
B	174	0	87	45
C	1047	0	1	23
D	93	0	30	0

HGV Movements	A	B	C	D
A	4	0	51	2
B	8	0	7	0
C	52	0	1	0
D	2	0	0	0

HGV %	A	B	C	D
A	5%	0%	5%	3%
B	5%	0%	8%	0%
C	5%	0%	97%	0%
D	2%	0%	0%	0%

PCU	A	B	C	D
A	90	0	1119	2
B	180	0	94	45
C	1097	0	1	22
D	94	0	30	0

Future Assessment Year (2035)

Total Vehicle Movements	A	B	C	D
A	89	0	1108	60
B	179	0	90	47
C	1079	0	1	23
D	96	0	31	0

HGV Movements	A	B	C	D
A	4	0	51	2
B	8	0	7	0
C	52	0	1	0
D	2	0	0	0

HGV %	A	B	C	D
A	5%	0%	5%	3%
B	4%	0%	8%	0%
C	5%	0%	95%	0%
D	2%	0%	0%	0%

PCU	A	B	C	D
A	93	0	1153	2
B	185	0	97	47
C	1130	0	1	22
D	97	0	31	0

Committed Development

Total Vehicle Movements	A	B	C	D
A	0	0	5	0
B	0	0	3	0
C	6	0	0	0
D	0	0	0	0

HGV Movements	A	B	C	D
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
D	0	0	0	0

HGV %	A	B	C	D
A	0%	0%	0%	0%
B	0%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

PCU	A	B	C	D
A	0	0	5	0
B	0	0	3	0
C	6	0	0	0
D	0	0	0	0

Proposed Development

Total Vehicle Movements	A	B	C	D
A	0	0	27	0
B	0	0	4	0
C	16	0	0	0
D	0	0	0	0

HGV Movements	A	B	C	D
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
D	0	0	0	0

HGV %	A	B	C	D
A	0%	0%	0%	0%
B	0%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

PCU	A	B	C	D
A	0	0	27	0
B	0	0	4	0
C	16	0	0	0
D	0	0	0	0

Opening Year (2030) + Committed

Total Vehicle Movements	A	B	C	D
A	86	0	1081	59
B	174	0	90	45
C	1053	0	1	23
D	93	0	30	0

HGV Movements	A	B	C	D
A	4	0	51	2
B	8	0	7	0
C	52	0	1	0
D	2	0	0	0

HGV %	A	B	C	D
A	5%	0%	5%	3%
B	5%	0%	8%	0%
C	5%	0%	97%	0%
D	2%	0%	0%	0%

PCU	A	B	C	D
A	90	0	1124	2
B	180	0	97	45
C	1103	0	1	22
D	94	0	30	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements	A	B	C	D
A	86	0	1108	59
B	174	0	94	45
C	1069	0	1	23
D	93	0	30	0

HGV Movements	A	B	C	D
A	4	0	51	2
B	8	0	7	0
C	52	0	1	0
D	2	0	0	0

HGV %	A	B	C	D
A	5%	0%	5%	3%
B	5%	0%	7%	0%
C	5%	0%	97%	0%
D	2%	0%	0%	0%

PCU	A	B	C	D
A	90	0	1151	2
B	180	0	101	45
C	1119	0	1	22
D	94	0	30	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements	A	B	C	D
A	89	0	1113	60
B	179	0	93	47
C	1085	0	1	23
D	96	0	31	0

HGV Movements	A	B	C	D
A	4	0	51	2
B	8	0	7	0
C	52	0	1	0
D	2	0	0	0

HGV %	A	B	C	D
A	5%	0%	5%	3%
B	4%	0%	8%	0%
C	5%	0%	95%	0%
D	2%	0%	0%	0%

PCU	A	B	C	D
A	93	0	1158	2
B	185	0	100	47
C	1136	0	1	22
D	97	0	31	0

Future Assessment Year (2035) + Committed + Proposed

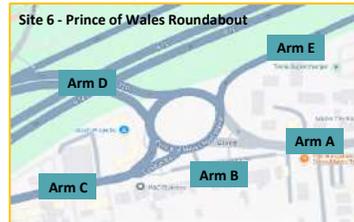
Total Vehicle Movements	A	B	C	D
A	89	0	1140	60
B	179	0	97	47
C	1101	0	1	23
D	96	0	31	0

HGV Movements	A	B	C	D
A	4	0	51	2
B	8	0	7	0
C	52	0	1	0
D	2	0	0	0

HGV %	A	B	C	D
A	5%	0%	4%	3%
B	4%	0%	7%	0%
C	5%	0%	95%	0%
D	2%	0%	0%	0%

PCU	A	B	C	D
A	93	0	1185	2
B	185	0	104	47
C	1152	0	1	22
D	97	0	31	0

Tey Gardens, Little Tey  
AM Peak Hour



**Notes**  
 Network AM Peak hour - 0700 - 0800  
 Committed Development AM Peak Hour - 0800 - 0900  
 Proposed Residential Development AM Peak Hour - 0800 - 0900  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0262  
 Tempo Growth - 2025 - 2035 = 1.0566

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements					
	A	B	C	D	E
A	0	1	184	354	0
B	1	0	0	0	0
C	21	0	0	49	0
D	272	0	155	2	0
E	45	0	85	665	0

HGV Movements					
	A	B	C	D	E
A	0	0	13	16	0
B	0	0	0	0	0
C	2	0	0	5	0
D	14	0	19	0	0
E	0	0	12	85	0

HGV %					
	A	B	C	D	E
A	0%	0%	7%	5%	0%
B	0%	0%	0%	0%	0%
C	10%	0%	0%	10%	0%
D	5%	0%	12%	0%	0%
E	0%	0%	18%	10%	0%

PCU					
	A	B	C	D	E
A	0	1	195	366	0
B	1	0	0	0	0
C	23	0	0	52	0
D	281	0	173	2	0
E	46	0	73	954	0

Opening Year (2030)

Total Vehicle Movements					
	A	B	C	D	E
A	0	1	189	363	0
B	1	0	0	0	0
C	22	0	0	50	0
D	279	0	159	2	0
E	46	0	67	888	0

HGV Movements					
	A	B	C	D	E
A	0	0	13	16	0
B	0	0	0	0	0
C	2	0	0	5	0
D	14	0	19	0	0
E	0	0	12	85	0

HGV %					
	A	B	C	D	E
A	0%	0%	7%	4%	0%
B	0%	0%	0%	0%	0%
C	9%	0%	0%	10%	0%
D	5%	0%	12%	0%	0%
E	0%	0%	18%	10%	0%

PCU					
	A	B	C	D	E
A	0	1	201	376	0
B	1	0	0	0	0
C	24	0	0	53	0
D	288	0	178	2	0
E	46	0	75	979	0

Future Assessment Year (2035)

Total Vehicle Movements					
	A	B	C	D	E
A	0	1	194	374	0
B	1	0	0	0	0
C	22	0	0	62	0
D	287	0	164	2	0
E	48	0	69	914	0

HGV Movements					
	A	B	C	D	E
A	0	0	13	16	0
B	0	0	0	0	0
C	2	0	0	5	0
D	14	0	19	0	0
E	0	0	12	85	0

HGV %					
	A	B	C	D	E
A	0%	0%	7%	4%	0%
B	0%	0%	0%	0%	0%
C	9%	0%	0%	10%	0%
D	5%	0%	12%	0%	0%
E	0%	0%	17%	9%	0%

PCU					
	A	B	C	D	E
A	0	1	207	387	0
B	1	0	0	0	0
C	24	0	0	55	0
D	287	0	183	2	0
E	48	0	77	1008	0

Committed Development

Total Vehicle Movements					
	A	B	C	D	E
A	0	0	0	1	0
B	0	0	0	0	0
C	0	0	0	0	0
D	1	0	0	0	0
E	0	0	0	2	0

HGV Movements					
	A	B	C	D	E
A	0	0	0	0	0
B	0	0	0	0	0
C	0	0	0	0	0
D	0	0	0	0	0
E	0	0	0	0	0

HGV %					
	A	B	C	D	E
A	0%	0%	0%	0%	0%
B	0%	0%	0%	0%	0%
C	0%	0%	0%	0%	0%
D	0%	0%	0%	0%	0%
E	0%	0%	0%	0%	0%

PCU					
	A	B	C	D	E
A	0	0	0	1	0
B	0	0	0	0	0
C	0	0	0	0	0
D	1	0	0	0	0
E	0	0	0	2	0

Proposed Development

Total Vehicle Movements					
	A	B	C	D	E
A	0	0	0	3	0
B	0	0	0	0	0
C	0	0	0	0	0
D	8	0	5	0	0
E	0	0	0	10	0

HGV Movements					
	A	B	C	D	E
A	0	0	0	0	0
B	0	0	0	0	0
C	0	0	0	0	0
D	0	0	0	0	0
E	0	0	0	0	0

HGV %					
	A	B	C	D	E
A	0%	0%	0%	0%	0%
B	0%	0%	0%	0%	0%
C	0%	0%	0%	0%	0%
D	0%	0%	0%	0%	0%
E	0%	0%	0%	0%	0%

PCU					
	A	B	C	D	E
A	0	0	0	3	0
B	0	0	0	0	0
C	0	0	0	0	0
D	8	0	5	0	0
E	0	0	0	10	0

Opening Year (2030) + Committed

Total Vehicle Movements					
	A	B	C	D	E
A	0	1	189	364	0
B	1	0	0	0	0
C	22	0	0	50	0
D	280	0	159	2	0
E	46	0	67	890	0

HGV Movements					
	A	B	C	D	E
A	0	0	13	16	0
B	0	0	0	0	0
C	2	0	0	5	0
D	14	0	19	0	0
E	0	0	12	85	0

HGV %					
	A	B	C	D	E
A	0%	0%	7%	4%	0%
B	0%	0%	0%	0%	0%
C	9%	0%	0%	10%	0%
D	5%	0%	12%	0%	0%
E	0%	0%	18%	10%	0%

PCU					
	A	B	C	D	E
A	0	1	201	377	0
B	1	0	0	0	0
C	24	0	0	53	0
D	289	0	178	2	0
E	46	0	75	981	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements					
	A	B	C	D	E
A	0	1	189	367	0
B	1	0	0	0	0
C	22	0	0	50	0
D	288	0	164	2	0
E	46	0	67	900	0

HGV Movements					
	A	B	C	D	E
A	0	0	13	16	0
B	0	0	0	0	0
C	2	0	0	5	0
D	14	0	19	0	0
E	0	0	12	85	0

HGV %					
	A	B	C	D	E
A	0%	0%	7%	4%	0%
B	0%	0%	0%	0%	0%
C	9%	0%	0%	10%	0%
D	5%	0%	12%	0%	0%
E	0%	0%	18%	9%	0%

PCU					
	A	B	C	D	E
A	0	1	201	380	0
B	1	0	0	0	0
C	24	0	0	53	0
D	297	0	183	2	0
E	46	0	75	991	0

Future Assessment Year (2035) + Committed

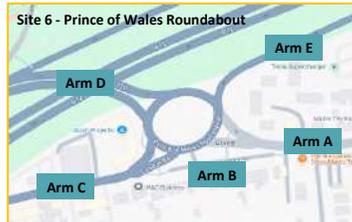
Total Vehicle Movements					
	A	B	C	D	E
A	0	1	194	375	0
B	1	0	0	0	0
C	22	0	0	62	0
D	288	0	164	2	0
E	48	0	69	916	0

HGV Movements					
	A	B	C	D	E
A	0	0	13	16	0
B	0	0	0	0	0
C	2	0	0	5	0
D	14	0	19	0	0
E	0	0	12	85	0

HGV %					
	A	B	C	D	E
A	0%	0%	7%	4%	0%
B	0%	0%	0%	0%	0%
C	9%	0%	0%	10%	0%
D	5%	0%	12%	0%	0%
E	0%	0%	17%	9%	0%

PCU					
	A	B	C	D	E
A	0	1	207	388	0
B	1	0	0	0	0
C	24	0	0	55	0
D	298	0	183	2	0
E	48	0	77	1010	0

Tey Gardens, Little Tey  
PM Peak Hour



**Notes**  
 Network PM Peak hour - 1600 - 1700  
 Committed Development PM Peak Hour - 1700 - 1800  
 Proposed Residential Development PM Peak Hour - 1700 - 1800  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0269  
 Tempo Growth - 2025 - 2035 = 1.0576

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements					
	A	B	C	D	E
A	3	0	165	312	0
B	0	0	0	0	0
C	48	0	0	73	0
D	385	2	159	3	0
E	45	2	51	795	0

HGV Movements					
	A	B	C	D	E
A	0	0	8	9	0
B	0	0	0	0	0
C	1	0	0	4	0
D	10	0	10	0	0
E	1	0	2	43	0

HGV %					
	A	B	C	D	E
A	0%	0%	5%	3%	0%
B	0%	0%	0%	0%	0%
C	2%	0%	0%	5%	0%
D	3%	0%	6%	0%	0%
E	2%	0%	4%	5%	0%

PCU					
	A	B	C	D	E
A	3	0	171	320	0
B	0	0	0	0	0
C	48	0	0	77	0
D	388	2	170	3	0
E	46	2	52	831	0

Opening Year (2030)

Total Vehicle Movements					
	A	B	C	D	E
A	3	0	169	320	0
B	0	0	0	0	0
C	49	0	0	75	0
D	385	2	163	3	0
E	46	2	52	816	0

HGV Movements					
	A	B	C	D	E
A	0	0	8	9	0
B	0	0	0	0	0
C	1	0	0	4	0
D	10	0	10	0	0
E	1	0	2	43	0

HGV %					
	A	B	C	D	E
A	0%	0%	5%	3%	0%
B	0%	0%	0%	0%	0%
C	2%	0%	0%	5%	0%
D	3%	0%	6%	0%	0%
E	2%	0%	4%	5%	0%

PCU					
	A	B	C	D	E
A	3	0	176	329	0
B	0	0	0	0	0
C	49	0	0	79	0
D	388	2	175	3	0
E	47	2	53	853	0

Future Assessment Year (2035)

Total Vehicle Movements					
	A	B	C	D	E
A	3	0	175	330	0
B	0	0	0	0	0
C	51	0	0	77	0
D	407	2	168	3	0
E	48	2	54	841	0

HGV Movements					
	A	B	C	D	E
A	0	0	8	9	0
B	0	0	0	0	0
C	1	0	0	4	0
D	10	0	10	0	0
E	1	0	2	43	0

HGV %					
	A	B	C	D	E
A	0%	0%	5%	3%	0%
B	0%	0%	0%	0%	0%
C	2%	0%	0%	5%	0%
D	2%	0%	6%	0%	0%
E	2%	0%	4%	5%	0%

PCU					
	A	B	C	D	E
A	3	0	181	338	0
B	0	0	0	0	0
C	51	0	0	81	0
D	410	2	180	3	0
E	49	2	55	879	0

Committed Development

Total Vehicle Movements					
	A	B	C	D	E
A	0	0	0	2	0
B	0	0	0	0	0
C	0	0	0	0	0
D	1	0	1	0	0
E	0	0	0	6	0

HGV Movements					
	A	B	C	D	E
A	0	0	0	0	0
B	0	0	0	0	0
C	0	0	0	0	0
D	0	0	0	0	0
E	0	0	0	0	0

HGV %					
	A	B	C	D	E
A	0%	0%	0%	0%	0%
B	0%	0%	0%	0%	0%
C	0%	0%	0%	0%	0%
D	0%	0%	0%	0%	0%
E	0%	0%	0%	0%	0%

PCU					
	A	B	C	D	E
A	0	0	0	2	0
B	0	0	0	0	0
C	0	0	0	0	0
D	1	0	1	0	0
E	0	0	0	6	0

Proposed Development

Total Vehicle Movements					
	A	B	C	D	E
A	0	0	0	7	0
B	0	0	0	0	0
C	0	0	0	0	0
D	3	0	2	0	0
E	0	0	0	20	0

HGV Movements					
	A	B	C	D	E
A	0	0	0	0	0
B	0	0	0	0	0
C	0	0	0	0	0
D	0	0	0	0	0
E	0	0	0	0	0

HGV %					
	A	B	C	D	E
A	0%	0%	0%	0%	0%
B	0%	0%	0%	0%	0%
C	0%	0%	0%	0%	0%
D	0%	0%	0%	0%	0%
E	0%	0%	0%	0%	0%

PCU					
	A	B	C	D	E
A	0	0	0	7	0
B	0	0	0	0	0
C	0	0	0	0	0
D	3	0	2	0	0
E	0	0	0	20	0

Opening Year (2030) + Committed

Total Vehicle Movements					
	A	B	C	D	E
A	3	0	169	322	0
B	0	0	0	0	0
C	49	0	0	75	0
D	386	2	164	3	0
E	46	2	52	822	0

HGV Movements					
	A	B	C	D	E
A	0	0	8	9	0
B	0	0	0	0	0
C	1	0	0	4	0
D	10	0	10	0	0
E	1	0	2	43	0

HGV %					
	A	B	C	D	E
A	0%	0%	5%	3%	0%
B	0%	0%	0%	0%	0%
C	2%	0%	0%	5%	0%
D	3%	0%	6%	0%	0%
E	2%	0%	4%	5%	0%

PCU					
	A	B	C	D	E
A	3	0	176	331	0
B	0	0	0	0	0
C	49	0	0	79	0
D	389	2	176	3	0
E	47	2	53	859	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements					
	A	B	C	D	E
A	3	0	169	329	0
B	0	0	0	0	0
C	49	0	0	75	0
D	389	2	166	3	0
E	46	2	52	842	0

HGV Movements					
	A	B	C	D	E
A	0	0	8	9	0
B	0	0	0	0	0
C	1	0	0	4	0
D	10	0	10	0	0
E	1	0	2	43	0

HGV %					
	A	B	C	D	E
A	0%	0%	5%	3%	0%
B	0%	0%	0%	0%	0%
C	2%	0%	0%	5%	0%
D	3%	0%	6%	0%	0%
E	2%	0%	4%	5%	0%

PCU					
	A	B	C	D	E
A	3	0	176	338	0
B	0	0	0	0	0
C	49	0	0	79	0
D	402	2	178	3	0
E	47	2	53	879	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements					
	A	B	C	D	E
A	3	0	175	332	0
B	0	0	0	0	0
C	51	0	0	77	0
D	408	2	169	3	0
E	48	2	54	847	0

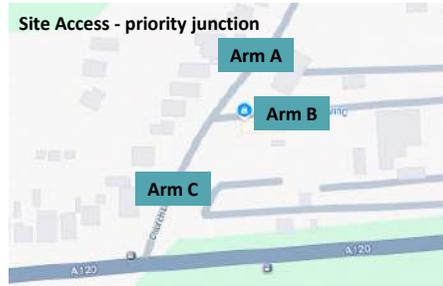
HGV Movements					
	A	B	C	D	E
A	0	0	8	9	0
B	0	0	0	0	0
C	1	0	0	4	0
D	10	0	10	0	0
E	1	0	2	43	0

HGV %					
	A	B	C	D	E
A	0%	0%	5%	3%	0%
B	0%	0%	0%	0%	0%
C	2%	0%	0%	5%	0%
D	2%	0%	6%	0%	0%
E	2%	0%	4%	5%	0%

PCU					
	A	B	C	D	E
A	3	0	181	340	0
B	0	0	0	0	0
C	51	0	0	81	0
D	411	2	181	3	0
E	49	2	55	885	0

Future Assessment Year (2

Tey Gardens, Little Tey  
AM Peak Hour



**Notes**  
 Network AM Peak hour - 0700 - 0800  
 Committed Development AM Peak Hour - 0800 - 0900  
 Proposed Residential Development AM Peak Hour - 0800 - 0900  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempro Growth - 2025 - 2030 = 1.0262  
 Tempro Growth - 2025 - 2035 = 1.0566

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements	A	B	C
A	0	0	7
B	0	0	0
C	19	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	7
B	0	0	0
C	19	0	0

Opening Year (2030)

Total Vehicle Movements	A	B	C
A	0	0	7
B	0	0	0
C	19	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	7
B	0	0	0
C	19	0	0

Future Assessment Year (2035)

Total Vehicle Movements	A	B	C
A	0	0	7
B	0	0	0
C	20	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	7
B	0	0	0
C	20	0	0

Committed Development

Total Vehicle Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

Proposed Development

Total Vehicle Movements	A	B	C
A	0	0	0
B	0	0	57
C	0	24	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	0
B	0	0	57
C	0	24	0

Opening Year (2030) + Committed

Total Vehicle Movements	A	B	C
A	0	0	7
B	0	0	0
C	19	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	7
B	0	0	0
C	19	0	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements	A	B	C
A	0	0	7
B	0	0	57
C	19	24	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	7
B	0	0	57
C	19	24	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements	A	B	C
A	0	0	7
B	0	0	0
C	20	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	7
B	0	0	0
C	20	0	0

Future Assessment Year (2035) + Committed + Proposed

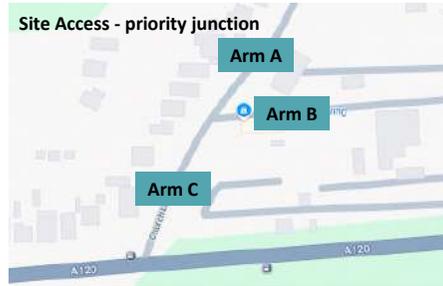
Total Vehicle Movements	A	B	C
A	0	0	7
B	0	0	57
C	20	24	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	7
B	0	0	57
C	20	24	0

Tey Gardens, Little Tey  
PM Peak Hour



**Notes**  
 Network PM Peak hour - 0700 - 0800  
 Committed Development PM Peak Hour - 0800 - 0900  
 Proposed Residential Development PM Peak Hour - 0800 - 0900  
 Existing Global Stone site was operating at minimum capacity during surveys.  
 Therefore no allowance has been made for existing trips (no reduction applied)

Tempo Growth - 2025 - 2030 = 1.0269  
 Tempo Growth - 2025 - 2035 = 1.0576

Committed Development = 25% of Coggeshall residential scheme (75% complete at time of surveys)

2025 Base Survey Results

Total Vehicle Movements	A	B	C
A	0	0	17
B	0	0	0
C	7	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	17
B	0	0	0
C	7	0	0

Opening Year (2030)

Total Vehicle Movements	A	B	C
A	0	0	17
B	0	0	0
C	7	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	17
B	0	0	0
C	7	0	0

Future Assessment Year (2035)

Total Vehicle Movements	A	B	C
A	0	0	18
B	0	0	0
C	7	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	18
B	0	0	0
C	7	0	0

Committed Development

Total Vehicle Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

Proposed Development

Total Vehicle Movements	A	B	C
A	0	0	0
B	0	0	24
C	0	47	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	0
B	0	24	0
C	47	0	0

Opening Year (2030) + Committed

Total Vehicle Movements	A	B	C
A	0	0	17
B	0	0	0
C	7	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	17
B	0	0	0
C	7	0	0

Opening Year (2030) + Committed + Proposed

Total Vehicle Movements	A	B	C
A	0	0	17
B	0	0	24
C	7	47	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	17
B	0	24	0
C	54	0	0

Future Assessment Year (2035) + Committed

Total Vehicle Movements	A	B	C
A	0	0	18
B	0	0	0
C	7	0	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	18
B	0	0	0
C	7	0	0

Future Assessment Year (2035) + Committed + Proposed

Total Vehicle Movements	A	B	C
A	0	0	18
B	0	0	24
C	7	47	0

HGV Movements	A	B	C
A	0	0	0
B	0	0	0
C	0	0	0

HGV %	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	0%	0%	0%

PCU	A	B	C
A	0	0	18
B	0	24	0
C	54	0	0

# APPENDIX D

---

PROPOSED SITE ACCESS PICADY OUTPUT

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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:** Proposed Site Access PICADY.j9

**Path:** C:\Users\Andrew FTP\Firmin Transport Planning\FTP Cloud - Company FTP\Drawings\2025\2503.09 - Tey Gardens, Little Tey\Junction Capacity Modelling

**Report generation date:** 21/05/2025 14:06:01

- »2030 Opening Year + com + proposed dev, AM Peak Hour
- »2030 Opening Year + com + proposed dev, PM Peak Hour
- »2035 Future Year + com + proposed dev, AM Peak Hour
- »2035 Future Year + com + proposed dev, PM Peak Hour

**Summary of junction performance**

	AM Peak Hour					PM Peak Hour				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
<b>2030 Opening Year + com + proposed dev</b>										
Stream B-AC	D1	0.1	6.44	0.10	A	D2	0.0	6.07	0.04	A
Stream C-AB		0.0	6.00	0.04	A		0.1	6.39	0.09	A
<b>2035 Future Year + com + proposed dev</b>										
Stream B-AC	D3	0.1	6.44	0.10	A	D4	0.0	6.08	0.04	A
Stream C-AB		0.0	5.99	0.04	A		0.1	6.39	0.09	A

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**

<b>Title</b>	Proposed Site Access
<b>Location</b>	Church Lane
<b>Site number</b>	1
<b>Date</b>	21/05/2025
<b>Version</b>	
<b>Status</b>	Proposed
<b>Identifier</b>	
<b>Client</b>	Tey Gardens
<b>Jobnumber</b>	2503.09
<b>Enumerator</b>	Andrew FTP
<b>Description</b>	

**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

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D2	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D3	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D4	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2030 Opening Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
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		4.81	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	Church Lane North		Major
B	Site Access		Minor
C	Church Lane 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	5.50			72.0	✓	0.00

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

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.75	25	25

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	486	0.090	0.228	0.144	0.326
B-C	624	0.098	0.247	-	-
C-B	616	0.244	0.244	-	-

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)
D1	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	7	100.000
B		✓	57	100.000
C		✓	43	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	0	7
	B	0	0	57
	C	19	24	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.10	6.44	0.1	A
C-AB	0.04	6.00	0.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	622	0.069	43	0.1	6.207	A
C-AB	18	624	0.030	18	0.0	5.944	A
C-A	14			14			
A-B	0			0			
A-C	5			5			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	622	0.082	51	0.1	6.305	A
C-AB	22	625	0.035	22	0.0	5.967	A
C-A	16			16			
A-B	0			0			
A-C	6			6			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	622	0.101	63	0.1	6.439	A
C-AB	27	628	0.044	27	0.0	5.997	A
C-A	20			20			
A-B	0			0			
A-C	8			8			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	622	0.101	63	0.1	6.439	A
C-AB	27	628	0.044	27	0.0	5.997	A
C-A	20			20			
A-B	0			0			
A-C	8			8			

#### 07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	622	0.082	51	0.1	6.309	A
C-AB	22	625	0.035	22	0.0	5.968	A
C-A	16			16			
A-B	0			0			
A-C	6			6			

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	622	0.069	43	0.1	6.213	A
C-AB	18	624	0.030	19	0.0	5.947	A
C-A	14			14			
A-B	0			0			
A-C	5			5			

# 2030 Opening Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
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		4.73	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)
D2	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	17	100.000
B		✓	24	100.000
C		✓	54	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	0	17
	B	0	0	24
	C	7	47	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.04	6.07	0.0	A
C-AB	0.09	6.39	0.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	621	0.029	18	0.0	5.972	A
C-AB	36	616	0.058	35	0.1	6.197	A
C-A	5			5			
A-B	0			0			
A-C	13			13			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	620	0.035	22	0.0	6.016	A
C-AB	43	616	0.069	43	0.1	6.277	A
C-A	6			6			
A-B	0			0			
A-C	15			15			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	619	0.043	26	0.0	6.074	A
C-AB	52	616	0.085	52	0.1	6.384	A
C-A	7			7			
A-B	0			0			
A-C	19			19			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	619	0.043	26	0.0	6.074	A
C-AB	52	616	0.085	52	0.1	6.387	A
C-A	7			7			
A-B	0			0			
A-C	19			19			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	620	0.035	22	0.0	6.019	A
C-AB	43	616	0.069	43	0.1	6.281	A
C-A	6			6			
A-B	0			0			
A-C	15			15			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	621	0.029	18	0.0	5.977	A
C-AB	36	616	0.058	36	0.1	6.206	A
C-A	5			5			
A-B	0			0			
A-C	13			13			

# 2035 Future Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
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		4.77	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)
D3	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	7	100.000
B		✓	57	100.000
C		✓	44	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	7
	B	0	0	57
	C	20	24	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.10	6.44	0.1	A
C-AB	0.04	5.99	0.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	622	0.069	43	0.1	6.207	A
C-AB	19	624	0.030	18	0.0	5.939	A
C-A	15			15			
A-B	0			0			
A-C	5			5			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	622	0.082	51	0.1	6.305	A
C-AB	22	626	0.035	22	0.0	5.962	A
C-A	17			17			
A-B	0			0			
A-C	6			6			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	622	0.101	63	0.1	6.439	A
C-AB	27	628	0.044	27	0.0	5.990	A
C-A	21			21			
A-B	0			0			
A-C	8			8			

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	622	0.101	63	0.1	6.439	A
C-AB	27	628	0.044	27	0.0	5.992	A
C-A	21			21			
A-B	0			0			
A-C	8			8			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	622	0.082	51	0.1	6.309	A
C-AB	22	626	0.036	22	0.0	5.965	A
C-A	17			17			
A-B	0			0			
A-C	6			6			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	622	0.069	43	0.1	6.213	A
C-AB	19	624	0.030	19	0.0	5.945	A
C-A	15			15			
A-B	0			0			
A-C	5			5			

# 2035 Future Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
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		4.68	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)
D4	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	18	100.000
B		✓	24	100.000
C		✓	54	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	18
	B	0	0	24
	C	7	47	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To			
	A	B	C	
	A	0	0	0
	B	0	0	0
C	0	0	0	

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.04	6.08	0.0	A
C-AB	0.09	6.39	0.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	620	0.029	18	0.0	5.974	A
C-AB	36	616	0.058	35	0.1	6.199	A
C-A	5			5			
A-B	0			0			
A-C	14			14			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	620	0.035	22	0.0	6.018	A
C-AB	43	616	0.069	43	0.1	6.280	A
C-A	6			6			
A-B	0			0			
A-C	16			16			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	619	0.043	26	0.0	6.076	A
C-AB	52	616	0.085	52	0.1	6.387	A
C-A	7			7			
A-B	0			0			
A-C	20			20			

16:30 - 16:45

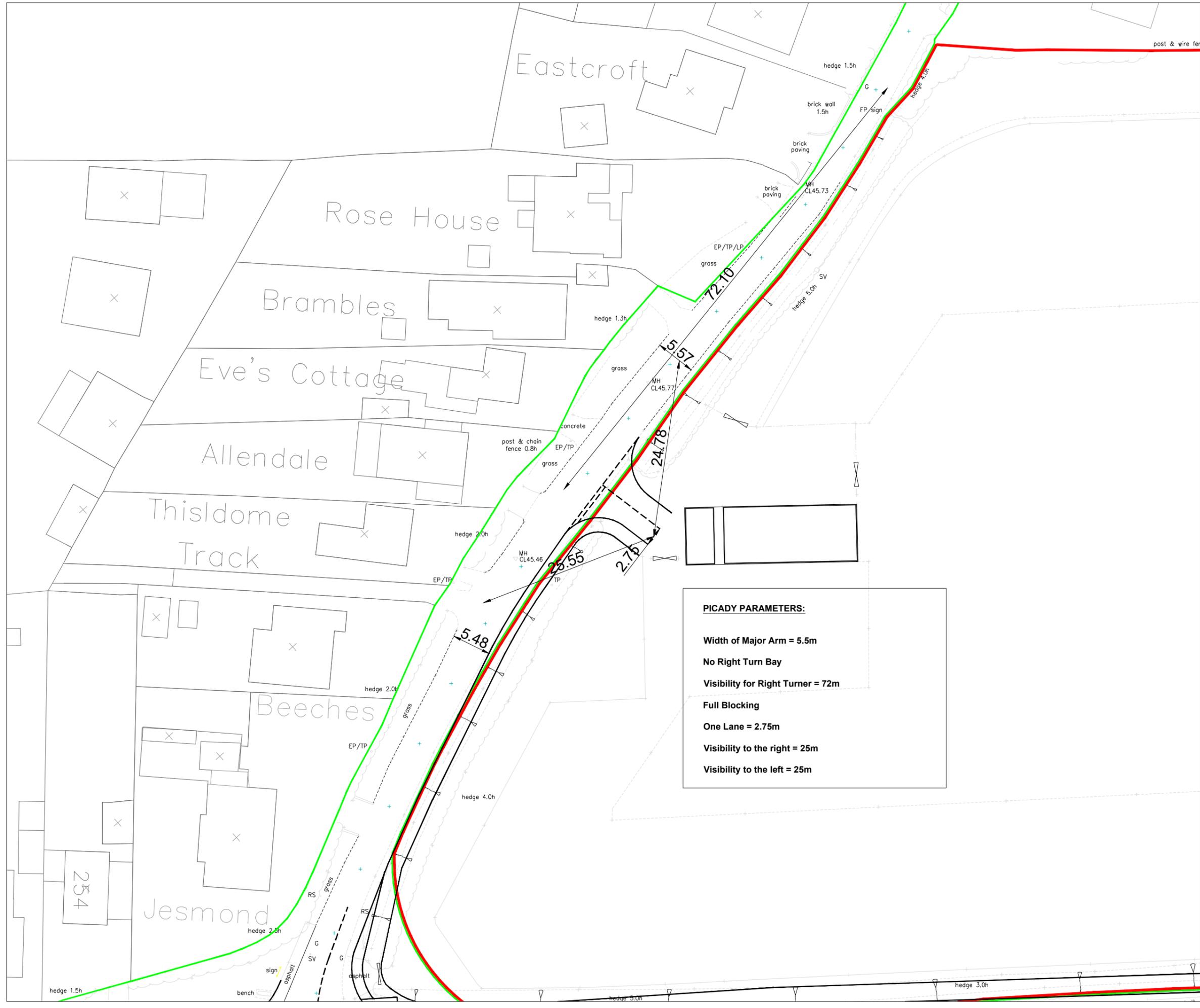
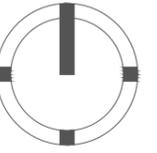
Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	619	0.043	26	0.0	6.076	A
C-AB	52	616	0.085	52	0.1	6.390	A
C-A	7			7			
A-B	0			0			
A-C	20			20			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	620	0.035	22	0.0	6.021	A
C-AB	43	616	0.069	43	0.1	6.281	A
C-A	6			6			
A-B	0			0			
A-C	16			16			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	620	0.029	18	0.0	5.977	A
C-AB	36	616	0.058	36	0.1	6.205	A
C-A	5			5			
A-B	0			0			
A-C	14			14			



**PICADY PARAMETERS:**

- Width of Major Arm = 5.5m
- No Right Turn Bay
- Visibility for Right Turner = 72m
- Full Blocking
- One Lane = 2.75m
- Visibility to the right = 25m
- Visibility to the left = 25m

**KEY:**

- Indicative Site Boundary —
- Highway Boundary Extent —

**NOTE:**

Based on Topographical Survey. Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval. Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd. These drawings are intended for planning application purposes only, they are not to be used for construction.

Client  
**TEY GARDENS LLP**

Project  
**TEY GARDENS, LITTLE TEY**

Title  
**PROPOSED SITE ACCESS  
PICADY MEASUREMENTS**

Drawn <b>A FIRMIN</b>	Checked <b>AF</b>
Scale <b>1:500 @ A3</b>	Date <b>MAY 2025</b>
Drawing No. -	

Firm Transport Planning Ltd. accept no responsibility for any unauthorised amendments to this drawing. Only figured dimensions are to be worked to. COPYRIGHT RESERVED

# APPENDIX E

---

JUNCTION 1 PICADY OUTPUT (EXISTING)

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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:** Junction 1 Existing.j9

**Path:** C:\Users\Andrew FTP\Firmin Transport Planning\FTP Cloud - Company FTP\Drawings\2025\2503.09 - Tey Gardens, Little Tey\Junction Capacity Modelling

**Report generation date:** 12/05/2025 16:04:22

- »2025 Base, AM Peak Hour
- »2025 Base, PM Peak Hour
- »2030 Opening Year + com dev, AM Peak Hour
- »2030 Opening Year + com dev, PM Peak Hour
- »2030 Opening Year + com + proposed dev, AM Peak Hour
- »2030 Opening Year + com + proposed dev, PM Peak Hour
- »2035 Future Year + com dev, AM Peak Hour
- »2035 Future Year + com dev, PM Peak Hour
- »2035 Future Year + com + proposed dev, AM Peak Hour
- »2035 Future Year + com + proposed dev, PM Peak Hour

**Summary of junction performance**

	AM Peak Hour					PM Peak Hour				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
<b>2025 Base</b>										
Stream B-AC	D1	0.0	19.01	0.04	C	D2	0.1	10.90	0.05	B
Stream C-AB		0.5	3.68	0.17	A		0.1	3.58	0.04	A
<b>2030 Opening Year + com dev</b>										
Stream B-AC	D3	0.0	21.17	0.04	C	D4	0.2	15.24	0.16	C
Stream C-AB		0.6	3.63	0.19	A		1.2	3.97	0.26	A
<b>2030 Opening Year + com + proposed dev</b>										
Stream B-AC	D5	0.5	27.79	0.35	D	D6	0.2	15.40	0.16	C
Stream C-AB		2.0	4.29	0.36	A		1.2	3.99	0.27	A
<b>2035 Future Year + com dev</b>										
Stream B-AC	D7	0.1	24.36	0.05	C	D8	0.1	11.93	0.06	B
Stream C-AB		0.8	3.60	0.22	A		0.1	3.49	0.04	A
<b>2035 Future Year + com + proposed dev</b>										
Stream B-AC	D9	0.7	34.58	0.40	D	D10	0.2	16.48	0.17	C
Stream C-AB		2.5	4.59	0.41	A		1.4	4.00	0.28	A

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

## File summary

### File Description

<b>Title</b>	Junction 1 - Existing
<b>Location</b>	A120 / Church Lane
<b>Site number</b>	1
<b>Date</b>	12/05/2025
<b>Version</b>	
<b>Status</b>	Existing
<b>Identifier</b>	
<b>Client</b>	Tey Gardens
<b>Jobnumber</b>	2503.09
<b>Enumerator</b>	Andrew FTP
<b>Description</b>	

### 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

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2025 Base, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.32	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	A120 West		Major
B	Church Lane		Minor
C	A120 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	7.30			250.0	✓	0.00

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

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.94	35	100

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	589	0.101	0.256	0.161	0.365
B-C	752	0.109	0.275	-	-
C-B	719	0.263	0.263	-	-

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)
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	852	100.000
B		✓	7	100.000
C		✓	1082	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	2	850
	B	3	0	4
	C	1065	17	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	10
	B	0	0	0
	C	9	18	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.04	19.01	0.0	C
C-AB	0.17	3.68	0.5	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	376	0.014	5	0.0	9.696	A
C-AB	57	1034	0.055	57	0.1	3.682	A
C-A	758			758			
A-B	2			2			
A-C	640			640			

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	308	0.020	6	0.0	11.945	B
C-AB	98	1135	0.087	98	0.2	3.480	A
C-A	874			874			
A-B	2			2			
A-C	764			764			

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	197	0.039	8	0.0	18.956	C
C-AB	220	1283	0.171	218	0.5	3.391	A
C-A	972			972			
A-B	2			2			
A-C	936			936			

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	197	0.039	8	0.0	19.007	C
C-AB	221	1284	0.172	221	0.5	3.393	A
C-A	970			970			
A-B	2			2			
A-C	936			936			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	307	0.020	6	0.0	11.967	B
C-AB	99	1136	0.087	100	0.2	3.469	A
C-A	874			874			
A-B	2			2			
A-C	764			764			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	376	0.014	5	0.0	9.705	A
C-AB	57	1035	0.055	58	0.1	3.674	A
C-A	757			757			
A-B	2			2			
A-C	640			640			

# 2025 Base, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.16	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)
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	855	100.000
B		✓	17	100.000
C		✓	947	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	854
	B	3	0	14
	C	941	6	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	6	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.05	10.90	0.1	B
C-AB	0.04	3.58	0.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	485	0.026	13	0.0	7.627	A
C-AB	15	1023	0.014	15	0.0	3.569	A
C-A	698			698			
A-B	0.75			0.75			
A-C	643			643			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	432	0.035	15	0.0	8.631	A
C-AB	23	1099	0.021	23	0.0	3.339	A
C-A	828			828			
A-B	0.90			0.90			
A-C	768			768			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	349	0.054	19	0.1	10.893	B
C-AB	45	1214	0.037	45	0.1	3.073	A
C-A	997			997			
A-B	1			1			
A-C	940			940			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	349	0.054	19	0.1	10.898	B
C-AB	45	1214	0.037	45	0.1	3.081	A
C-A	997			997			
A-B	1			1			
A-C	940			940			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	432	0.035	15	0.0	8.637	A
C-AB	24	1099	0.021	24	0.0	3.357	A
C-A	828			828			
A-B	0.90			0.90			
A-C	768			768			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	485	0.026	13	0.0	7.632	A
C-AB	15	1023	0.014	15	0.0	3.583	A
C-A	698			698			
A-B	0.75			0.75			
A-C	643			643			

# 2030 Opening Year + com dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.34	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)
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	883	100.000
B		✓	7	100.000
C		✓	1115	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	2	881
	B	3	0	4
	C	1098	17	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	9	17	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.04	21.17	0.0	C
C-AB	0.19	3.63	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	367	0.014	5	0.0	9.951	A
C-AB	60	1052	0.057	59	0.1	3.626	A
C-A	780			780			
A-B	2			2			
A-C	663			663			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	295	0.021	6	0.0	12.463	B
C-AB	105	1156	0.091	105	0.2	3.430	A
C-A	897			897			
A-B	2			2			
A-C	792			792			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	178	0.043	8	0.0	21.093	C
C-AB	245	1310	0.187	243	0.6	3.383	A
C-A	983			983			
A-B	2			2			
A-C	970			970			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	178	0.043	8	0.0	21.169	C
C-AB	246	1312	0.188	246	0.6	3.388	A
C-A	981			981			
A-B	2			2			
A-C	970			970			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	295	0.021	6	0.0	12.494	B
C-AB	106	1158	0.092	108	0.2	3.424	A
C-A	896			896			
A-B	2			2			
A-C	792			792			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	367	0.014	5	0.0	9.961	A
C-AB	60	1053	0.057	60	0.1	3.617	A
C-A	779			779			
A-B	2			2			
A-C	663			663			

# 2030 Opening Year + com dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.74	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)
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	884	100.000
B		✓	41	100.000
C		✓	1013	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	883
	B	10	0	31
	C	974	39	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	6	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	15.24	0.2	C
C-AB	0.26	3.97	1.2	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	445	0.069	31	0.1	8.690	A
C-AB	100	1036	0.097	100	0.2	3.843	A
C-A	662			662			
A-B	0.75			0.75			
A-C	665			665			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	383	0.096	37	0.1	10.380	B
C-AB	163	1117	0.146	163	0.4	3.770	A
C-A	747			747			
A-B	0.90			0.90			
A-C	794			794			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	282	0.160	45	0.2	15.157	C
C-AB	325	1238	0.262	322	1.2	3.935	A
C-A	791			791			
A-B	1			1			
A-C	972			972			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	281	0.160	45	0.2	15.244	C
C-AB	328	1240	0.264	328	1.2	3.972	A
C-A	787			787			
A-B	1			1			
A-C	972			972			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	383	0.096	37	0.1	10.424	B
C-AB	165	1119	0.148	169	0.4	3.821	A
C-A	745			745			
A-B	0.90			0.90			
A-C	794			794			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	444	0.069	31	0.1	8.712	A
C-AB	101	1037	0.098	102	0.2	3.870	A
C-A	661			661			
A-B	0.75			0.75			
A-C	665			665			

# 2030 Opening Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.37	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)
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	890	100.000
B		✓	64	100.000
C		✓	1132	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	9	881
	B	20	0	44
	C	1098	34	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	9	9	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.35	27.79	0.5	D
C-AB	0.36	4.29	2.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	399	0.121	48	0.1	10.223	B
C-AB	113	1068	0.106	112	0.2	3.766	A
C-A	739			739			
A-B	7			7			
A-C	663			663			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	327	0.176	57	0.2	13.331	B
C-AB	199	1168	0.170	198	0.5	3.712	A
C-A	819			819			
A-B	8			8			
A-C	792			792			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	201	0.350	69	0.5	26.987	D
C-AB	463	1318	0.351	457	1.9	4.208	A
C-A	784			784			
A-B	10			10			
A-C	970			970			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	200	0.353	70	0.5	27.787	D
C-AB	471	1322	0.357	471	2.0	4.285	A
C-A	775			775			
A-B	10			10			
A-C	970			970			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	326	0.177	59	0.2	13.550	B
C-AB	203	1173	0.173	209	0.5	3.763	A
C-A	815			815			
A-B	8			8			
A-C	792			792			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	399	0.121	48	0.1	10.282	B
C-AB	115	1069	0.107	116	0.2	3.782	A
C-A	738			738			
A-B	7			7			
A-C	663			663			

# 2030 Opening Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.75	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)
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	898	100.000
B		✓	41	100.000
C		✓	1013	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	15	883
	B	10	0	31
	C	974	39	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	6	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	15.40	0.2	C
C-AB	0.27	3.99	1.2	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	443	0.070	31	0.1	8.716	A
C-AB	101	1035	0.097	100	0.2	3.851	A
C-A	662			662			
A-B	11			11			
A-C	665			665			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	382	0.097	37	0.1	10.428	B
C-AB	164	1115	0.147	163	0.4	3.777	A
C-A	746			746			
A-B	13			13			
A-C	794			794			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	280	0.161	45	0.2	15.310	C
C-AB	327	1237	0.265	324	1.2	3.952	A
C-A	788			788			
A-B	17			17			
A-C	972			972			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	279	0.162	45	0.2	15.399	C
C-AB	331	1239	0.267	330	1.2	3.993	A
C-A	785			785			
A-B	17			17			
A-C	972			972			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	381	0.097	37	0.1	10.475	B
C-AB	166	1118	0.149	169	0.4	3.829	A
C-A	744			744			
A-B	13			13			
A-C	794			794			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	443	0.070	31	0.1	8.740	A
C-AB	102	1035	0.098	103	0.2	3.876	A
C-A	661			661			
A-B	11			11			
A-C	665			665			

# 2035 Future Year + com dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.38	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)
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	909	100.000
B		✓	7	100.000
C		✓	1148	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	2	907
	B	3	0	4
	C	1130	18	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	9	17	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.05	24.36	0.1	C
C-AB	0.22	3.60	0.8	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	356	0.015	5	0.0	10.250	B
C-AB	67	1067	0.063	66	0.1	3.596	A
C-A	798			798			
A-B	2			2			
A-C	683			683			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	281	0.022	6	0.0	13.102	B
C-AB	120	1176	0.102	119	0.2	3.415	A
C-A	912			912			
A-B	2			2			
A-C	815			815			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	156	0.049	8	0.1	24.212	C
C-AB	293	1336	0.219	290	0.8	3.456	A
C-A	971			971			
A-B	2			2			
A-C	999			999			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	155	0.050	8	0.1	24.359	C
C-AB	296	1338	0.221	296	0.8	3.468	A
C-A	968			968			
A-B	2			2			
A-C	999			999			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	280	0.022	6	0.0	13.147	B
C-AB	121	1178	0.103	124	0.2	3.411	A
C-A	911			911			
A-B	2			2			
A-C	815			815			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	356	0.015	5	0.0	10.259	B
C-AB	67	1068	0.063	68	0.1	3.591	A
C-A	797			797			
A-B	2			2			
A-C	683			683			

# 2035 Future Year + com dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.17	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)
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	910	100.000
B		✓	18	100.000
C		✓	1009	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	909
	B	3	0	15
	C	1003	6	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	5	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.06	11.93	0.1	B
C-AB	0.04	3.49	0.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	472	0.029	13	0.0	7.844	A
C-AB	16	1051	0.015	16	0.0	3.479	A
C-A	744			744			
A-B	0.75			0.75			
A-C	684			684			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	16	416	0.039	16	0.0	9.009	A
C-AB	26	1134	0.023	26	0.0	3.243	A
C-A	881			881			
A-B	0.90			0.90			
A-C	817			817			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	20	322	0.062	20	0.1	11.922	B
C-AB	53	1261	0.042	53	0.1	2.976	A
C-A	1058			1058			
A-B	1			1			
A-C	1001			1001			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	20	322	0.062	20	0.1	11.930	B
C-AB	53	1261	0.042	53	0.1	2.981	A
C-A	1057			1057			
A-B	1			1			
A-C	1001			1001			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	16	416	0.039	16	0.0	9.015	A
C-AB	26	1134	0.023	27	0.0	3.260	A
C-A	881			881			
A-B	0.90			0.90			
A-C	817			817			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	472	0.029	14	0.0	7.849	A
C-AB	16	1050	0.015	16	0.0	3.487	A
C-A	744			744			
A-B	0.75			0.75			
A-C	684			684			

# 2035 Future Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.64	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)
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	916	100.000
B		✓	64	100.000
C		✓	1165	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	9	907
	B	20	0	44
	C	1130	35	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	9	9	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.40	34.58	0.7	D
C-AB	0.41	4.59	2.5	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	389	0.124	48	0.1	10.529	B
C-AB	123	1083	0.114	122	0.3	3.747	A
C-A	754			754			
A-B	7			7			
A-C	683			683			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	313	0.184	57	0.2	14.070	B
C-AB	220	1187	0.186	219	0.6	3.724	A
C-A	827			827			
A-B	8			8			
A-C	815			815			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	176	0.399	69	0.6	32.978	D
C-AB	538	1343	0.401	531	2.4	4.470	A
C-A	745			745			
A-B	10			10			
A-C	999			999			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	174	0.404	70	0.7	34.577	D
C-AB	551	1348	0.409	550	2.5	4.590	A
C-A	732			732			
A-B	10			10			
A-C	999			999			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	311	0.185	59	0.2	14.393	B
C-AB	226	1193	0.189	233	0.6	3.792	A
C-A	822			822			
A-B	8			8			
A-C	815			815			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	389	0.124	49	0.1	10.600	B
C-AB	125	1084	0.115	126	0.3	3.766	A
C-A	752			752			
A-B	7			7			
A-C	683			683			

# 2035 Future Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.78	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)
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	924	100.000
B		✓	42	100.000
C		✓	1042	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	15	909
	B	10	0	32
	C	1003	39	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	5	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.17	16.48	0.2	C
C-AB	0.28	4.00	1.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	438	0.072	31	0.1	8.854	A
C-AB	105	1049	0.100	104	0.2	3.808	A
C-A	680			680			
A-B	11			11			
A-C	684			684			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	38	374	0.101	38	0.1	10.701	B
C-AB	173	1133	0.153	172	0.4	3.745	A
C-A	764			764			
A-B	13			13			
A-C	817			817			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	46	266	0.174	46	0.2	16.354	C
C-AB	352	1260	0.279	348	1.3	3.956	A
C-A	795			795			
A-B	17			17			
A-C	1001			1001			

#### 16:30 - 16:45

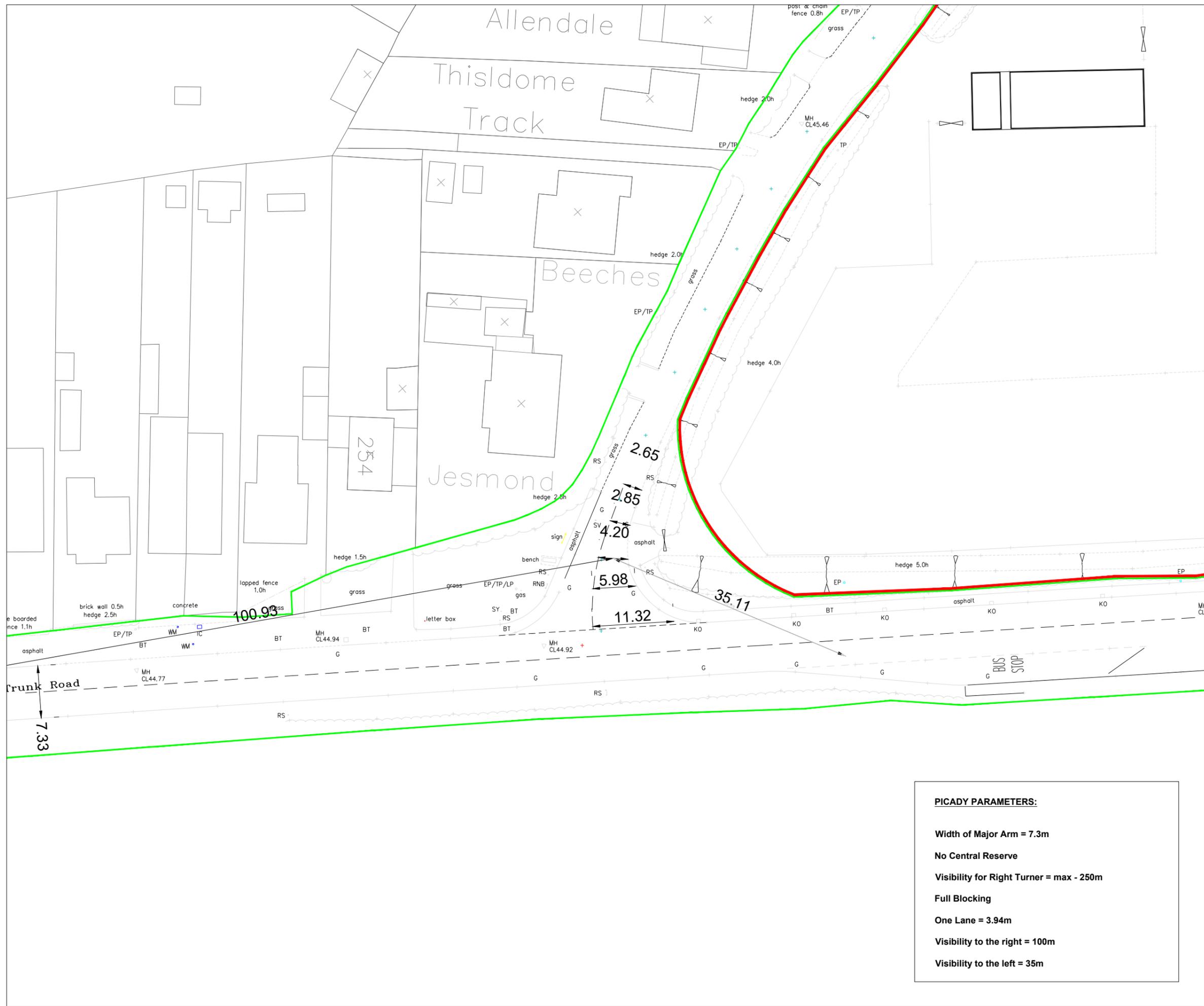
Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	46	265	0.175	46	0.2	16.475	C
C-AB	356	1263	0.282	356	1.4	4.001	A
C-A	791			791			
A-B	17			17			
A-C	1001			1001			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	38	373	0.101	38	0.1	10.758	B
C-AB	175	1136	0.154	179	0.4	3.796	A
C-A	762			762			
A-B	13			13			
A-C	817			817			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	437	0.072	32	0.1	8.877	A
C-AB	106	1050	0.101	107	0.2	3.833	A
C-A	679			679			
A-B	11			11			
A-C	684			684			



**KEY:**

- Indicative Site Boundary —
- Highway Boundary Extent —

**NOTE:**

Based on Topographical Survey. Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval. Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd. These drawings are intended for planning application purposes only, they are not to be used for construction.

**PICADY PARAMETERS:**

- Width of Major Arm = 7.3m
- No Central Reserve
- Visibility for Right Turner = max - 250m
- Full Blocking
- One Lane = 3.94m
- Visibility to the right = 100m
- Visibility to the left = 35m



Client		<b>TEY GARDENS LLP</b>	
Project		TEY GARDENS, LITTLE TEY	
Title		<b>JUNCTION 1 - EXISTING PICADY MEASUREMENTS</b>	
Drawn	A FIRMIN	Checked	AF
Scale	1:1000 @ A3	Date	MAY 2025
Drawing No. -			

# APPENDIX F

---

JUNCTION 1 PICADY OUTPUT (PROPOSED)

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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:** Junction 1 Proposed.j9

**Path:** C:\Users\Andrew FTP\Firmin Transport Planning\FTP Cloud - Company FTP\Drawings\2025\2503.09 - Tey Gardens, Little Tey\Junction Capacity Modelling

**Report generation date:** 12/05/2025 16:12:55

- »2025 Base, AM Peak Hour
- »2025 Base, PM Peak Hour
- »2030 Opening Year + com dev, AM Peak Hour
- »2030 Opening Year + com dev, PM Peak Hour
- »2030 Opening Year + com + proposed dev, AM Peak Hour
- »2030 Opening Year + com + proposed dev, PM Peak Hour
- »2035 Future Year + com dev, AM Peak Hour
- »2035 Future Year + com dev, PM Peak Hour
- »2035 Future Year + com + proposed dev, AM Peak Hour
- »2035 Future Year + com + proposed dev, PM Peak Hour

**Summary of junction performance**

	AM Peak Hour					PM Peak Hour				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
<b>2025 Base</b>										
Stream B-AC	D1	0.0	23.17	0.05	C	D2	0.1	11.75	0.06	B
Stream C-AB		0.0	9.03	0.04	A		0.0	7.25	0.01	A
<b>2030 Opening Year + com dev</b>										
Stream B-AC	D3	0.1	27.30	0.06	D	D4	0.2	17.58	0.18	C
Stream C-AB		0.0	9.12	0.05	A		0.1	8.01	0.09	A
<b>2030 Opening Year + com + proposed dev</b>										
Stream B-AC	D5	0.8	42.00	0.45	E	D6	0.2	17.83	0.18	C
Stream C-AB		0.1	8.91	0.08	A		0.1	8.10	0.09	A
<b>2035 Future Year + com dev</b>										
Stream B-AC	D7	0.1	34.41	0.07	D	D8	0.1	13.29	0.07	B
Stream C-AB		0.1	9.35	0.05	A		0.0	7.56	0.01	A
<b>2035 Future Year + com + proposed dev</b>										
Stream B-AC	D9	1.2	67.07	0.57	F	D10	0.2	19.70	0.20	C
Stream C-AB		0.1	9.14	0.09	A		0.1	8.27	0.09	A

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

## File summary

### File Description

<b>Title</b>	Junction 1 - Proposed
<b>Location</b>	A120 / Church Lane
<b>Site number</b>	1
<b>Date</b>	12/05/2025
<b>Version</b>	
<b>Status</b>	Proposed
<b>Identifier</b>	
<b>Client</b>	Tey Gardens
<b>Jobnumber</b>	2503.09
<b>Enumerator</b>	Andrew FTP
<b>Description</b>	

### 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

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2025 Base, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.16	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	A120 West		Major
B	Church Lane		Minor
C	A120 East		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00		✓	3.50	250.0	✓	13.00

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

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.00	131	94

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	625	0.114	0.288	0.181	0.411
B-C	752	0.115	0.291	-	-
C-B	820	0.318	0.318	-	-

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)
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	852	100.000
B		✓	7	100.000
C		✓	1082	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	2	850
	B	3	0	4
	C	1065	17	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	10
	B	0	0	0
	C	9	18	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.05	23.17	0.0	C
C-AB	0.04	9.03	0.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	369	0.014	5	0.0	9.884	A
C-AB	13	505	0.025	13	0.0	7.306	A
C-A	802			802			
A-B	2			2			
A-C	640			640			

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	292	0.022	6	0.0	12.595	B
C-AB	15	468	0.033	15	0.0	7.945	A
C-A	957			957			
A-B	2			2			
A-C	764			764			

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	163	0.047	8	0.0	23.139	C
C-AB	19	417	0.045	19	0.0	9.028	A
C-A	1173			1173			
A-B	2			2			
A-C	936			936			

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	163	0.047	8	0.0	23.173	C
C-AB	19	417	0.045	19	0.0	9.030	A
C-A	1173			1173			
A-B	2			2			
A-C	936			936			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	292	0.022	6	0.0	12.608	B
C-AB	15	468	0.033	15	0.0	7.947	A
C-A	957			957			
A-B	2			2			
A-C	764			764			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	369	0.014	5	0.0	9.891	A
C-AB	13	505	0.025	13	0.0	7.313	A
C-A	802			802			
A-B	2			2			
A-C	640			640			

# 2025 Base, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.13	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)
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	855	100.000
B		✓	17	100.000
C		✓	947	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	854
	B	3	0	14
	C	941	6	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	6	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.06	11.75	0.1	B
C-AB	0.01	7.25	0.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	477	0.027	13	0.0	7.747	A
C-AB	5	604	0.007	4	0.0	6.008	A
C-A	708			708			
A-B	0.75			0.75			
A-C	643			643			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	420	0.036	15	0.0	8.891	A
C-AB	5	561	0.010	5	0.0	6.473	A
C-A	846			846			
A-B	0.90			0.90			
A-C	768			768			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	325	0.058	19	0.1	11.748	B
C-AB	7	503	0.013	7	0.0	7.247	A
C-A	1036			1036			
A-B	1			1			
A-C	940			940			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	325	0.058	19	0.1	11.755	B
C-AB	7	503	0.013	7	0.0	7.247	A
C-A	1036			1036			
A-B	1			1			
A-C	940			940			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	420	0.036	15	0.0	8.899	A
C-AB	5	561	0.010	5	0.0	6.473	A
C-A	846			846			
A-B	0.90			0.90			
A-C	768			768			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	477	0.027	13	0.0	7.752	A
C-AB	5	604	0.007	5	0.0	6.011	A
C-A	708			708			
A-B	0.75			0.75			
A-C	643			643			

# 2030 Opening Year + com dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.17	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)
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	883	100.000
B		✓	7	100.000
C		✓	1115	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	2	881
	B	3	0	4
	C	1098	17	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	9	17	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.06	27.30	0.1	D
C-AB	0.05	9.12	0.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	359	0.015	5	0.0	10.180	B
C-AB	13	504	0.025	13	0.0	7.319	A
C-A	827			827			
A-B	2			2			
A-C	663			663			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	278	0.023	6	0.0	13.263	B
C-AB	15	466	0.033	15	0.0	7.983	A
C-A	987			987			
A-B	2			2			
A-C	792			792			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	140	0.055	8	0.1	27.237	D
C-AB	19	413	0.045	19	0.0	9.119	A
C-A	1209			1209			
A-B	2			2			
A-C	970			970			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	140	0.055	8	0.1	27.296	D
C-AB	19	413	0.045	19	0.0	9.121	A
C-A	1209			1209			
A-B	2			2			
A-C	970			970			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	278	0.023	6	0.0	13.280	B
C-AB	15	466	0.033	15	0.0	7.985	A
C-A	987			987			
A-B	2			2			
A-C	792			792			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	359	0.015	5	0.0	10.186	B
C-AB	13	504	0.025	13	0.0	7.323	A
C-A	827			827			
A-B	2			2			
A-C	663			663			

# 2030 Opening Year + com dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.50	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)
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	884	100.000
B		✓	41	100.000
C		✓	1013	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	883
	B	10	0	31
	C	974	39	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	6	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.18	17.58	0.2	C
C-AB	0.09	8.01	0.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	437	0.071	31	0.1	8.855	A
C-AB	29	596	0.049	29	0.1	6.347	A
C-A	733			733			
A-B	0.75			0.75			
A-C	665			665			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	369	0.100	37	0.1	10.831	B
C-AB	35	553	0.063	35	0.1	6.954	A
C-A	876			876			
A-B	0.90			0.90			
A-C	794			794			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	250	0.181	45	0.2	17.505	C
C-AB	43	492	0.087	43	0.1	8.004	A
C-A	1072			1072			
A-B	1			1			
A-C	972			972			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	250	0.181	45	0.2	17.582	C
C-AB	43	492	0.087	43	0.1	8.007	A
C-A	1072			1072			
A-B	1			1			
A-C	972			972			

**16:45 - 17:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	369	0.100	37	0.1	10.870	B
C-AB	35	553	0.063	35	0.1	6.957	A
C-A	876			876			
A-B	0.90			0.90			
A-C	794			794			

**17:00 - 17:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	437	0.071	31	0.1	8.875	A
C-AB	29	596	0.049	29	0.1	6.351	A
C-A	733			733			
A-B	0.75			0.75			
A-C	665			665			

# 2030 Opening Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.33	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)
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	890	100.000
B		✓	64	100.000
C		✓	1132	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	9	881
	B	20	0	44
	C	1098	34	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	9	9	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.45	42.00	0.8	E
C-AB	0.08	8.91	0.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	390	0.124	48	0.1	10.504	B
C-AB	26	540	0.047	25	0.0	6.997	A
C-A	827			827			
A-B	7			7			
A-C	663			663			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	308	0.187	57	0.2	14.329	B
C-AB	31	499	0.061	31	0.1	7.690	A
C-A	987			987			
A-B	8			8			
A-C	792			792			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	156	0.452	68	0.8	40.204	E
C-AB	37	441	0.085	37	0.1	8.906	A
C-A	1209			1209			
A-B	10			10			
A-C	970			970			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	156	0.452	70	0.8	41.997	E
C-AB	37	441	0.085	37	0.1	8.910	A
C-A	1209			1209			
A-B	10			10			
A-C	970			970			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	308	0.187	60	0.2	14.629	B
C-AB	31	499	0.061	31	0.1	7.695	A
C-A	987			987			
A-B	8			8			
A-C	792			792			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	390	0.124	49	0.1	10.562	B
C-AB	26	540	0.047	26	0.1	7.000	A
C-A	827			827			
A-B	7			7			
A-C	663			663			

# 2030 Opening Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.51	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)
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	898	100.000
B		✓	41	100.000
C		✓	1013	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	15	883
	B	10	0	31
	C	974	39	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	6	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.18	17.83	0.2	C
C-AB	0.09	8.10	0.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	435	0.071	31	0.1	8.884	A
C-AB	29	593	0.050	29	0.1	6.385	A
C-A	733			733			
A-B	11			11			
A-C	665			665			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	367	0.100	37	0.1	10.889	B
C-AB	35	549	0.064	35	0.1	7.008	A
C-A	876			876			
A-B	13			13			
A-C	794			794			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	247	0.183	45	0.2	17.751	C
C-AB	43	488	0.088	43	0.1	8.092	A
C-A	1072			1072			
A-B	17			17			
A-C	972			972			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	247	0.183	45	0.2	17.828	C
C-AB	43	488	0.088	43	0.1	8.095	A
C-A	1072			1072			
A-B	17			17			
A-C	972			972			

**16:45 - 17:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	367	0.100	37	0.1	10.929	B
C-AB	35	549	0.064	35	0.1	7.014	A
C-A	876			876			
A-B	13			13			
A-C	794			794			

**17:00 - 17:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	435	0.071	31	0.1	8.906	A
C-AB	29	593	0.050	29	0.1	6.392	A
C-A	733			733			
A-B	11			11			
A-C	665			665			

# 2035 Future Year + com dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.19	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)
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	909	100.000
B		✓	7	100.000
C		✓	1148	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	2	907
	B	3	0	4
	C	1130	18	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	9	17	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.07	34.41	0.1	D
C-AB	0.05	9.35	0.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	347	0.015	5	0.0	10.531	B
C-AB	14	499	0.027	13	0.0	7.418	A
C-A	851			851			
A-B	2			2			
A-C	683			683			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	261	0.024	6	0.0	14.103	B
C-AB	16	459	0.035	16	0.0	8.124	A
C-A	1016			1016			
A-B	2			2			
A-C	815			815			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	112	0.069	8	0.1	34.287	D
C-AB	20	405	0.049	20	0.1	9.346	A
C-A	1244			1244			
A-B	2			2			
A-C	999			999			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	112	0.069	8	0.1	34.413	D
C-AB	20	405	0.049	20	0.1	9.348	A
C-A	1244			1244			
A-B	2			2			
A-C	999			999			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	261	0.024	6	0.0	14.129	B
C-AB	16	459	0.035	16	0.0	8.128	A
C-A	1016			1016			
A-B	2			2			
A-C	815			815			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	5	347	0.015	5	0.0	10.538	B
C-AB	14	499	0.027	14	0.0	7.422	A
C-A	851			851			
A-B	2			2			
A-C	683			683			

# 2035 Future Year + com dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.14	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)
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	910	100.000
B		✓	18	100.000
C		✓	1009	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	909
	B	3	0	15
	C	1003	6	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	5	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.07	13.29	0.1	B
C-AB	0.01	7.56	0.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	463	0.029	13	0.0	7.998	A
C-AB	5	590	0.008	4	0.0	6.152	A
C-A	755			755			
A-B	0.75			0.75			
A-C	684			684			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	16	401	0.040	16	0.0	9.353	A
C-AB	5	545	0.010	5	0.0	6.673	A
C-A	902			902			
A-B	0.90			0.90			
A-C	817			817			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	20	291	0.068	20	0.1	13.280	B
C-AB	7	483	0.014	7	0.0	7.558	A
C-A	1104			1104			
A-B	1			1			
A-C	1001			1001			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	20	291	0.068	20	0.1	13.291	B
C-AB	7	483	0.014	7	0.0	7.558	A
C-A	1104			1104			
A-B	1			1			
A-C	1001			1001			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	16	401	0.040	16	0.0	9.362	A
C-AB	5	545	0.010	5	0.0	6.673	A
C-A	902			902			
A-B	0.90			0.90			
A-C	817			817			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	463	0.029	14	0.0	8.003	A
C-AB	5	590	0.008	5	0.0	6.152	A
C-A	755			755			
A-B	0.75			0.75			
A-C	684			684			

# 2035 Future Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.99	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)
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	916	100.000
B		✓	64	100.000
C		✓	1165	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	9	907
	B	20	0	44
	C	1130	35	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	9	9	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.57	67.07	1.2	F
C-AB	0.09	9.14	0.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	378	0.127	48	0.1	10.867	B
C-AB	26	534	0.049	26	0.1	7.089	A
C-A	851			851			
A-B	7			7			
A-C	683			683			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	292	0.197	57	0.2	15.331	C
C-AB	31	491	0.064	31	0.1	7.829	A
C-A	1016			1016			
A-B	8			8			
A-C	815			815			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	123	0.572	67	1.2	60.656	F
C-AB	39	432	0.089	38	0.1	9.135	A
C-A	1244			1244			
A-B	10			10			
A-C	999			999			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	123	0.573	70	1.2	67.069	F
C-AB	39	432	0.089	39	0.1	9.140	A
C-A	1244			1244			
A-B	10			10			
A-C	999			999			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	291	0.197	61	0.3	15.904	C
C-AB	31	491	0.064	32	0.1	7.835	A
C-A	1016			1016			
A-B	8			8			
A-C	815			815			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	378	0.127	49	0.1	10.936	B
C-AB	26	534	0.049	26	0.1	7.097	A
C-A	851			851			
A-B	7			7			
A-C	683			683			

# 2035 Future Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.54	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)
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	924	100.000
B		✓	42	100.000
C		✓	1042	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	15	909
	B	10	0	32
	C	1003	39	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	5	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.20	19.70	0.2	C
C-AB	0.09	8.27	0.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	429	0.074	31	0.1	9.038	A
C-AB	29	586	0.050	29	0.1	6.461	A
C-A	755			755			
A-B	11			11			
A-C	684			684			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	38	358	0.106	38	0.1	11.236	B
C-AB	35	541	0.065	35	0.1	7.117	A
C-A	902			902			
A-B	13			13			
A-C	817			817			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	46	229	0.202	46	0.2	19.589	C
C-AB	43	478	0.090	43	0.1	8.272	A
C-A	1104			1104			
A-B	17			17			
A-C	1001			1001			

#### 16:30 - 16:45

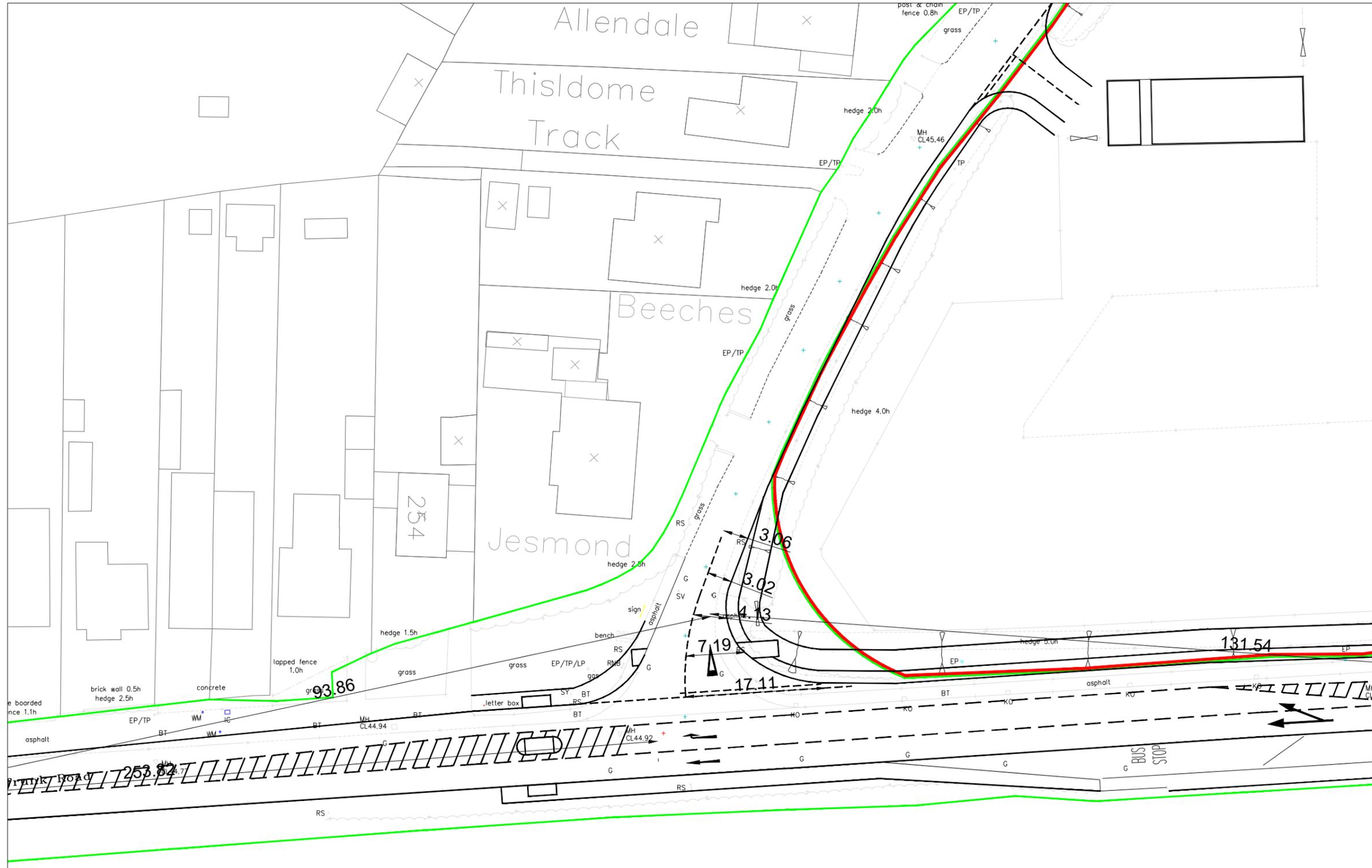
Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	46	229	0.202	46	0.2	19.702	C
C-AB	43	478	0.090	43	0.1	8.275	A
C-A	1104			1104			
A-B	17			17			
A-C	1001			1001			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	38	358	0.106	38	0.1	11.283	B
C-AB	35	541	0.065	35	0.1	7.123	A
C-A	902			902			
A-B	13			13			
A-C	817			817			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	429	0.074	32	0.1	9.068	A
C-AB	29	586	0.050	29	0.1	6.467	A
C-A	755			755			
A-B	11			11			
A-C	684			684			



**KEY:**

- Indicative Site Boundary** —
- Highway Boundary Extent** —

**NOTE:**

Based on Topographical Survey. Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval. Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd. These drawings are intended for planning application purposes only, they are not to be used for construction.

**PICADY PARAMETERS:**

- Width of Major Arm = 6m
- 3.5m Right Turn Bay
- Visibility for Right Turner = max - 250m
- Partial Blocking = 13 cars
- One Lane = 4.0m
- Visibility to the right = 94m
- Visibility to the left = 131m



Client		<b>TEY GARDENS LLP</b>	
Project		TEY GARDENS, LITTLE TEY	
Title		<b>JUNCTION 1 - PROPOSED PICADY MEASUREMENTS</b>	
Drawn	A FIRMIN	Checked	AF
Scale	1:1000 @ A3	Date	MAY 2025
Drawing No. -			

# APPENDIX G

---

JUNCTION 2 PICADY OUTPUT

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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:** Junction 2 Existing.j9  
**Path:** C:\Users\Andrew FTP\Firmin Transport Planning\FTP Cloud - Company FTP\Drawings\2025\2503.09 - Tey Gardens, Little Tey\Junction Capacity Modelling  
**Report generation date:** 13/05/2025 09:50:17

- »2025 Base, AM Peak Hour
- »2025 Base, PM Peak Hour
- »2030 Opening Year + com dev, AM Peak Hour
- »2030 Opening Year + com dev, PM Peak Hour
- »2030 Opening Year + com + proposed dev, AM Peak Hour
- »2030 Opening Year + com + proposed dev, PM Peak Hour
- »2035 Future Year + com dev, AM Peak Hour
- »2035 Future Year + com dev, PM Peak Hour
- »2035 Future Year + com + proposed dev, AM Peak Hour
- »2035 Future Year + com + proposed dev, PM Peak Hour

**Summary of junction performance**

	AM Peak Hour					PM Peak Hour				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
<b>2025 Base</b>										
Stream B-C	D1	0.2	11.85	0.19	B	D2	0.2	10.55	0.15	B
Stream B-A		0.9	89.25	0.50	F		0.6	59.37	0.40	F
Stream C-AB		0.3	11.16	0.21	B		0.4	11.78	0.26	B
<b>2030 Opening Year + com dev</b>										
Stream B-C	D3	0.3	15.15	0.24	C	D4	0.2	11.51	0.16	B
Stream B-A		1.5	143.20	0.64	F		0.9	80.52	0.49	F
Stream C-AB		0.3	11.55	0.22	B		0.4	12.26	0.27	B
<b>2030 Opening Year + com + proposed dev</b>										
Stream B-C	D5	1.1	54.18	0.55	F	D6	0.2	13.04	0.18	B
Stream B-A		2.4	223.10	0.81	F		1.2	107.81	0.58	F
Stream C-AB		0.3	11.91	0.22	B		0.4	12.47	0.28	B
<b>2035 Future Year + com dev</b>										
Stream B-C	D7	0.7	34.10	0.43	D	D8	0.2	13.55	0.19	B
Stream B-A		2.3	221.30	0.78	F		1.3	116.90	0.60	F
Stream C-AB		0.3	11.84	0.22	B		0.4	12.74	0.29	B
<b>2035 Future Year + com + proposed dev</b>										
Stream B-C	D9	7.8	318.19	1.12	F	D10	0.3	18.99	0.25	C
Stream B-A		5.0	391.72	1.08	F		1.8	164.97	0.71	F
Stream C-AB		0.3	12.30	0.23	B		0.4	12.97	0.29	B

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

## File summary

### File Description

<b>Title</b>	Junction 2 - Existing
<b>Location</b>	A120 / Great Tey Road
<b>Site number</b>	1
<b>Date</b>	13/05/2025
<b>Version</b>	
<b>Status</b>	Existing
<b>Identifier</b>	
<b>Client</b>	Tey Gardens
<b>Jobnumber</b>	2503.09
<b>Enumerator</b>	Andrew FTP
<b>Description</b>	

## 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

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

## Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2025 Base, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.18	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	A120 West		Major
B	Great Tey Road		Minor
C	A120 East		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.90		✓	2.50	150.0	✓	10.00

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	One lane plus flare	10.00	9.40	7.10	6.00	5.00	✓	3.00	57	66

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	535	0.094	0.237	0.149	0.338
B-C	758	0.112	0.282	-	-
C-B	682	0.254	0.254	-	-

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)
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	833	100.000
B		✓	102	100.000
C		✓	1133	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	17	816
	B	36	0	66
	C	1057	76	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	10
	B	0	0	5
	C	10	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.19	11.85	0.2	B
B-A	0.50	89.25	0.9	F
C-AB	0.21	11.16	0.3	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	522	0.095	49	0.1	7.604	A
B-A	27	223	0.121	27	0.1	18.254	C
C-AB	57	483	0.118	57	0.1	8.428	A
C-A	796			796			
A-B	13			13			
A-C	614			614			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	59	477	0.124	59	0.1	8.608	A
B-A	32	163	0.199	32	0.2	27.448	D
C-AB	68	451	0.152	68	0.2	9.400	A
C-A	950			950			
A-B	15			15			
A-C	734			734			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	385	0.189	72	0.2	11.518	B
B-A	40	79	0.502	37	0.9	82.269	F
C-AB	84	406	0.206	83	0.3	11.137	B
C-A	1164			1164			
A-B	19			19			
A-C	898			898			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	376	0.193	73	0.2	11.854	B
B-A	40	79	0.501	39	0.9	89.250	F
C-AB	84	406	0.206	84	0.3	11.159	B
C-A	1164			1164			
A-B	19			19			
A-C	898			898			

#### 07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	59	472	0.126	60	0.1	8.738	A
B-A	32	164	0.198	35	0.3	28.513	D
C-AB	68	451	0.152	69	0.2	9.422	A
C-A	950			950			
A-B	15			15			
A-C	734			734			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	521	0.095	50	0.1	7.649	A
B-A	27	223	0.121	28	0.1	18.419	C
C-AB	57	483	0.118	57	0.1	8.455	A
C-A	796			796			
A-B	13			13			
A-C	614			614			

# 2025 Base, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.89	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)
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	880	100.000
B		✓	92	100.000
C		✓	1021	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	28	852
	B	37	0	55
	C	923	98	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	6
	B	0	0	2
	C	6	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.15	10.55	0.2	B
B-A	0.40	59.37	0.6	F
C-AB	0.26	11.78	0.4	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	527	0.079	41	0.1	7.405	A
B-A	28	242	0.115	27	0.1	16.759	C
C-AB	74	494	0.149	73	0.2	8.535	A
C-A	695			695			
A-B	21			21			
A-C	641			641			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	482	0.102	49	0.1	8.310	A
B-A	33	183	0.182	33	0.2	24.001	C
C-AB	88	460	0.191	88	0.2	9.660	A
C-A	830			830			
A-B	25			25			
A-C	766			766			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	405	0.149	60	0.2	10.433	B
B-A	41	101	0.404	39	0.6	57.010	F
C-AB	108	413	0.261	107	0.3	11.749	B
C-A	1016			1016			
A-B	31			31			
A-C	938			938			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	402	0.151	61	0.2	10.554	B
B-A	41	101	0.403	41	0.6	59.368	F
C-AB	108	413	0.261	108	0.4	11.784	B
C-A	1016			1016			
A-B	31			31			
A-C	938			938			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	479	0.103	50	0.1	8.388	A
B-A	33	183	0.182	35	0.2	24.544	C
C-AB	88	460	0.191	89	0.2	9.696	A
C-A	830			830			
A-B	25			25			
A-C	766			766			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	526	0.079	42	0.1	7.441	A
B-A	28	242	0.115	28	0.1	16.888	C
C-AB	74	494	0.149	74	0.2	8.572	A
C-A	695			695			
A-B	21			21			
A-C	641			641			

# 2030 Opening Year + com dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.13	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)
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	863	100.000
B		✓	105	100.000
C		✓	1168	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	17	846
	B	37	0	68
	C	1090	78	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	10
	B	0	0	4
	C	10	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.24	15.15	0.3	C
B-A	0.64	143.20	1.5	F
C-AB	0.22	11.55	0.3	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	51	519	0.099	51	0.1	7.677	A
B-A	28	213	0.131	27	0.1	19.334	C
C-AB	59	477	0.123	58	0.1	8.578	A
C-A	821			821			
A-B	13			13			
A-C	637			637			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	471	0.130	61	0.1	8.780	A
B-A	33	150	0.221	33	0.3	30.511	D
C-AB	70	444	0.158	70	0.2	9.624	A
C-A	980			980			
A-B	15			15			
A-C	761			761			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	339	0.221	74	0.3	13.555	B
B-A	41	64	0.641	37	1.3	121.079	F
C-AB	86	397	0.216	86	0.3	11.527	B
C-A	1200			1200			
A-B	19			19			
A-C	931			931			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	312	0.240	75	0.3	15.150	C
B-A	41	64	0.638	40	1.5	143.202	F
C-AB	86	397	0.216	86	0.3	11.552	B
C-A	1200			1200			
A-B	19			19			
A-C	931			931			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	462	0.132	62	0.2	9.002	A
B-A	33	152	0.219	38	0.3	32.797	D
C-AB	70	444	0.158	70	0.2	9.650	A
C-A	980			980			
A-B	15			15			
A-C	761			761			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	51	517	0.099	51	0.1	7.728	A
B-A	28	213	0.131	28	0.2	19.544	C
C-AB	59	477	0.123	59	0.1	8.609	A
C-A	821			821			
A-B	13			13			
A-C	637			637			

# 2030 Opening Year + com dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.29	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)
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	910	100.000
B		✓	94	100.000
C		✓	1057	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	29	881
	B	38	0	56
	C	956	101	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	6
	B	0	0	2
	C	6	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.16	11.51	0.2	B
B-A	0.49	80.52	0.9	F
C-AB	0.27	12.26	0.4	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	519	0.081	42	0.1	7.535	A
B-A	29	231	0.124	28	0.1	17.657	C
C-AB	76	488	0.156	75	0.2	8.702	A
C-A	720			720			
A-B	22			22			
A-C	663			663			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	472	0.107	50	0.1	8.522	A
B-A	34	170	0.201	34	0.2	26.299	D
C-AB	91	453	0.200	91	0.2	9.918	A
C-A	859			859			
A-B	26			26			
A-C	792			792			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	381	0.162	61	0.2	11.244	B
B-A	42	86	0.489	40	0.8	74.871	F
C-AB	111	405	0.275	111	0.4	12.222	B
C-A	1053			1053			
A-B	32			32			
A-C	970			970			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	374	0.165	62	0.2	11.514	B
B-A	42	86	0.488	42	0.9	80.518	F
C-AB	111	405	0.275	111	0.4	12.263	B
C-A	1053			1053			
A-B	32			32			
A-C	970			970			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	468	0.108	51	0.1	8.639	A
B-A	34	171	0.200	37	0.3	27.242	D
C-AB	91	453	0.200	91	0.3	9.958	A
C-A	859			859			
A-B	26			26			
A-C	792			792			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	518	0.081	42	0.1	7.573	A
B-A	29	232	0.124	29	0.1	17.822	C
C-AB	76	488	0.156	76	0.2	8.744	A
C-A	720			720			
A-B	22			22			
A-C	663			663			

# 2030 Opening Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.56	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)
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	903	100.000
B		✓	106	100.000
C		✓	1184	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	19	884
	B	38	0	68
	C	1106	78	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	4
	C	10	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.55	54.18	1.1	F
B-A	0.81	223.10	2.4	F
C-AB	0.22	11.91	0.3	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	51	510	0.100	51	0.1	7.824	A
B-A	29	205	0.139	28	0.2	20.228	C
C-AB	59	471	0.125	58	0.1	8.710	A
C-A	833			833			
A-B	14			14			
A-C	666			666			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	460	0.133	61	0.2	9.027	A
B-A	34	141	0.242	34	0.3	33.354	D
C-AB	70	436	0.161	70	0.2	9.823	A
C-A	994			994			
A-B	17			17			
A-C	795			795			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	243	0.308	74	0.4	21.153	C
B-A	42	52	0.806	35	2.0	178.107	F
C-AB	86	388	0.221	86	0.3	11.880	B
C-A	1218			1218			
A-B	21			21			
A-C	973			973			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	136	0.549	72	1.1	54.184	F
B-A	42	52	0.800	40	2.4	223.105	F
C-AB	86	388	0.221	86	0.3	11.908	B
C-A	1218			1218			
A-B	21			21			
A-C	973			973			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	446	0.137	65	0.2	9.540	A
B-A	34	143	0.239	43	0.3	38.573	E
C-AB	70	436	0.161	70	0.2	9.852	A
C-A	994			994			
A-B	17			17			
A-C	795			795			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	51	508	0.101	51	0.1	7.879	A
B-A	29	206	0.139	29	0.2	20.484	C
C-AB	59	471	0.125	59	0.1	8.741	A
C-A	833			833			
A-B	14			14			
A-C	666			666			

# 2030 Opening Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.85	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)
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	927	100.000
B		✓	96	100.000
C		✓	1088	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	30	897
	B	40	0	56
	C	987	101	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	6
	B	0	0	2
	C	6	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.18	13.04	0.2	B
B-A	0.58	107.81	1.2	F
C-AB	0.28	12.47	0.4	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	512	0.082	42	0.1	7.644	A
B-A	30	225	0.134	30	0.2	18.318	C
C-AB	76	485	0.157	75	0.2	8.772	A
C-A	743			743			
A-B	23			23			
A-C	675			675			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	464	0.109	50	0.1	8.698	A
B-A	36	163	0.221	35	0.3	28.197	D
C-AB	91	449	0.202	91	0.2	10.029	B
C-A	887			887			
A-B	27			27			
A-C	806			806			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	352	0.175	61	0.2	12.352	B
B-A	44	76	0.581	41	1.1	95.534	F
C-AB	111	400	0.278	111	0.4	12.428	B
C-A	1087			1087			
A-B	33			33			
A-C	988			988			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	338	0.183	62	0.2	13.042	B
B-A	44	76	0.579	44	1.2	107.812	F
C-AB	111	400	0.278	111	0.4	12.472	B
C-A	1087			1087			
A-B	33			33			
A-C	988			988			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	457	0.110	51	0.1	8.867	A
B-A	36	164	0.220	40	0.3	29.777	D
C-AB	91	449	0.202	91	0.3	10.073	B
C-A	887			887			
A-B	27			27			
A-C	806			806			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	511	0.083	42	0.1	7.687	A
B-A	30	226	0.133	31	0.2	18.516	C
C-AB	76	485	0.157	76	0.2	8.817	A
C-A	743			743			
A-B	23			23			
A-C	675			675			

# 2035 Future Year + com dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.98	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)
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	889	100.000
B		✓	108	100.000
C		✓	1202	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	18	871
	B	38	0	70
	C	1122	80	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	9
	B	0	0	4
	C	9	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.43	34.10	0.7	D
B-A	0.78	221.30	2.3	F
C-AB	0.22	11.84	0.3	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	514	0.102	52	0.1	7.782	A
B-A	29	206	0.139	28	0.2	20.128	C
C-AB	60	474	0.127	60	0.1	8.681	A
C-A	845			845			
A-B	14			14			
A-C	656			656			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	63	464	0.136	63	0.2	8.964	A
B-A	34	142	0.240	34	0.3	32.946	D
C-AB	72	439	0.164	72	0.2	9.783	A
C-A	1009			1009			
A-B	16			16			
A-C	783			783			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	77	266	0.290	76	0.4	18.889	C
B-A	42	54	0.778	36	1.8	167.301	F
C-AB	88	392	0.225	88	0.3	11.808	B
C-A	1235			1235			
A-B	20			20			
A-C	959			959			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	77	180	0.428	76	0.7	34.104	D
B-A	42	54	0.773	40	2.3	221.300	F
C-AB	88	392	0.225	88	0.3	11.836	B
C-A	1235			1235			
A-B	20			20			
A-C	959			959			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	63	451	0.140	65	0.2	9.384	A
B-A	34	144	0.237	42	0.3	37.500	E
C-AB	72	439	0.164	72	0.2	9.812	A
C-A	1009			1009			
A-B	16			16			
A-C	783			783			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	512	0.103	53	0.1	7.838	A
B-A	29	206	0.139	29	0.2	20.385	C
C-AB	60	474	0.127	60	0.1	8.715	A
C-A	845			845			
A-B	14			14			
A-C	656			656			

# 2035 Future Year + com dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.00	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)
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	937	100.000
B		✓	97	100.000
C		✓	1088	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	30	907
	B	39	0	58
	C	984	104	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	6
	B	0	0	2
	C	6	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.19	13.55	0.2	B
B-A	0.60	116.90	1.3	F
C-AB	0.29	12.74	0.4	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	513	0.085	43	0.1	7.665	A
B-A	29	222	0.132	29	0.1	18.579	C
C-AB	78	483	0.162	78	0.2	8.862	A
C-A	741			741			
A-B	23			23			
A-C	683			683			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	464	0.112	52	0.1	8.740	A
B-A	35	159	0.221	35	0.3	28.818	D
C-AB	93	447	0.209	93	0.3	10.171	B
C-A	885			885			
A-B	27			27			
A-C	815			815			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	347	0.184	63	0.2	12.688	B
B-A	43	72	0.597	39	1.2	102.281	F
C-AB	115	397	0.289	114	0.4	12.697	B
C-A	1083			1083			
A-B	33			33			
A-C	999			999			

#### 16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	329	0.194	64	0.2	13.551	B
B-A	43	72	0.595	42	1.3	116.903	F
C-AB	115	397	0.289	114	0.4	12.744	B
C-A	1083			1083			
A-B	33			33			
A-C	999			999			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	456	0.114	53	0.1	8.923	A
B-A	35	160	0.219	39	0.3	30.569	D
C-AB	93	447	0.209	94	0.3	10.218	B
C-A	885			885			
A-B	27			27			
A-C	815			815			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	511	0.085	44	0.1	7.706	A
B-A	29	222	0.132	30	0.2	18.784	C
C-AB	78	483	0.162	79	0.2	8.910	A
C-A	741			741			
A-B	23			23			
A-C	683			683			

# 2035 Future Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		16.13	C

### 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)
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	929	100.000
B		✓	109	100.000
C		✓	1218	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	20	909
	B	39	0	70
	C	1138	80	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	9
	B	0	0	4
	C	9	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	1.12	318.19	7.8	F
B-A	1.08	391.72	5.0	F
C-AB	0.23	12.30	0.3	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	504	0.105	52	0.1	7.963	A
B-A	29	197	0.149	29	0.2	21.286	C
C-AB	60	466	0.129	60	0.1	8.851	A
C-A	857			857			
A-B	15			15			
A-C	684			684			

#### 07:00 - 07:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	63	450	0.140	63	0.2	9.291	A
B-A	35	131	0.267	34	0.3	36.901	E
C-AB	72	430	0.167	72	0.2	10.038	B
C-A	1023			1023			
A-B	18			18			
A-C	817			817			

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	77	70	1.099	58	4.8	213.594	F
B-A	43	40	1.074	31	3.2	292.954	F
C-AB	88	381	0.231	88	0.3	12.273	B
C-A	1253			1253			
A-B	22			22			
A-C	1001			1001			

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	77	69	1.121	65	7.8	318.187	F
B-A	43	40	1.076	36	5.0	391.717	F
C-AB	88	381	0.231	88	0.3	12.304	B
C-A	1253			1253			
A-B	22			22			
A-C	1001			1001			

**07:45 - 08:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	63	428	0.147	94	0.2	11.774	B
B-A	35	131	0.267	53	0.4	55.594	F
C-AB	72	430	0.167	72	0.2	10.075	B
C-A	1023			1023			
A-B	18			18			
A-C	817			817			

**08:00 - 08:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	501	0.105	53	0.1	8.029	A
B-A	29	197	0.149	30	0.2	21.623	C
C-AB	60	466	0.129	60	0.2	8.885	A
C-A	857			857			
A-B	15			15			
A-C	684			684			

# 2035 Future Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.06	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)
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	954	100.000
B		✓	99	100.000
C		✓	1119	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	31	923
	B	41	0	58
	C	1015	104	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	6
	B	0	0	2
	C	5	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.25	18.99	0.3	C
B-A	0.71	164.97	1.8	F
C-AB	0.29	12.97	0.4	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	506	0.086	43	0.1	7.770	A
B-A	31	217	0.142	30	0.2	19.199	C
C-AB	78	480	0.163	78	0.2	8.937	A
C-A	764			764			
A-B	23			23			
A-C	695			695			

#### 16:00 - 16:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	455	0.115	52	0.1	8.924	A
B-A	37	153	0.241	36	0.3	30.757	D
C-AB	93	443	0.211	93	0.3	10.289	B
C-A	912			912			
A-B	28			28			
A-C	830			830			

#### 16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	297	0.215	63	0.3	15.342	C
B-A	45	64	0.708	40	1.6	132.992	F
C-AB	115	392	0.292	114	0.4	12.920	B
C-A	1118			1118			
A-B	34			34			
A-C	1016			1016			

#### 16:30 - 16:45

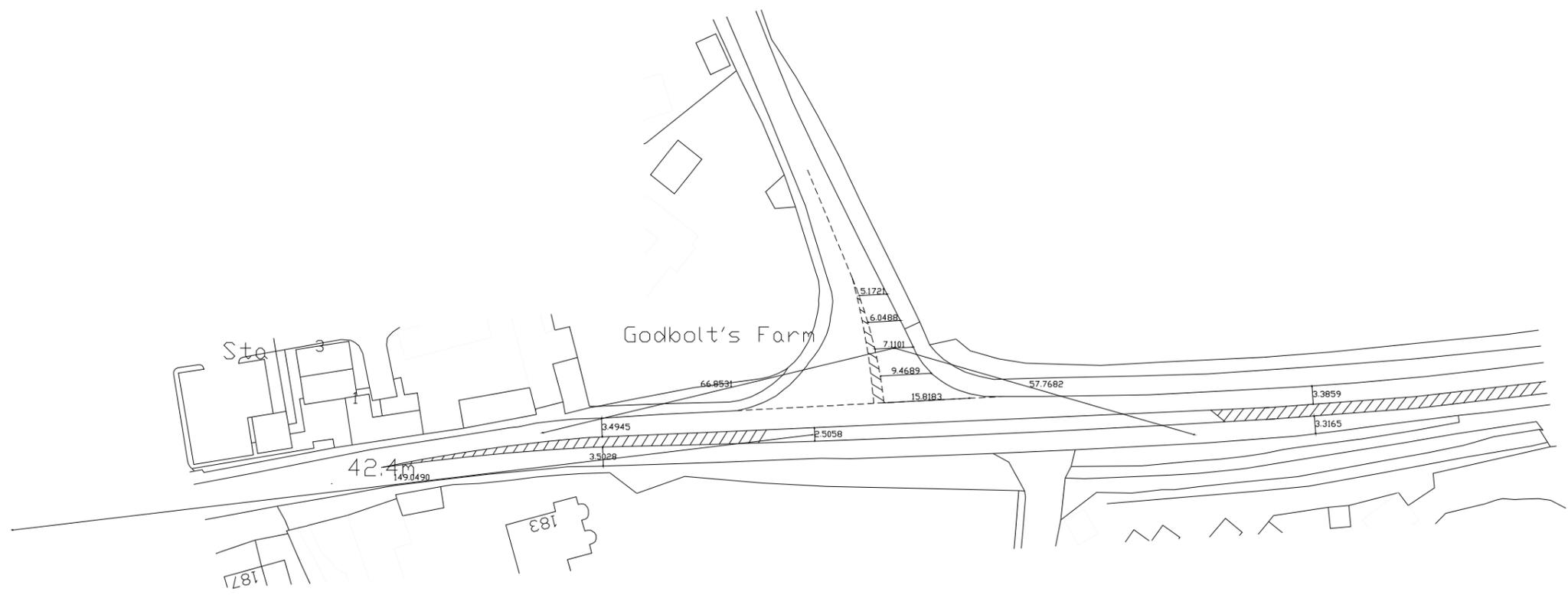
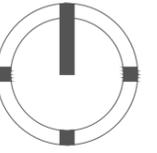
Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	253	0.252	64	0.3	18.988	C
B-A	45	64	0.704	44	1.8	164.969	F
C-AB	115	392	0.292	114	0.4	12.971	B
C-A	1118			1118			
A-B	34			34			
A-C	1016			1016			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	445	0.117	53	0.1	9.206	A
B-A	37	154	0.239	43	0.3	33.848	D
C-AB	93	443	0.211	94	0.3	10.339	B
C-A	912			912			
A-B	28			28			
A-C	830			830			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	504	0.087	44	0.1	7.820	A
B-A	31	217	0.142	32	0.2	19.442	C
C-AB	78	480	0.163	79	0.2	8.985	A
C-A	764			764			
A-B	23			23			
A-C	695			695			



**PICADY PARAMETERS:**

**Width of Major Arm = 6.9m**

**Right Turn Lane - 2.5m**

**Visibility for Right Turner = max - 150m**

**Partial Blocking = 10 cars**

**One Lane plus flare**

**Visibility to the right = 66m**

**Visibility to the left = 57m**

**NOTE:**  
Based on Topographical Survey.  
Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval.  
Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd.  
These drawings are intended for planning application purposes only, they are not to be used for construction.



Client		<b>TEY GARDENS LLP</b>	
Project		TEY GARDENS, LITTLE TEY	
Title		<b>JUNCTION 2 - EXISTING PICADY MEASUREMENTS</b>	
Drawn	A FIRMIN	Checked	AF
Scale	1:1000 @ A3	Date	MAY 2025
Drawing No. -			

# APPENDIX H

---

JUNCTION 3 ARCADY OUTPUT

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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: Junction 3 Existing - Advanced Mode.j9

Path: C:\Users\Andrew FTP\Firmin Transport Planning\FTP Cloud - Company FTP\Drawings\2025\2503.09 - Tey Gardens, Little Tey\Junction Capacity Modelling

Report generation date: 13/05/2025 11:15:24

- »2025 Base, AM Peak Hour
- »2025 Base, PM Peak Hour
- »2030 Opening Year + com dev, AM Peak Hour
- »2030 Opening Year + com dev, PM Peak Hour
- »2030 Opening Year + com + proposed dev, AM Peak Hour
- »2030 Opening Year + com + proposed dev, PM Peak Hour
- »2035 Opening Year + com dev, AM Peak Hour
- »2035 Opening Year + com dev, PM Peak Hour
- »2035 Opening Year + com + proposed dev, AM Peak Hour
- »2035 Opening Year + com + proposed dev, PM Peak Hour

**Summary of junction performance**

	AM Peak Hour					PM Peak Hour				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2025 Base										
Arm 1	D1	12.2	38.79	0.94	E	D2	4.9	16.54	0.84	C
Arm 2		1.8	78.13	0.68	F		0.2	19.66	0.19	C
Arm 3		20.1	76.41	0.99	F		22.4	80.38	1.00	F
2030 Opening Year + com dev										
Arm 1	D3	17.1	51.91	0.97	F	D4	6.1	19.92	0.87	C
Arm 2		2.9	124.91	0.81	F		0.3	22.56	0.22	C
Arm 3		30.2	105.56	1.03	F		33.2	109.72	1.03	F
2030 Opening Year + com + proposed dev										
Arm 1	D5	20.4	59.93	0.98	F	D6	7.5	24.07	0.89	C
Arm 2		3.6	154.46	0.88	F		0.3	25.82	0.24	D
Arm 3		46.6	150.27	1.07	F		36.4	117.11	1.04	F
2035 Opening Year + com dev										
Arm 1	D7	25.4	71.38	1.00	F	D8	7.5	24.14	0.89	C
Arm 2		4.9	191.60	0.97	F		0.3	26.05	0.26	D
Arm 3		41.9	137.74	1.06	F		42.0	131.47	1.06	F
2035 Opening Year + com + proposed dev										
Arm 1	D9	27.0	74.38	1.00	F	D10	9.5	29.98	0.92	D
Arm 2		5.3	203.87	0.99	F		0.4	30.73	0.29	D
Arm 3		56.6	176.07	1.09	F		49.6	151.26	1.07	F

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

<b>Title</b>	Junction 3 Existing
<b>Location</b>	A120 / Godmans Lane
<b>Site number</b>	3
<b>Date</b>	13/05/2025
<b>Version</b>	
<b>Status</b>	Existing
<b>Identifier</b>	
<b>Client</b>	Tey Gardens
<b>Jobnumber</b>	2503.09
<b>Enumerator</b>	Andrew FTP
<b>Description</b>	

## 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
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D7	2035 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D8	2035 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D9	2035 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D10	2035 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓

## Analysis Set Details

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

# 2025 Base, AM Peak Hour

## 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 3 have 96% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	56.26	F

### Junction Network Options

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

## Arms

### Arms

Arm	Name	Description
1	A120 East	
2	Godmans Lane	
3	A120 West	

### 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	3.00	3.00	4.15	1.9	9.30	5.90	0.0	
2	3.15	3.15	4.57	3.6	9.80	7.30	0.0	
3	3.00	3.00	3.00	0.0	12.90	12.90	0.0	

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.605	951
2	0.620	947
3	0.599	902

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

#### Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1	Percentage		150.00
3	Percentage		120.00

## 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	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1097	100.000
2		ONE HOUR	✓	81	100.000
3		ONE HOUR	✓	875	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	13	1084
	2	30	0	51
	3	857	16	2

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	0	10
	2	3	0	4
	3	9	13	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	0.94	38.79	12.2	E	1007	1510
2	0.68	78.13	1.8	F	74	111
3	0.99	76.41	20.1	F	803	1204

### Main Results for each time segment

#### 06:45 - 07:00

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	826	206	13	1287	0.642	819	660	0.0	1.8	7.590	A
2	61	15	811	380	0.161	60	22	0.0	0.2	11.235	B
3	659	165	22	978	0.674	651	849	0.0	2.0	10.773	B

**07:00 - 07:15**

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	986	247	16	1284	0.768	981	790	1.8	3.1	11.646	B
2	73	18	971	275	0.265	72	26	0.2	0.4	17.728	C
3	787	197	27	975	0.807	779	1016	2.0	3.8	17.777	C

**07:15 - 07:30**

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	1208	302	19	1281	0.943	1179	933	3.1	10.3	29.155	D
2	89	22	1167	145	0.614	85	31	0.4	1.4	56.589	F
3	963	241	32	971	0.992	920	1221	3.8	14.6	48.546	E

**07:30 - 07:45**

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	1208	302	19	1281	0.943	1200	955	10.3	12.2	38.787	E
2	89	22	1188	131	0.679	88	31	1.4	1.8	78.134	F
3	963	241	32	971	0.992	942	1243	14.6	20.1	76.412	F

**07:45 - 08:00**

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	986	247	17	1283	0.769	1021	859	12.2	3.5	15.337	C
2	73	18	1011	248	0.293	78	28	1.8	0.4	21.790	C
3	787	197	29	973	0.808	848	1060	20.1	4.8	36.860	E

**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	826	206	14	1286	0.642	833	678	3.5	1.8	8.052	A
2	61	15	824	371	0.164	62	22	0.4	0.2	11.680	B
3	659	165	23	977	0.674	669	863	4.8	2.1	12.062	B

# 2025 Base, PM Peak Hour

## 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 3 have 97% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	46.50	E

### 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	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1013	100.000
2		ONE HOUR	✓	40	100.000
3		ONE HOUR	✓	920	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	1	32	980
	2	13	0	27
	3	886	34	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	5
	2	0	0	11
	3	6	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	0.84	16.54	4.9	C	930	1394
2	0.19	19.66	0.2	C	37	55
3	1.00	80.38	22.4	F	844	1266

### Main Results for each time segment

#### 15:45 - 16:00

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	763	191	25	1339	0.569	757	670	0.0	1.3	6.133	A
2	30	8	734	437	0.069	30	49	0.0	0.1	8.844	A
3	693	173	10	1016	0.682	684	753	0.0	2.1	10.599	B

#### 16:00 - 16:15

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	911	228	30	1335	0.682	908	802	1.3	2.1	8.356	A
2	36	9	879	349	0.103	36	59	0.1	0.1	11.506	B
3	827	207	13	1015	0.815	819	902	2.1	4.0	17.707	C

#### 16:15 - 16:30

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	1115	279	36	1330	0.838	1105	944	2.1	4.7	15.279	C
2	44	11	1070	233	0.189	44	71	0.1	0.2	18.992	C
3	1013	253	15	1013	1.000	965	1098	4.0	16.0	49.817	E

#### 16:30 - 16:45

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	1115	279	36	1330	0.839	1114	966	4.7	4.9	16.538	C
2	44	11	1079	227	0.194	44	72	0.2	0.2	19.659	C
3	1013	253	15	1013	1.000	987	1108	16.0	22.4	80.379	F

#### 16:45 - 17:00

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	911	228	33	1333	0.683	922	876	4.9	2.2	8.973	A
2	36	9	892	340	0.106	36	62	0.2	0.1	11.863	B
3	827	207	13	1015	0.815	897	916	22.4	5.0	39.910	E

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	763	191	26	1339	0.570	766	688	2.2	1.3	6.323	A
2	30	8	742	431	0.070	30	50	0.1	0.1	8.976	A
3	693	173	11	1016	0.682	704	762	5.0	2.2	11.909	B

# 2030 Opening Year + com dev, AM Peak Hour

## 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 3 have 96% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	77.51	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
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1130	100.000
2		ONE HOUR	✓	83	100.000
3		ONE HOUR	✓	906	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	0	13	1117
	2	31	0	52
	3	888	16	2

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	10
	2	3	0	4
	3	9	12	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	0.97	51.91	17.1	F	1037	1555
2	0.81	124.91	2.9	F	76	114
3	1.03	105.56	30.2	F	831	1247

### Main Results for each time segment

#### 06:45 - 07:00

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	851	213	13	1287	0.661	843	683	0.0	1.9	7.987	A
2	62	16	835	364	0.172	62	22	0.0	0.2	11.877	B
3	682	171	23	977	0.698	673	874	0.0	2.2	11.531	B

#### 07:00 - 07:15

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	1016	254	16	1284	0.791	1009	817	1.9	3.6	12.783	B
2	75	19	999	256	0.292	74	26	0.2	0.4	19.708	C
3	814	204	28	974	0.836	805	1046	2.2	4.5	20.248	C

#### 07:15 - 07:30

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	1244	311	19	1282	0.971	1204	949	3.6	13.5	35.336	E
2	91	23	1193	129	0.711	85	30	0.4	1.9	75.724	F
3	998	249	32	971	1.027	936	1246	4.5	19.8	60.296	F

#### 07:30 - 07:45

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	1244	311	19	1281	0.971	1230	970	13.5	17.1	51.906	F
2	91	23	1217	112	0.815	87	31	1.9	2.9	124.914	F
3	998	249	33	971	1.028	956	1272	19.8	30.2	105.559	F

#### 07:45 - 08:00

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	1016	254	18	1282	0.792	1068	923	17.1	4.1	20.133	C
2	75	19	1058	217	0.343	84	28	2.9	0.5	28.665	D
3	814	204	31	972	0.838	909	1110	30.2	6.5	67.449	F

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	851	213	14	1286	0.661	859	708	4.1	2.0	8.591	A
2	62	16	851	354	0.177	64	22	0.5	0.2	12.481	B
3	682	171	24	977	0.698	698	891	6.5	2.4	13.620	B

# 2030 Opening Year + com dev, PM Peak Hour

## 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 3 have 97% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	62.01	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
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1048	100.000
2		ONE HOUR	✓	41	100.000
3		ONE HOUR	✓	951	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	1	33	1014
	2	13	0	28
	3	916	35	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	5
	2	0	0	11
	3	6	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	0.87	19.92	6.1	C	962	1442
2	0.22	22.56	0.3	C	38	56
3	1.03	109.72	33.2	F	873	1309

### Main Results for each time segment

#### 15:45 - 16:00

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	789	197	26	1339	0.589	783	691	0.0	1.4	6.418	A
2	31	8	759	421	0.073	31	51	0.0	0.1	9.212	A
3	716	179	10	1016	0.704	707	779	0.0	2.3	11.322	B

#### 16:00 - 16:15

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	942	236	31	1334	0.706	938	827	1.4	2.3	9.006	A
2	37	9	909	330	0.112	37	61	0.1	0.1	12.264	B
3	855	214	13	1015	0.842	845	933	2.3	4.7	20.107	C

#### 16:15 - 16:30

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	1154	288	36	1330	0.867	1140	959	2.3	5.7	17.799	C
2	45	11	1104	212	0.213	45	72	0.1	0.3	21.484	C
3	1047	262	15	1013	1.034	980	1134	4.7	21.5	61.430	F

#### 16:30 - 16:45

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	1154	288	37	1329	0.868	1152	979	5.7	6.1	19.916	C
2	45	11	1116	205	0.221	45	73	0.3	0.3	22.561	C
3	1047	262	15	1013	1.034	1000	1146	21.5	33.2	109.723	F

#### 16:45 - 17:00

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	942	236	35	1331	0.708	956	938	6.1	2.5	9.962	A
2	37	9	926	319	0.115	37	65	0.3	0.1	12.788	B
3	855	214	13	1015	0.843	960	951	33.2	6.9	72.615	F

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	789	197	27	1338	0.590	793	717	2.5	1.5	6.656	A
2	31	8	768	415	0.074	31	52	0.1	0.1	9.377	A
3	716	179	11	1016	0.705	733	789	6.9	2.5	13.449	B

# 2030 Opening Year + com + proposed dev, AM Peak Hour

## 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 3 have 96% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	102.51	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	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1146	100.000
2		ONE HOUR	✓	83	100.000
3		ONE HOUR	✓	944	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	13	1133
	2	31	0	52
	3	926	16	2

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	0	10
	2	3	0	4
	3	9	12	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	0.98	59.93	20.4	F	1052	1577
2	0.88	154.46	3.6	F	76	114
3	1.07	150.27	46.6	F	866	1299

### Main Results for each time segment

#### 06:45 - 07:00

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	863	216	13	1287	0.671	855	710	0.0	2.0	8.196	A
2	62	16	847	356	0.175	62	22	0.0	0.2	12.186	B
3	711	178	23	977	0.727	701	885	0.0	2.5	12.592	B

#### 07:00 - 07:15

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	1030	258	16	1284	0.802	1023	848	2.0	3.8	13.411	B
2	75	19	1013	247	0.303	74	26	0.2	0.4	20.723	C
3	849	212	28	974	0.871	836	1059	2.5	5.6	24.090	C

#### 07:15 - 07:30

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	1262	315	18	1282	0.984	1215	963	3.8	15.4	38.804	E
2	91	23	1204	121	0.754	84	30	0.4	2.2	86.213	F
3	1039	260	32	971	1.070	950	1257	5.6	28.0	77.558	F

#### 07:30 - 07:45

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	1262	315	18	1282	0.984	1242	979	15.4	20.4	59.931	F
2	91	23	1230	104	0.877	86	30	2.2	3.6	154.462	F
3	1039	260	32	971	1.070	965	1283	28.0	46.6	150.269	F

07:45 - 08:00

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	1030	258	18	1282	0.803	1094	965	20.4	4.5	24.094	C
2	75	19	1084	200	0.373	86	29	3.6	0.6	34.452	D
3	849	212	32	971	0.874	951	1138	46.6	21.1	132.277	F

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	863	216	15	1285	0.671	872	793	4.5	2.1	8.909	A
2	62	16	864	345	0.181	64	23	0.6	0.2	12.893	B
3	711	178	24	977	0.728	784	904	21.1	2.9	25.070	D

# 2030 Opening Year + com + proposed dev, PM Peak Hour

## 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 3 have 97% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	67.19	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
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1079	100.000
2		ONE HOUR	✓	41	100.000
3		ONE HOUR	✓	967	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	1	2	3	
From	1	1	33	1045
	2	13	0	28
	3	932	35	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To		
	1	2	3
1	0	0	5
2	0	0	11
3	5	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	0.89	24.07	7.5	C	990	1485
2	0.24	25.82	0.3	D	38	56
3	1.04	117.11	36.4	F	887	1331

### Main Results for each time segment

#### 15:45 - 16:00

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	812	203	26	1339	0.607	806	703	0.0	1.5	6.687	A
2	31	8	782	407	0.076	31	51	0.0	0.1	9.552	A
3	728	182	10	1026	0.710	719	802	0.0	2.3	11.407	B

#### 16:00 - 16:15

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	970	243	31	1334	0.727	966	840	1.5	2.6	9.655	A
2	37	9	936	313	0.118	37	61	0.1	0.1	12.996	B
3	869	217	13	1024	0.849	859	960	2.3	4.9	20.572	C

#### 16:15 - 16:30

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	1188	297	36	1330	0.893	1171	971	2.6	6.9	20.617	C
2	45	11	1135	193	0.234	44	72	0.1	0.3	24.107	C
3	1065	266	15	1022	1.041	992	1164	4.9	23.1	64.135	F

#### 16:30 - 16:45

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	1188	297	37	1330	0.894	1186	990	6.9	7.5	24.067	C
2	45	11	1149	184	0.245	45	73	0.3	0.3	25.822	D
3	1065	266	15	1022	1.042	1011	1179	23.1	36.4	117.109	F

16:45 - 17:00

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	970	243	36	1330	0.729	989	962	7.5	2.8	11.070	B
2	37	9	959	300	0.123	38	66	0.3	0.1	13.756	B
3	869	217	13	1024	0.849	984	983	36.4	7.7	82.760	F

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	812	203	27	1338	0.607	817	732	2.8	1.6	6.977	A
2	31	8	792	401	0.077	31	52	0.1	0.1	9.748	A
3	728	182	11	1026	0.710	748	813	7.7	2.6	13.855	B

# 2035 Opening Year + com dev, AM Peak Hour

## 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 3 have 96% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	104.19	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
D7	2035 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1164	100.000
2		ONE HOUR	✓	86	100.000
3		ONE HOUR	✓	934	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	0	14	1150
	2	32	0	54
	3	915	17	2

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	10
	2	3	0	4
	3	9	12	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	1.00	71.38	25.4	F	1068	1602
2	0.97	191.60	4.9	F	79	118
3	1.06	137.74	41.9	F	857	1286

### Main Results for each time segment

#### 06:45 - 07:00

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	876	219	14	1286	0.681	868	703	0.0	2.1	8.454	A
2	65	16	859	348	0.186	64	23	0.0	0.2	12.628	B
3	703	176	24	977	0.720	693	899	0.0	2.4	12.316	B

#### 07:00 - 07:15

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	1046	262	17	1283	0.815	1038	840	2.1	4.1	14.226	B
2	77	19	1028	237	0.326	76	28	0.2	0.5	22.260	C
3	840	210	28	974	0.862	828	1076	2.4	5.3	23.048	C

#### 07:15 - 07:30

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	1282	320	19	1281	1.000	1226	959	4.1	18.0	43.472	E
2	95	24	1213	115	0.823	86	32	0.5	2.7	102.971	F
3	1028	257	32	971	1.059	947	1267	5.3	25.7	72.829	F

#### 07:30 - 07:45

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	1282	320	20	1281	1.001	1252	976	18.0	25.4	71.385	F
2	95	24	1239	98	0.967	86	33	2.7	4.9	191.603	F
3	1028	257	32	971	1.059	964	1293	25.7	41.9	137.743	F

#### 07:45 - 08:00

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	1046	262	19	1281	0.817	1128	962	25.4	5.0	31.592	D
2	77	19	1116	179	0.433	94	31	4.9	0.8	48.963	E
3	840	210	35	969	0.866	947	1175	41.9	15.2	113.930	F

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	876	219	15	1285	0.682	887	763	5.0	2.2	9.295	A
2	65	16	878	335	0.193	67	24	0.8	0.2	13.526	B
3	703	176	25	976	0.721	753	920	15.2	2.7	19.417	C

# 2035 Opening Year + com dev, PM Peak Hour

### 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 3 have 97% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	74.16	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
D8	2035 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1079	100.000
2		ONE HOUR	✓	43	100.000
3		ONE HOUR	✓	979	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	1	34	1044
	2	14	0	29
	3	943	36	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	5
	2	0	0	11
	3	5	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	0.89	24.14	7.5	C	990	1485
2	0.26	26.05	0.3	D	39	59
3	1.06	131.47	42.0	F	898	1348

### Main Results for each time segment

#### 15:45 - 16:00

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	812	203	27	1338	0.607	806	712	0.0	1.5	6.695	A
2	32	8	781	408	0.079	32	52	0.0	0.1	9.568	A
3	737	184	11	1025	0.719	727	802	0.0	2.4	11.733	B

#### 16:00 - 16:15

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	970	242	32	1334	0.727	966	850	1.5	2.6	9.671	A
2	39	10	935	314	0.123	38	62	0.1	0.1	13.051	B
3	880	220	13	1024	0.860	869	960	2.4	5.3	21.756	C

#### 16:15 - 16:30

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	1188	297	37	1330	0.893	1171	975	2.6	6.9	20.670	C
2	47	12	1134	194	0.244	47	73	0.1	0.3	24.313	C
3	1078	269	16	1022	1.055	996	1164	5.3	25.8	69.630	F

#### 16:30 - 16:45

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	1188	297	37	1329	0.894	1186	993	6.9	7.5	24.142	C
2	47	12	1148	185	0.256	47	75	0.3	0.3	26.054	D
3	1078	269	16	1022	1.055	1013	1179	25.8	42.0	131.471	F

#### 16:45 - 17:00

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	970	242	37	1329	0.730	989	979	7.5	2.8	11.107	B
2	39	10	958	301	0.129	39	68	0.3	0.2	13.811	B
3	880	220	14	1023	0.860	1002	983	42.0	11.6	103.457	F

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	812	203	28	1337	0.608	817	756	2.8	1.6	6.995	A
2	32	8	791	401	0.081	33	54	0.2	0.1	9.767	A
3	737	184	11	1025	0.719	773	813	11.6	2.7	16.081	C

# 2035 Opening Year + com + proposed dev, AM Peak Hour

## 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 3 have 96% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	123.19	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
D9	2035 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1180	100.000
2		ONE HOUR	✓	86	100.000
3		ONE HOUR	✓	972	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	14	1166
	2	32	0	54
	3	953	17	2

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	9
	2	3	0	4
	3	8	12	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	1.00	74.38	27.0	F	1083	1624
2	0.99	203.87	5.3	F	79	118
3	1.09	176.07	56.6	F	892	1338

### Main Results for each time segment

#### 06:45 - 07:00

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	888	222	14	1298	0.685	880	731	0.0	2.1	8.457	A
2	65	16	871	345	0.187	64	23	0.0	0.2	12.745	B
3	732	183	24	986	0.742	721	911	0.0	2.7	13.112	B

#### 07:00 - 07:15

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	1061	265	17	1295	0.819	1053	871	2.1	4.2	14.354	B
2	77	19	1042	234	0.330	76	28	0.2	0.5	22.828	C
3	874	218	28	982	0.889	859	1090	2.7	6.4	26.386	D

#### 07:15 - 07:30

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	1299	325	19	1293	1.005	1240	976	4.2	18.9	44.573	E
2	95	24	1228	113	0.839	85	32	0.5	2.9	107.781	F
3	1070	268	32	980	1.092	963	1281	6.4	33.1	87.448	F

#### 07:30 - 07:45

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	1299	325	19	1293	1.005	1267	989	18.9	27.0	74.377	F
2	95	24	1254	96	0.989	85	32	2.9	5.3	203.871	F
3	1070	268	32	980	1.092	976	1307	33.1	56.6	176.066	F

07:45 - 08:00

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	1061	265	19	1293	0.820	1148	977	27.0	5.1	33.929	D
2	77	19	1137	172	0.449	95	30	5.3	0.9	54.765	F
3	874	218	35	978	0.894	961	1196	56.6	34.9	173.736	F

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	888	222	17	1295	0.686	900	867	5.1	2.2	9.357	A
2	65	16	891	332	0.195	67	26	0.9	0.2	13.701	B
3	732	183	25	985	0.743	858	933	34.9	3.2	49.074	E

# 2035 Opening Year + com + proposed dev, PM Peak Hour

## 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 3 have 97% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	86.13	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
D10	2035 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1110	100.000
2		ONE HOUR	✓	43	100.000
3		ONE HOUR	✓	995	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	1	2	3	
From	1	1	34	1075
	2	14	0	29
	3	959	36	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To		
	1	2	3
1	0	0	5
2	3	0	11
3	5	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	0.92	29.98	9.5	D	1019	1528
2	0.29	30.73	0.4	D	39	59
3	1.07	151.26	49.6	F	913	1370

### Main Results for each time segment

#### 15:45 - 16:00

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	836	209	27	1338	0.624	829	723	0.0	1.6	6.987	A
2	32	8	804	390	0.083	32	52	0.0	0.1	10.031	B
3	749	187	11	1025	0.731	739	825	0.0	2.6	12.183	B

#### 16:00 - 16:15

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	998	249	32	1334	0.748	993	863	1.6	2.8	10.416	B
2	39	10	963	295	0.131	38	62	0.1	0.1	14.012	B
3	894	224	13	1023	0.874	882	988	2.6	5.8	23.449	C

#### 16:15 - 16:30

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	1222	306	36	1330	0.919	1200	980	2.8	8.5	24.218	C
2	47	12	1163	175	0.271	47	73	0.1	0.4	27.881	D
3	1096	274	16	1021	1.073	1000	1193	5.8	29.6	77.180	F

#### 16:30 - 16:45

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	1222	306	37	1329	0.919	1218	995	8.5	9.5	29.985	D
2	47	12	1181	164	0.288	47	74	0.4	0.4	30.726	D
3	1096	274	16	1021	1.073	1016	1211	29.6	49.6	151.255	F

16:45 - 17:00

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	998	249	36	1330	0.750	1023	980	9.5	3.1	12.633	B
2	39	10	992	277	0.139	40	68	0.4	0.2	15.195	C
3	894	224	14	1023	0.874	1003	1018	49.6	22.6	133.524	F

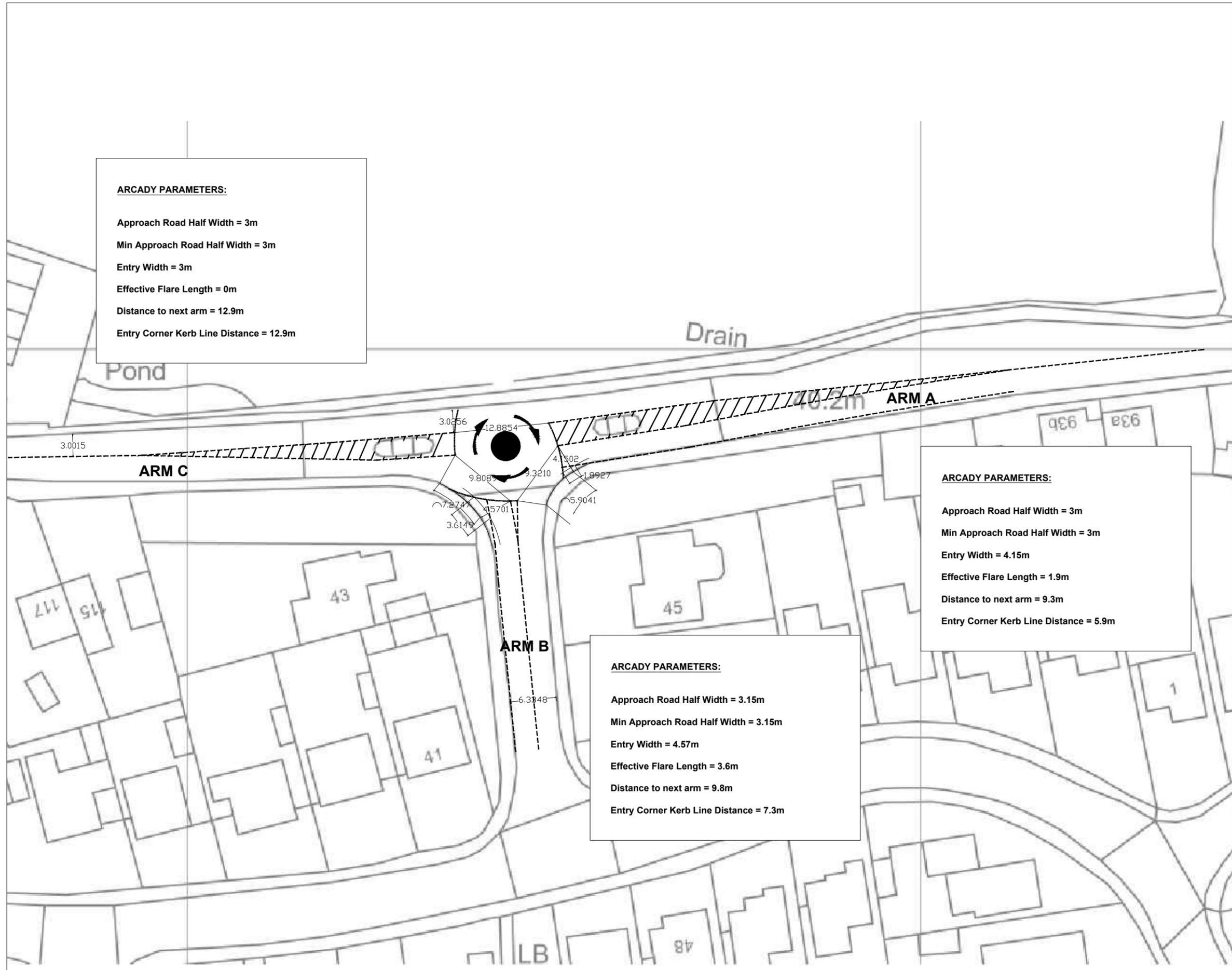
17:00 - 17:15

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	836	209	30	1335	0.626	841	809	3.1	1.7	7.370	A
2	32	8	816	383	0.084	33	56	0.2	0.1	10.273	B
3	749	187	11	1025	0.731	828	837	22.6	2.9	24.982	C



**ARCADY PARAMETERS:**

Approach Road Half Width = 3m  
 Min Approach Road Half Width = 3m  
 Entry Width = 3m  
 Effective Flare Length = 0m  
 Distance to next arm = 12.9m  
 Entry Corner Kerb Line Distance = 12.9m



**ARCADY PARAMETERS:**

Approach Road Half Width = 3m  
 Min Approach Road Half Width = 3m  
 Entry Width = 4.15m  
 Effective Flare Length = 1.9m  
 Distance to next arm = 9.3m  
 Entry Corner Kerb Line Distance = 5.9m

**ARCADY PARAMETERS:**

Approach Road Half Width = 3.15m  
 Min Approach Road Half Width = 3.15m  
 Entry Width = 4.57m  
 Effective Flare Length = 3.6m  
 Distance to next arm = 9.8m  
 Entry Corner Kerb Line Distance = 7.3m

**NOTE:**  
 Based on Topographical Survey.  
 Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval.  
 Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd.  
 These drawings are intended for planning application purposes only, they are not to be used for construction.



Client  
**TEY GARDENS LLP**

Project  
**TEY GARDENS, LITTLE TEY**

Title  
**JUNCTION 3 - EXISTING ARCADY MEASUREMENTS**

Drawn <b>A FIRMIN</b>	Checked <b>AF</b>
Scale <b>1:500 @ A3</b>	Date <b>MAY 2025</b>
Drawing No. -	

# APPENDIX I

---

JUNCTION 4 ARCADY OUTPUT

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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:** Junction 4 Existing.j9  
**Path:** C:\Users\Andrew FTP\Firmin Transport Planning\FTP Cloud - Company FTP\Drawings\2025\2503.09 - Tey Gardens, Little Tey\Junction Capacity Modelling  
**Report generation date:** 13/05/2025 13:12:14

- »2025 Base, AM Peak Hour
- »2025 Base, PM Peak Hour
- »2030 Opening Year + com dev, AM Peak Hour
- »2030 Opening Year + com dev, PM Peak Hour
- »2030 Opening Year + com + proposed dev, AM Peak Hour
- »2030 Opening Year + com + proposed dev, PM Peak Hour
- »2035 Opening Year + com dev, AM Peak Hour
- »2035 Opening Year + com dev, PM Peak Hour
- »2035 Opening Year + com + proposed dev, AM Peak Hour
- »2035 Opening Year + com + proposed dev, PM Peak Hour

**Summary of junction performance**

	AM Peak Hour					PM Peak Hour				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
<b>2025 Base</b>										
Arm 1	D1	13.0	40.64	0.95	E	D2	10.3	31.46	0.93	D
Arm 2		3.7	124.00	0.86	F		0.7	29.04	0.43	D
Arm 3		10.1	40.29	0.93	E		11.3	43.11	0.94	E
<b>2030 Opening Year + com dev</b>										
Arm 1	D3	18.7	55.18	0.98	F	D4	14.6	42.99	0.96	E
Arm 2		6.8	203.55	1.02	F		0.9	35.79	0.49	E
Arm 3		14.1	53.93	0.96	F		14.8	53.72	0.96	F
<b>2030 Opening Year + com + proposed dev</b>										
Arm 1	D5	25.6	71.67	1.00	F	D6	20.3	56.64	0.98	F
Arm 2		7.6	225.16	1.06	F		1.1	42.66	0.54	E
Arm 3		24.3	82.72	1.01	F		17.9	62.90	0.98	F
<b>2035 Opening Year + com dev</b>										
Arm 1	D7	24.5	68.17	1.00	F	D8	21.4	59.17	0.99	F
Arm 2		10.3	285.42	1.15	F		1.1	44.08	0.55	E
Arm 3		19.0	68.84	0.99	F		21.4	72.60	0.99	F
<b>2035 Opening Year + com + proposed dev</b>										
Arm 1	D9	29.4	78.73	1.01	F	D10	30.3	77.96	1.01	F
Arm 2		12.1	336.39	1.22	F		1.3	51.46	0.59	F
Arm 3		27.0	90.18	1.02	F		26.1	84.88	1.01	F

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

<b>Title</b>	Junction 4 Existing
<b>Location</b>	A120 / Ashbury Drive
<b>Site number</b>	4
<b>Date</b>	13/05/2025
<b>Version</b>	
<b>Status</b>	Existing
<b>Identifier</b>	
<b>Client</b>	Tey Gardens
<b>Jobnumber</b>	2503.09
<b>Enumerator</b>	Andrew FTP
<b>Description</b>	

## 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
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D7	2035 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D8	2035 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D9	2035 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D10	2035 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓

## Analysis Set Details

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

# 2025 Base, AM Peak Hour

## 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 3 have 95% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	44.39	E

### Junction Network Options

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

## Arms

### Arms

Arm	Name	Description
1	A120 East	
2	Ashbury Drive	
3	A120 West	

### 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	3.00	3.00	4.15	1.9	9.30	5.90	0.0	
2	3.15	3.15	4.57	3.6	9.80	7.30	0.0	
3	3.00	3.00	3.00	0.0	12.90	12.90	0.0	

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.605	951
2	0.620	947
3	0.599	902

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

#### Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1	Percentage		150.00
3	Percentage		135.00

## 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	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1118	100.000
2		ONE HOUR	✓	106	100.000
3		ONE HOUR	✓	875	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	33	1085
	2	102	0	4
	3	874	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	6	10
	2	1	0	0
	3	9	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	0.95	40.64	13.0	E	1026	1539
2	0.86	124.00	3.7	F	97	146
3	0.93	40.29	10.1	E	803	1204

### Main Results for each time segment

#### 06:45 - 07:00

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	842	210	0.75	1298	0.648	834	727	0.0	1.8	7.649	A
2	80	20	810	390	0.204	79	25	0.0	0.3	11.517	B
3	659	165	76	1061	0.621	652	813	0.0	1.6	8.688	A

**07:00 - 07:15**

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	1005	251	0.89	1298	0.774	999	872	1.8	3.2	11.813	B
2	95	24	970	282	0.337	94	30	0.3	0.5	19.046	C
3	787	197	91	1049	0.750	782	973	1.6	2.8	13.196	B

**07:15 - 07:30**

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	1231	308	1	1298	0.948	1200	1044	3.2	11.0	30.062	D
2	117	29	1165	151	0.775	109	36	0.5	2.5	75.889	F
3	963	241	105	1039	0.927	940	1169	2.8	8.6	30.934	D

**07:30 - 07:45**

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	1231	308	1	1298	0.948	1223	1064	11.0	13.0	40.636	E
2	117	29	1186	136	0.858	112	37	2.5	3.7	124.000	F
3	963	241	108	1037	0.929	958	1191	8.6	10.1	40.290	E

**07:45 - 08:00**

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	1005	251	0.93	1298	0.774	1043	916	13.0	3.6	15.894	C
2	95	24	1012	254	0.375	107	32	3.7	0.6	26.439	D
3	787	197	103	1040	0.756	814	1016	10.1	3.3	17.539	C

**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	842	210	0.76	1298	0.648	849	743	3.6	1.9	8.130	A
2	80	20	824	381	0.209	81	26	0.6	0.3	12.062	B
3	659	165	78	1059	0.622	665	827	3.3	1.7	9.290	A

# 2025 Base, PM Peak Hour

## 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 3 have 96% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	36.40	E

### 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	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1141	100.000
2		ONE HOUR	✓	85	100.000
3		ONE HOUR	✓	918	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	0	124	1017
	2	83	0	2
	3	915	2	1

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	5
	2	1	0	0
	3	6	100	100

## 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	0.93	31.46	10.3	D	1047	1570
2	0.43	29.04	0.7	D	78	117
3	0.94	43.11	11.3	E	842	1264

### Main Results for each time segment

#### 15:45 - 16:00

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	859	215	2	1358	0.632	852	744	0.0	1.7	7.027	A
2	64	16	760	447	0.143	63	94	0.0	0.2	9.375	A
3	691	173	62	1098	0.629	685	762	0.0	1.7	8.573	A

#### 16:00 - 16:15

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	1026	256	3	1357	0.756	1021	892	1.7	3.0	10.528	B
2	76	19	911	350	0.218	76	113	0.2	0.3	13.129	B
3	825	206	74	1089	0.758	820	912	1.7	3.0	13.141	B

#### 16:15 - 16:30

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	1256	314	3	1356	0.926	1232	1071	3.0	9.1	25.006	D
2	94	23	1099	228	0.410	92	136	0.3	0.7	26.155	D
3	1011	253	90	1077	0.939	984	1101	3.0	9.6	32.303	D

#### 16:30 - 16:45

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	1256	314	3	1356	0.926	1251	1091	9.1	10.3	31.458	D
2	94	23	1116	217	0.432	93	138	0.7	0.7	29.039	D
3	1011	253	91	1076	0.940	1004	1119	9.6	11.3	43.111	E

#### 16:45 - 17:00

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	1026	256	3	1357	0.756	1054	931	10.3	3.2	12.856	B
2	76	19	940	331	0.231	78	116	0.7	0.3	14.351	B
3	825	206	76	1087	0.759	857	942	11.3	3.4	17.523	C

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	859	215	2	1358	0.633	865	758	3.2	1.8	7.387	A
2	64	16	772	439	0.146	65	96	0.3	0.2	9.619	A
3	691	173	63	1097	0.630	698	773	3.4	1.7	9.146	A

# 2030 Opening Year + com dev, AM Peak Hour

## 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 3 have 95% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	61.56	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
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1152	100.000
2		ONE HOUR	✓	109	100.000
3		ONE HOUR	✓	907	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	0	34	1118
	2	105	0	4
	3	906	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	6	10
	2	1	0	0
	3	9	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	0.98	55.18	18.7	F	1057	1586
2	1.02	203.55	6.8	F	100	150
3	0.96	53.93	14.1	F	832	1248

### Main Results for each time segment

#### 06:45 - 07:00

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	867	217	0.75	1298	0.668	859	753	0.0	2.0	8.067	A
2	82	21	834	374	0.219	81	26	0.0	0.3	12.239	B
3	683	171	78	1059	0.645	676	837	0.0	1.8	9.233	A

#### 07:00 - 07:15

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	1036	259	0.89	1298	0.798	1029	902	2.0	3.7	13.025	B
2	98	24	998	263	0.372	97	31	0.3	0.6	21.498	C
3	815	204	93	1048	0.778	809	1002	1.8	3.3	14.731	B

#### 07:15 - 07:30

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	1268	317	1	1298	0.977	1225	1069	3.7	14.4	36.731	E
2	120	30	1189	134	0.895	107	37	0.6	3.7	107.394	F
3	999	250	104	1040	0.960	966	1193	3.3	11.4	37.983	E

#### 07:30 - 07:45

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	1268	317	1	1298	0.977	1251	1090	14.4	18.7	55.177	F
2	120	30	1214	117	1.025	107	38	3.7	6.8	203.550	F
3	999	250	104	1040	0.960	988	1218	11.4	14.1	53.928	F

#### 07:45 - 08:00

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	1036	259	0.94	1298	0.798	1093	972	18.7	4.3	21.550	C
2	98	24	1061	221	0.444	122	33	6.8	0.9	44.111	E
3	815	204	117	1029	0.792	855	1066	14.1	4.2	24.265	C

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	867	217	0.76	1298	0.668	876	772	4.3	2.1	8.700	A
2	82	21	850	363	0.226	84	27	0.9	0.3	13.008	B
3	683	171	81	1057	0.646	692	853	4.2	1.9	10.105	B

# 2030 Opening Year + com dev, PM Peak Hour

### 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 3 have 96% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	47.33	E

### 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
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1179	100.000
2		ONE HOUR	✓	87	100.000
3		ONE HOUR	✓	949	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	0	127	1052
	2	85	0	2
	3	946	2	1

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	5
	2	1	0	0
	3	5	97	97

## 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	0.96	42.99	14.6	E	1082	1623
2	0.49	35.79	0.9	E	80	120
3	0.96	53.72	14.8	F	871	1306

### Main Results for each time segment

#### 15:45 - 16:00

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	888	222	2	1358	0.654	880	768	0.0	1.8	7.421	A
2	65	16	786	430	0.152	65	96	0.0	0.2	9.837	A
3	714	179	63	1108	0.645	707	788	0.0	1.8	8.847	A

#### 16:00 - 16:15

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	1060	265	3	1357	0.781	1054	920	1.8	3.4	11.617	B
2	78	20	941	330	0.237	78	115	0.2	0.3	14.237	B
3	853	213	76	1098	0.777	847	943	1.8	3.3	14.022	B

#### 16:15 - 16:30

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	1298	325	3	1357	0.957	1263	1099	3.4	12.0	30.876	D
2	96	24	1128	209	0.458	94	138	0.3	0.8	30.705	D
3	1045	261	92	1086	0.962	1011	1131	3.3	11.8	37.290	E

#### 16:30 - 16:45

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	1298	325	3	1356	0.957	1288	1123	12.0	14.6	42.989	E
2	96	24	1150	195	0.491	95	141	0.8	0.9	35.792	E
3	1045	261	93	1084	0.963	1033	1152	11.8	14.8	53.719	F

#### 16:45 - 17:00

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	1060	265	3	1357	0.781	1103	973	14.6	3.8	16.258	C
2	78	20	985	302	0.259	80	121	0.9	0.4	16.432	C
3	853	213	79	1096	0.779	897	987	14.8	3.8	21.388	C

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	888	222	2	1358	0.654	895	785	3.8	1.9	7.894	A
2	65	16	799	422	0.155	66	98	0.4	0.2	10.149	B
3	714	179	65	1107	0.646	722	801	3.8	1.9	9.543	A

# 2030 Opening Year + com + proposed dev, AM Peak Hour

## 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 3 have 95% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	83.34	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	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1168	100.000
2		ONE HOUR	✓	109	100.000
3		ONE HOUR	✓	960	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	34	1134
	2	105	0	4
	3	944	16	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To		
	1	2	3
1	0	6	10
2	1	0	0
3	8	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	1.00	71.67	25.6	F	1072	1608
2	1.06	225.16	7.6	F	100	150
3	1.01	82.72	24.3	F	881	1321

### Main Results for each time segment

#### 06:45 - 07:00

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	879	220	12	1289	0.682	871	781	0.0	2.1	8.454	A
2	82	21	846	366	0.224	81	37	0.0	0.3	12.571	B
3	723	181	78	1070	0.675	715	849	0.0	2.0	9.921	A

#### 07:00 - 07:15

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	1050	263	14	1287	0.816	1042	934	2.1	4.1	14.224	B
2	98	24	1012	254	0.386	97	45	0.3	0.6	22.692	C
3	863	216	93	1059	0.815	855	1015	2.0	4.0	17.023	C

#### 07:15 - 07:30

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	1286	321	17	1285	1.001	1230	1091	4.1	18.1	43.558	E
2	120	30	1194	131	0.917	106	53	0.6	4.0	114.692	F
3	1057	264	103	1051	1.005	1005	1198	4.0	17.1	50.241	F

#### 07:30 - 07:45

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	1286	321	17	1285	1.001	1256	1113	18.1	25.6	71.672	F
2	120	30	1220	114	1.057	106	54	4.0	7.6	225.160	F
3	1057	264	102	1052	1.005	1028	1224	17.1	24.3	82.718	F

07:45 - 08:00

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	1050	263	16	1286	0.817	1132	1041	25.6	5.0	31.641	D
2	98	24	1099	195	0.503	124	49	7.6	1.1	64.444	F
3	863	216	119	1039	0.831	937	1104	24.3	5.7	45.626	E

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	879	220	12	1289	0.682	890	807	5.0	2.2	9.274	A
2	82	21	864	354	0.232	85	38	1.1	0.3	13.572	B
3	723	181	82	1067	0.677	737	868	5.7	2.2	11.353	B

# 2030 Opening Year + com + proposed dev, PM Peak Hour

## 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 3 have 96% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	58.81	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
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1210	100.000
2		ONE HOUR	✓	87	100.000
3		ONE HOUR	✓	965	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	0	127	1083
	2	85	0	2
	3	962	2	1

## Vehicle Mix

### Heavy Vehicle Percentages

From	To		
	1	2	3
1	0	3	5
2	1	0	0
3	5	97	97

## 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	0.98	56.64	20.3	F	1110	1665
2	0.54	42.66	1.1	E	80	120
3	0.98	62.90	17.9	F	886	1328

### Main Results for each time segment

#### 15:45 - 16:00

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	911	228	2	1358	0.671	903	780	0.0	2.0	7.780	A
2	65	16	809	415	0.158	65	96	0.0	0.2	10.246	B
3	727	182	63	1108	0.656	719	810	0.0	1.9	9.101	A

#### 16:00 - 16:15

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	1088	272	3	1357	0.801	1081	934	2.0	3.8	12.677	B
2	78	20	968	313	0.250	78	115	0.2	0.3	15.279	C
3	868	217	76	1098	0.790	861	970	1.9	3.5	14.776	B

#### 16:15 - 16:30

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	1332	333	3	1357	0.982	1286	1110	3.8	15.4	36.941	E
2	96	24	1152	194	0.493	93	137	0.3	0.9	34.998	D
3	1062	266	91	1086	0.978	1022	1154	3.5	13.6	41.323	E

#### 16:30 - 16:45

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	1332	333	3	1356	0.982	1313	1135	15.4	20.3	56.642	F
2	96	24	1176	179	0.537	95	140	0.9	1.1	42.656	E
3	1062	266	93	1085	0.980	1045	1178	13.6	17.9	62.901	F

16:45 - 17:00

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	1088	272	3	1357	0.802	1151	999	20.3	4.4	21.846	C
2	78	20	1032	272	0.288	81	123	1.1	0.4	19.103	C
3	868	217	79	1095	0.792	923	1033	17.9	4.2	25.820	D

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	911	228	2	1358	0.671	920	798	4.4	2.1	8.383	A
2	65	16	824	405	0.162	66	98	0.4	0.2	10.644	B
3	727	182	65	1106	0.657	735	826	4.2	2.0	9.918	A

# 2035 Opening Year + com dev, AM Peak Hour

## 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 3 have 95% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	78.60	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
D7	2035 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1186	100.000
2		ONE HOUR	✓	112	100.000
3		ONE HOUR	✓	933	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	0	35	1151
	2	108	0	4
	3	932	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	6	9
	2	1	0	0
	3	9	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	1.00	68.17	24.5	F	1088	1632
2	1.15	285.42	10.3	F	103	154
3	0.99	68.84	19.0	F	856	1284

### Main Results for each time segment

#### 06:45 - 07:00

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	893	223	0.74	1310	0.682	885	774	0.0	2.1	8.312	A
2	84	21	858	363	0.232	83	27	0.0	0.3	12.818	B
3	702	176	80	1057	0.664	695	861	0.0	1.9	9.735	A

#### 07:00 - 07:15

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	1066	267	0.89	1310	0.814	1058	926	2.1	4.1	13.885	B
2	101	25	1027	250	0.403	99	32	0.3	0.6	23.674	C
3	839	210	96	1046	0.802	832	1031	1.9	3.7	16.260	C

#### 07:15 - 07:30

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	1306	326	1	1310	0.997	1251	1085	4.1	17.7	42.040	E
2	123	31	1214	125	0.990	106	38	0.6	5.0	139.989	F
3	1027	257	102	1041	0.987	985	1218	3.7	14.4	44.989	E

#### 07:30 - 07:45

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	1306	326	1	1310	0.997	1278	1106	17.7	24.5	68.172	F
2	123	31	1241	107	1.152	102	39	5.0	10.3	285.425	F
3	1027	257	99	1043	0.984	1009	1244	14.4	19.0	68.842	F

#### 07:45 - 08:00

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	1066	267	0.96	1310	0.814	1145	1025	24.5	4.8	29.081	D
2	101	25	1111	194	0.520	137	35	10.3	1.2	88.122	F
3	839	210	132	1019	0.823	894	1116	19.0	5.3	35.782	E

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	893	223	0.77	1310	0.682	903	799	4.8	2.2	9.079	A
2	84	21	877	351	0.241	88	27	1.2	0.3	13.883	B
3	702	176	85	1054	0.666	715	880	5.3	2.1	11.013	B

# 2035 Opening Year + com dev, PM Peak Hour

## 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 3 have 96% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	64.37	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
D8	2035 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1215	100.000
2		ONE HOUR	✓	90	100.000
3		ONE HOUR	✓	977	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	0	131	1084
	2	88	0	2
	3	974	2	1

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	5
	2	1	0	0
	3	5	95	95

## 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	0.99	59.17	21.4	F	1115	1672
2	0.55	44.08	1.1	E	83	124
3	0.99	72.60	21.4	F	897	1345

### Main Results for each time segment

#### 15:45 - 16:00

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	915	229	2	1358	0.673	907	791	0.0	2.0	7.840	A
2	68	17	810	415	0.163	67	99	0.0	0.2	10.324	B
3	736	184	65	1106	0.665	728	811	0.0	1.9	9.340	A

#### 16:00 - 16:15

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	1092	273	3	1358	0.805	1085	947	2.0	3.8	12.857	B
2	81	20	969	312	0.259	80	119	0.2	0.3	15.483	C
3	878	220	79	1096	0.801	871	971	1.9	3.7	15.515	C

#### 16:15 - 16:30

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	1338	334	3	1357	0.986	1289	1120	3.8	16.0	37.997	E
2	99	25	1151	195	0.509	97	141	0.3	1.0	35.860	E
3	1076	269	94	1084	0.993	1029	1153	3.7	15.5	45.382	E

#### 16:30 - 16:45

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	1338	334	3	1357	0.986	1316	1145	16.0	21.4	59.168	F
2	99	25	1175	179	0.554	98	144	1.0	1.1	44.076	E
3	1076	269	96	1082	0.994	1052	1178	15.5	21.4	72.598	F

#### 16:45 - 17:00

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	1092	273	3	1357	0.805	1160	1025	21.4	4.5	23.170	C
2	81	20	1036	269	0.301	84	127	1.1	0.4	19.714	C
3	878	220	82	1093	0.803	946	1038	21.4	4.5	31.782	D

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	915	229	2	1358	0.673	924	810	4.5	2.1	8.469	A
2	68	17	825	405	0.167	69	101	0.4	0.2	10.739	B
3	736	184	67	1105	0.666	745	827	4.5	2.1	10.284	B

# 2035 Opening Year + com + proposed dev, AM Peak Hour

## 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 3 have 95% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	95.38	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
D9	2035 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1202	100.000
2		ONE HOUR	✓	112	100.000
3		ONE HOUR	✓	971	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	35	1167
	2	108	0	4
	3	970	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To		
	1	2	3
1	0	6	9
2	1	0	0
3	8	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	1.01	78.73	29.4	F	1103	1654
2	1.22	336.39	12.1	F	103	154
3	1.02	90.18	27.0	F	891	1337

### Main Results for each time segment

#### 06:45 - 07:00

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	905	226	0.74	1310	0.691	896	802	0.0	2.2	8.537	A
2	84	21	870	355	0.238	83	27	0.0	0.3	13.184	B
3	731	183	80	1067	0.685	723	873	0.0	2.1	10.217	B

#### 07:00 - 07:15

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	1081	270	0.89	1310	0.825	1072	959	2.2	4.3	14.616	B
2	101	25	1041	241	0.418	99	32	0.3	0.7	25.145	D
3	873	218	96	1055	0.827	864	1044	2.1	4.3	18.000	C

#### 07:15 - 07:30

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	1323	331	1	1310	1.011	1260	1109	4.3	20.2	46.202	E
2	123	31	1223	119	1.040	103	38	0.7	5.8	159.735	F
3	1069	267	99	1053	1.016	1011	1227	4.3	18.8	53.774	F

#### 07:30 - 07:45

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	1323	331	1	1310	1.011	1286	1130	20.2	29.4	78.729	F
2	123	31	1249	101	1.216	98	39	5.8	12.1	336.390	F
3	1069	267	95	1056	1.012	1036	1253	18.8	27.0	90.176	F

07:45 - 08:00

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	1081	270	0.98	1310	0.825	1177	1088	29.4	5.4	37.719	E
2	101	25	1143	173	0.583	142	35	12.1	1.7	148.133	F
3	873	218	137	1024	0.852	952	1148	27.0	7.1	58.837	F

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	905	226	0.77	1310	0.691	917	836	5.4	2.3	9.438	A
2	84	21	890	341	0.247	90	27	1.7	0.3	14.614	B
3	731	183	87	1062	0.688	750	894	7.1	2.3	12.205	B

# 2035 Opening Year + com + proposed dev, PM Peak Hour

## 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 3 have 96% of the total flow for the roundabout for one or more time segments]

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	79.93	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
D10	2035 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1246	100.000
2		ONE HOUR	✓	90	100.000
3		ONE HOUR	✓	993	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		1	2	3
From	1	0	131	1115
	2	88	0	2
	3	990	2	1

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	5
	2	1	0	0
	3	5	95	95

## 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	1.01	77.96	30.3	F	1143	1715
2	0.59	51.46	1.3	F	83	124
3	1.01	84.88	26.1	F	911	1367

### Main Results for each time segment

#### 15:45 - 16:00

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	938	235	2	1358	0.691	929	803	0.0	2.2	8.238	A
2	68	17	832	400	0.169	67	99	0.0	0.2	10.775	B
3	748	187	65	1106	0.676	740	834	0.0	2.0	9.620	A

#### 16:00 - 16:15

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	1120	280	3	1357	0.825	1111	960	2.2	4.3	14.132	B
2	81	20	995	295	0.274	80	119	0.2	0.4	16.758	C
3	893	223	78	1096	0.814	885	997	2.0	4.0	16.423	C

#### 16:15 - 16:30

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	1372	343	3	1357	1.011	1306	1129	4.3	20.7	45.480	E
2	99	25	1170	182	0.544	96	139	0.4	1.1	40.581	E
3	1093	273	94	1084	1.009	1038	1172	4.0	17.9	50.281	F

#### 16:30 - 16:45

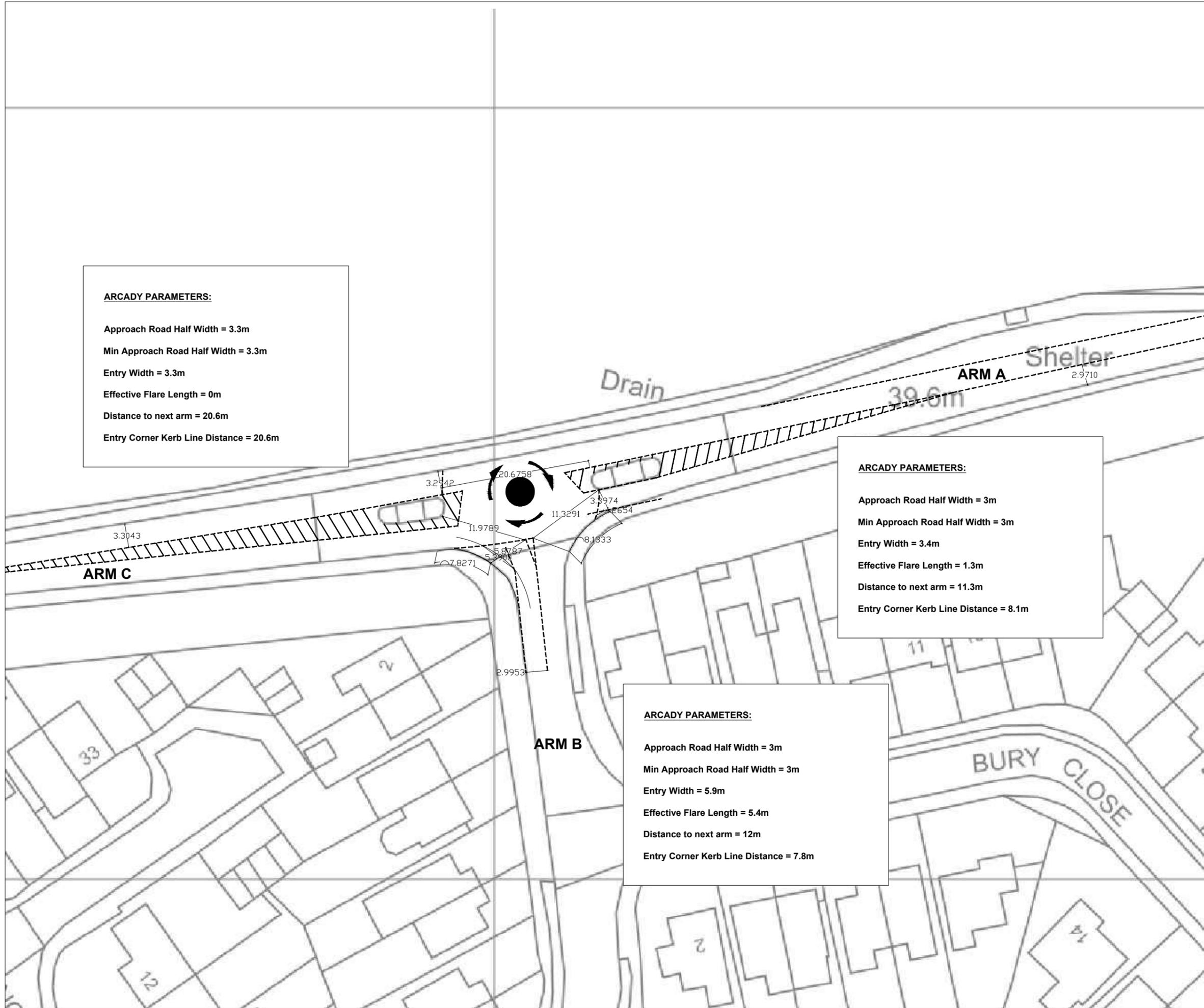
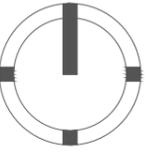
Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1372	343	3	1357	1.011	1334	1153	20.7	30.3	77.957	F
2	99	25	1194	167	0.595	98	142	1.1	1.3	51.458	F
3	1093	273	96	1082	1.010	1061	1197	17.9	26.1	84.879	F

16:45 - 17:00

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	1120	280	3	1357	0.825	1220	1056	30.3	5.4	36.827	E
2	81	20	1093	232	0.348	84	130	1.3	0.6	24.723	C
3	893	223	82	1093	0.817	977	1094	26.1	5.1	41.912	E

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	938	235	2	1358	0.691	950	825	5.4	2.3	9.077	A
2	68	17	851	388	0.175	69	101	0.6	0.2	11.328	B
3	748	187	68	1104	0.677	759	853	5.1	2.2	10.759	B



**ARCADY PARAMETERS:**

Approach Road Half Width = 3.3m  
 Min Approach Road Half Width = 3.3m  
 Entry Width = 3.3m  
 Effective Flare Length = 0m  
 Distance to next arm = 20.6m  
 Entry Corner Kerb Line Distance = 20.6m

**ARCADY PARAMETERS:**

Approach Road Half Width = 3m  
 Min Approach Road Half Width = 3m  
 Entry Width = 3.4m  
 Effective Flare Length = 1.3m  
 Distance to next arm = 11.3m  
 Entry Corner Kerb Line Distance = 8.1m

**ARCADY PARAMETERS:**

Approach Road Half Width = 3m  
 Min Approach Road Half Width = 3m  
 Entry Width = 5.9m  
 Effective Flare Length = 5.4m  
 Distance to next arm = 12m  
 Entry Corner Kerb Line Distance = 7.8m

**NOTE:**  
 Based on Topographical Survey.  
 Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval.  
 Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd.  
 These drawings are intended for planning application purposes only, they are not to be used for construction.



Client  
**TEY GARDENS LLP**

Project  
**TEY GARDENS, LITTLE TEY**

Title  
**JUNCTION 4 - EXISTING ARCADY MEASUREMENTS**

Drawn <b>A FIRMIN</b>	Checked <b>AF</b>
Scale <b>1:500 @ A3</b>	Date <b>MAY 2025</b>
Drawing No. -	

Firm Transport Planning Ltd. accept no responsibility for any unauthorised amendments to this drawing. Only figured dimensions are to be worked to.

# APPENDIX J

---

JUNCTION 5A PICADY OUTPUT

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
<b>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</b>

**Filename:** Junction 5a Existing.j9

**Path:** C:\Users\Andrew FTP\Firmin Transport Planning\FTP Cloud - Company FTP\Drawings\2025\2503.09 - Tey Gardens, Little Tey\Junction Capacity Modelling

**Report generation date:** 14/05/2025 09:10:47

- 
- »2025 Base, AM Peak Hour
  - »2025 Base, PM Peak Hour
  - »2030 Opening Year + com dev, AM Peak Hour
  - »2030 Opening Year + com dev, PM Peak Hour
  - »2030 Opening Year + com + proposed dev, AM Peak Hour
  - »2030 Opening Year + com + proposed dev, PM Peak Hour
  - »2035 Future Year + com dev, AM Peak Hour
  - »2035 Future Year + com dev, PM Peak Hour
  - »2035 Future Year + com + proposed dev, AM Peak Hour
  - »2035 Future Year + com + proposed dev, PM Peak Hour

## Summary of junction performance

	AM Peak Hour					PM Peak Hour				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
<b>2025 Base</b>										
Stream B-CD	D1	0.1	20.14	0.08	C	D2	0.2	24.56	0.18	C
Stream B-AD		1.1	189.79	0.58	F		1.6	142.56	0.67	F
Stream A-D		0.0	11.02	0.03	B		0.0	10.79	0.01	B
Stream D-ABC		0.0	0.00	0.00	A		0.0	14.93	0.03	B
Stream C-B		0.1	12.76	0.07	B		0.0	13.08	0.03	B
<b>2030 Opening Year + com dev</b>										
Stream B-CD	D3	1.6	319.57	0.98	F	D4	2.6	253.50	1.00	F
Stream B-AD		2.1	314.81	0.82	F		3.3	257.86	0.89	F
Stream A-D		0.0	11.24	0.03	B		0.0	11.04	0.01	B
Stream D-ABC		0.0	0.00	0.00	A		0.0	17.29	0.03	C
Stream C-B		0.1	13.24	0.08	B		0.0	13.39	0.03	B
<b>2030 Opening Year + com + proposed dev</b>										
Stream B-CD	D5	2.8	527.08	1.15	F	D6	4.3	391.81	1.13	F
Stream B-AD		3.8	484.88	1.12	F		5.6	399.96	1.11	F
Stream A-D		0.0	11.58	0.03	B		0.0	11.17	0.01	B
Stream D-ABC		0.0	0.00	0.00	A		0.0	20.05	0.04	C
Stream C-B		0.1	13.45	0.08	B		0.0	13.74	0.03	B
<b>2035 Future Year + com dev</b>										
Stream B-CD	D7	3.4	606.55	1.32	F	D8	5.3	436.71	1.25	F
Stream B-AD		4.6	549.78	1.28	F		7.1	469.39	1.23	F
Stream A-D		0.0	11.50	0.03	B		0.0	11.28	0.01	B
Stream D-ABC		0.0	0.00	0.00	A		0.0	21.87	0.04	C
Stream C-B		0.1	13.73	0.08	B		0.0	13.80	0.03	B
<b>2035 Future Year + com + proposed dev</b>										
Stream B-CD	D9	5.5	2398.21	2.27	F	D10	8.0	1298.21	1.70	F
Stream B-AD		7.8	2236.23	2.20	F		11.1	648.41	1.66	F
Stream A-D		0.0	11.84	0.03	B		0.0	11.42	0.01	B
Stream D-ABC		0.0	0.00	0.00	A		0.0	27.62	0.05	D
Stream C-B		0.1	13.96	0.08	B		0.0	14.18	0.03	B

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

## File summary

### File Description

Title	Junction 5a Existing
Location	A120 / Old London Road
Site number	5a
Date	14/05/2025
Version	
Status	Existing
Identifier	
Client	Tey Gardens
Jobnumber	2503.09
Enumerator	Andrew FTP
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
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15	✓
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15	✓

### Analysis Set Details

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

# 2025 Base, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.58	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	A120 East		Major
B	Old London Road		Minor
C	A120 West		Major
D	Access Road		Minor

### 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)
A	8.00			0.0		-
C	8.00			70.0		-

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

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare		10.00	6.70	2.80	2.20	2.20	✓	1.00	62	55
D	One lane	4.40								55	17

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.203	0.290	0.203	-	-	-
B-A	541	0.090	0.227	0.227	-	-	-	0.143	0.325	-	0.227	0.227	0.114
B-C	704	0.099	0.249	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	561	0.093	0.236	0.236	-	-	-	0.148	0.337	0.148	-	-	-
B-D, offside lane	541	0.090	0.227	0.227	-	-	-	0.143	0.325	0.143	-	-	-
C-B	615	0.217	0.217	0.311	-	-	-	-	-	-	-	-	-
D-A	724	-	-	-	-	-	-	0.256	-	0.101	-	-	-
D-B, nearside lane	574	0.152	0.152	0.345	-	-	-	0.241	0.241	0.095	-	-	-
D-B, offside lane	574	0.152	0.152	0.345	-	-	-	0.241	0.241	0.095	-	-	-
D-C	574	-	0.152	0.345	0.121	0.241	0.241	0.241	0.241	0.095	-	-	-

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	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1180	100.000
B		ONE HOUR	✓	37	100.000
C		ONE HOUR	✓	973	100.000
D		ONE HOUR	✓	3	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	50	1122	8
	B	22	0	15	0
	C	949	20	0	4
	D	2	0	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	2	10	0
	B	32	0	7	0
	C	9	0	0	0
	D	0	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-CD	0.08	20.14	0.1	C	14	21
B-AD	0.58	189.79	1.1	F	20	30
A-B					46	69
A-C					1030	1544
A-D	0.03	11.02	0.0	B	7	11
D-ABC	0.00	0.00	0.0	A	0	0
C-D					4	6
C-A					871	1306
C-B	0.07	12.76	0.1	B	18	28

### Main Results for each time segment

#### 06:45 - 07:00

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-CD	11	3	426	0.026	11	0.0	0.0	8.670	A
B-AD	17	4	158	0.105	16	0.0	0.1	25.297	D
A-B	38	9			38				
A-C	845	211			845				
A-D	6	2	411	0.015	6	0.0	0.0	8.890	A
D-ABC	0	0	271	0.000	0	0.0	0.0	0.000	A
C-D	3	0.75			3				
C-A	714	179			714				
C-B	15	4	402	0.037	15	0.0	0.0	9.285	A

#### 07:00 - 07:15

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-CD	13	3	374	0.036	13	0.0	0.0	9.970	A
B-AD	20	5	109	0.181	19	0.1	0.2	39.953	E
A-B	45	11			45				
A-C	1009	252			1009				
A-D	7	2	379	0.019	7	0.0	0.0	9.677	A
D-ABC	0	0	200	0.000	0	0.0	0.0	0.000	A
C-D	4	0.90			4				
C-A	853	213			853				
C-B	18	4	361	0.050	18	0.0	0.1	10.489	B

#### 07:15 - 07:30

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-CD	17	4	225	0.073	16	0.0	0.1	17.257	C
B-AD	24	6	41	0.585	21	0.2	1.0	160.996	F
A-B	55	14			55				
A-C	1235	309			1235				
A-D	9	2	335	0.026	9	0.0	0.0	11.022	B
D-ABC	0	0	95	0.000	0	0.0	0.0	0.000	A
C-D	4	1			4				
C-A	1045	261			1045				
C-B	22	6	304	0.072	22	0.1	0.1	12.751	B

#### 07:30 - 07:45

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-CD	17	4	195	0.085	16	0.1	0.1	20.145	C
B-AD	24	6	42	0.584	24	1.0	1.1	189.789	F
A-B	55	14			55				
A-C	1235	309			1235				
A-D	9	2	335	0.026	9	0.0	0.0	11.023	B
D-ABC	0	0	95	0.000	0	0.0	0.0	0.000	A
C-D	4	1			4				
C-A	1045	261			1045				
C-B	22	6	304	0.072	22	0.1	0.1	12.759	B

**07:45 - 08:00**

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-CD	13	3	365	0.037	14	0.1	0.0	10.253	B
B-AD	20	5	110	0.181	23	1.1	0.2	43.231	E
A-B	45	11			45				
A-C	1009	252			1009				
A-D	7	2	379	0.019	7	0.0	0.0	9.682	A
D-ABC	0	0	200	0.000	0	0.0	0.0	0.000	A
C-D	4	0.90			4				
C-A	853	213			853				
C-B	18	4	361	0.050	18	0.1	0.1	10.497	B

**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-CD	11	3	424	0.027	11	0.0	0.0	8.719	A
B-AD	17	4	158	0.105	17	0.2	0.1	25.590	D
A-B	38	9			38				
A-C	845	211			845				
A-D	6	2	411	0.015	6	0.0	0.0	8.895	A
D-ABC	0	0	271	0.000	0	0.0	0.0	0.000	A
C-D	3	0.75			3				
C-A	714	179			714				
C-B	15	4	402	0.037	15	0.1	0.0	9.299	A

# 2025 Base, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.96	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	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1168	100.000
B		ONE HOUR	✓	71	100.000
C		ONE HOUR	✓	1005	100.000
D		ONE HOUR	✓	6	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	33	1132	3
	B	42	0	29	0
	C	994	8	0	3
	D	5	0	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	3	5	0
	B	0	0	7	0
	C	5	13	0	0
	D	0	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-CD	0.18	24.56	0.2	C	27	40
B-AD	0.67	142.56	1.6	F	39	58
A-B					30	45
A-C					1039	1558
A-D	0.01	10.79	0.0	B	3	4
D-ABC	0.03	14.93	0.0	B	6	8
C-D					3	4
C-A					912	1368
C-B	0.03	13.08	0.0	B	7	11

### Main Results for each time segment

#### 15:45 - 16:00

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-CD	22	5	439	0.050	22	0.0	0.1	8.618	A
B-AD	32	8	217	0.146	31	0.0	0.2	19.277	C
A-B	25	6			25				
A-C	852	213			852				
A-D	2	0.56	412	0.005	2	0.0	0.0	8.785	A
D-ABC	5	1	435	0.010	4	0.0	0.0	8.366	A
C-D	2	0.56			2				
C-A	748	187			748				
C-B	6	2	366	0.016	6	0.0	0.0	9.994	A

#### 16:00 - 16:15

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-CD	26	7	384	0.068	26	0.1	0.1	10.064	B
B-AD	38	9	155	0.243	37	0.2	0.3	30.392	D
A-B	30	7			30				
A-C	1018	254			1018				
A-D	3	0.67	381	0.007	3	0.0	0.0	9.527	A
D-ABC	5	1	370	0.015	5	0.0	0.0	9.862	A
C-D	3	0.67			3				
C-A	894	223			894				
C-B	7	2	332	0.022	7	0.0	0.0	11.095	B

16:15 - 16:30

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-CD	32	8	209	0.153	32	0.1	0.2	20.241	C
B-AD	46	12	69	0.670	42	0.3	1.4	118.120	F
A-B	36	9			36				
A-C	1246	312			1246				
A-D	3	0.83	337	0.010	3	0.0	0.0	10.785	B
D-ABC	7	2	249	0.027	7	0.0	0.0	14.855	B
C-D	3	0.83			3				
C-A	1094	274			1094				
C-B	9	2	284	0.031	9	0.0	0.0	13.080	B

16:30 - 16:45

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-CD	32	8	178	0.179	32	0.2	0.2	24.558	C
B-AD	46	12	69	0.669	45	1.4	1.6	142.555	F
A-B	36	9			36				
A-C	1246	312			1246				
A-D	3	0.83	337	0.010	3	0.0	0.0	10.786	B
D-ABC	7	2	248	0.027	7	0.0	0.0	14.928	B
C-D	3	0.83			3				
C-A	1094	274			1094				
C-B	9	2	284	0.031	9	0.0	0.0	13.083	B

16:45 - 17:00

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-CD	26	7	374	0.070	27	0.2	0.1	10.391	B
B-AD	38	9	156	0.243	43	1.6	0.3	33.294	D
A-B	30	7			30				
A-C	1018	254			1018				
A-D	3	0.67	381	0.007	3	0.0	0.0	9.530	A
D-ABC	5	1	370	0.015	5	0.0	0.0	9.886	A
C-D	3	0.67			3				
C-A	894	223			894				
C-B	7	2	332	0.022	7	0.0	0.0	11.100	B

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-CD	22	5	437	0.050	22	0.1	0.1	8.669	A
B-AD	32	8	217	0.146	32	0.3	0.2	19.530	C
A-B	25	6			25				
A-C	852	213			852				
A-D	2	0.56	412	0.005	2	0.0	0.0	8.788	A
D-ABC	5	1	435	0.010	5	0.0	0.0	8.370	A
C-D	2	0.56			2				
C-A	748	187			748				
C-B	6	2	366	0.016	6	0.0	0.0	9.998	A

# 2030 Opening Year + com dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		6.06	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
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1215	100.000
B		ONE HOUR	✓	38	100.000
C		ONE HOUR	✓	1008	100.000
D		ONE HOUR	✓	3	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	51	1156	8
	B	23	0	15	0
	C	983	21	0	4
	D	2	0	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	2	10	0
	B	31	0	6	0
	C	8	0	0	0
	D	0	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-CD	0.98	319.57	1.6	F	14	21
B-AD	0.82	314.81	2.1	F	21	32
A-B					47	70
A-C					1061	1591
A-D	0.03	11.24	0.0	B	7	11
D-ABC	0.00	0.00	0.0	A	0	0
C-D					4	6
C-A					902	1353
C-B	0.08	13.24	0.1	B	19	29

### Main Results for each time segment

#### 06:45 - 07:00

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-CD	11	3	421	0.027	11	0.0	0.0	8.776	A
B-AD	17	4	152	0.114	17	0.0	0.1	26.532	D
A-B	38	10			38				
A-C	870	218			870				
A-D	6	2	406	0.015	6	0.0	0.0	8.987	A
D-ABC	0	0	261	0.000	0	0.0	0.0	0.000	A
C-D	3	0.75			3				
C-A	740	185			740				
C-B	16	4	396	0.040	16	0.0	0.0	9.460	A

#### 07:00 - 07:15

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-CD	13	3	366	0.037	13	0.0	0.0	10.211	B
B-AD	21	5	101	0.204	20	0.1	0.2	44.150	E
A-B	46	11			46				
A-C	1039	260			1039				
A-D	7	2	374	0.019	7	0.0	0.0	9.815	A
D-ABC	0	0	187	0.000	0	0.0	0.0	0.000	A
C-D	4	0.90			4				
C-A	884	221			884				
C-B	19	5	354	0.053	19	0.0	0.1	10.752	B

07:15 - 07:30

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-CD	17	4	110	0.150	16	0.0	0.2	37.955	E
B-AD	25	6	31	0.817	20	0.2	1.6	261.746	F
A-B	56	14			56				
A-C	1273	318			1273				
A-D	9	2	329	0.027	9	0.0	0.0	11.241	B
D-ABC	0	0	79	0.000	0	0.0	0.0	0.000	A
C-D	4	1			4				
C-A	1082	271			1082				
C-B	23	6	295	0.078	23	0.1	0.1	13.232	B

07:30 - 07:45

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-CD	17	4	17	0.984	11	0.2	1.6	319.567	F
B-AD	25	6	31	0.815	23	1.6	2.1	314.805	F
A-B	56	14			56				
A-C	1273	318			1273				
A-D	9	2	329	0.027	9	0.0	0.0	11.244	B
D-ABC	0	0	78	0.000	0	0.0	0.0	0.000	A
C-D	4	1			4				
C-A	1082	271			1082				
C-B	23	6	295	0.078	23	0.1	0.1	13.243	B

07:45 - 08:00

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-CD	13	3	355	0.038	20	1.6	0.0	10.948	B
B-AD	21	5	101	0.205	28	2.1	0.3	53.566	F
A-B	46	11			46				
A-C	1039	260			1039				
A-D	7	2	374	0.019	7	0.0	0.0	9.818	A
D-ABC	0	0	186	0.000	0	0.0	0.0	0.000	A
C-D	4	0.90			4				
C-A	884	221			884				
C-B	19	5	354	0.053	19	0.1	0.1	10.764	B

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-CD	11	3	419	0.027	11	0.0	0.0	8.831	A
B-AD	17	4	152	0.114	18	0.3	0.1	26.914	D
A-B	38	10			38				
A-C	870	218			870				
A-D	6	2	406	0.015	6	0.0	0.0	8.991	A
D-ABC	0	0	261	0.000	0	0.0	0.0	0.000	A
C-D	3	0.75			3				
C-A	740	185			740				
C-B	16	4	396	0.040	16	0.1	0.0	9.473	A

# 2030 Opening Year + com dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		7.99	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
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1207	100.000
B		ONE HOUR	✓	73	100.000
C		ONE HOUR	✓	1038	100.000
D		ONE HOUR	✓	6	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	34	1170	3
	B	43	0	30	0
	C	1027	8	0	3
	D	5	0	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	3	5	0
	B	0	0	7	0
	C	5	12	0	0
	D	0	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-CD	1.00	253.50	2.6	F	28	41
B-AD	0.89	257.86	3.3	F	39	59
A-B					31	47
A-C					1074	1610
A-D	0.01	11.04	0.0	B	3	4
D-ABC	0.03	17.29	0.0	C	6	8
C-D					3	4
C-A					942	1414
C-B	0.03	13.39	0.0	B	7	11

### Main Results for each time segment

#### 15:45 - 16:00

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-CD	23	6	431	0.052	22	0.0	0.1	8.806	A
B-AD	32	8	206	0.157	32	0.0	0.2	20.512	C
A-B	26	6			26				
A-C	881	220			881				
A-D	2	0.56	407	0.006	2	0.0	0.0	8.900	A
D-ABC	5	1	425	0.011	4	0.0	0.0	8.568	A
C-D	2	0.56			2				
C-A	773	193			773				
C-B	6	2	363	0.017	6	0.0	0.0	10.070	B

#### 16:00 - 16:15

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-CD	27	7	371	0.073	27	0.1	0.1	10.461	B
B-AD	39	10	142	0.271	38	0.2	0.4	34.229	D
A-B	31	8			31				
A-C	1052	263			1052				
A-D	3	0.67	374	0.007	3	0.0	0.0	9.689	A
D-ABC	5	1	356	0.015	5	0.0	0.0	10.274	B
C-D	3	0.67			3				
C-A	923	231			923				
C-B	7	2	327	0.022	7	0.0	0.0	11.240	B

**16:15 - 16:30**

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-CD	33	8	89	0.370	31	0.1	0.5	60.522	F
B-AD	47	12	53	0.886	39	0.4	2.4	195.052	F
A-B	37	9			37				
A-C	1288	322			1288				
A-D	3	0.83	329	0.010	3	0.0	0.0	11.040	B
D-ABC	7	2	218	0.030	7	0.0	0.0	17.045	C
C-D	3	0.83			3				
C-A	1131	283			1131				
C-B	9	2	278	0.032	9	0.0	0.0	13.383	B

**16:30 - 16:45**

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-CD	33	8	33	1.004	25	0.5	2.6	253.499	F
B-AD	47	12	53	0.885	44	2.4	3.3	257.863	F
A-B	37	9			37				
A-C	1288	322			1288				
A-D	3	0.83	329	0.010	3	0.0	0.0	11.041	B
D-ABC	7	2	215	0.031	7	0.0	0.0	17.295	C
C-D	3	0.83			3				
C-A	1131	283			1131				
C-B	9	2	278	0.032	9	0.0	0.0	13.385	B

**16:45 - 17:00**

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-CD	27	7	354	0.076	37	2.6	0.1	11.697	B
B-AD	39	10	142	0.272	50	3.3	0.4	43.482	E
A-B	31	8			31				
A-C	1052	263			1052				
A-D	3	0.67	374	0.007	3	0.0	0.0	9.690	A
D-ABC	5	1	352	0.015	5	0.0	0.0	10.385	B
C-D	3	0.67			3				
C-A	923	231			923				
C-B	7	2	327	0.022	7	0.0	0.0	11.245	B

**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-CD	23	6	429	0.053	23	0.1	0.1	8.867	A
B-AD	32	8	207	0.157	33	0.4	0.2	20.851	C
A-B	26	6			26				
A-C	881	220			881				
A-D	2	0.56	407	0.006	2	0.0	0.0	8.901	A
D-ABC	5	1	424	0.011	5	0.0	0.0	8.574	A
C-D	2	0.56			2				
C-A	773	193			773				
C-B	6	2	363	0.017	6	0.0	0.0	10.075	B

# 2030 Opening Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		9.26	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	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1231	100.000
B		ONE HOUR	✓	38	100.000
C		ONE HOUR	✓	1046	100.000
D		ONE HOUR	✓	3	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	51	1172	8
	B	23	0	15	0
	C	1021	21	0	4
	D	2	0	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	2	10	0
	B	31	0	6	0
	C	8	0	0	0
	D	0	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-CD	1.15	527.08	2.8	F	14	21
B-AD	1.12	484.88	3.8	F	21	32
A-B					47	70
A-C					1075	1613
A-D	0.03	11.58	0.0	B	7	11
D-ABC	0.00	0.00	0.0	A	0	0
C-D					4	6
C-A					937	1405
C-B	0.08	13.45	0.1	B	19	29

### Main Results for each time segment

#### 06:45 - 07:00

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-CD	11	3	418	0.027	11	0.0	0.0	8.853	A
B-AD	17	4	146	0.118	17	0.0	0.1	27.681	D
A-B	38	10			38				
A-C	882	221			882				
A-D	6	2	400	0.015	6	0.0	0.0	9.130	A
D-ABC	0	0	251	0.000	0	0.0	0.0	0.000	A
C-D	3	0.75			3				
C-A	769	192			769				
C-B	16	4	393	0.040	16	0.0	0.0	9.532	A

#### 07:00 - 07:15

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-CD	13	3	360	0.037	13	0.0	0.0	10.379	B
B-AD	21	5	94	0.219	20	0.1	0.3	48.084	E
A-B	46	11			46				
A-C	1054	263			1054				
A-D	7	2	366	0.020	7	0.0	0.0	10.020	B
D-ABC	0	0	175	0.000	0	0.0	0.0	0.000	A
C-D	4	0.90			4				
C-A	918	229			918				
C-B	19	5	350	0.054	19	0.0	0.1	10.864	B

**07:15 - 07:30**

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-CD	17	4	14	1.151	9	0.0	1.8	527.075	F
B-AD	25	6	23	1.115	17	0.3	2.4	421.837	F
A-B	56	14			56				
A-C	1290	323			1290				
A-D	9	2	320	0.028	9	0.0	0.0	11.572	B
D-ABC	0	0	62	0.000	0	0.0	0.0	0.000	A
C-D	4	1			4				
C-A	1124	281			1124				
C-B	23	6	291	0.080	23	0.1	0.1	13.440	B

**07:30 - 07:45**

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-CD	17	4	15	1.074	13	1.8	2.8	453.162	F
B-AD	25	6	23	1.120	20	2.4	3.8	484.877	F
A-B	56	14			56				
A-C	1290	323			1290				
A-D	9	2	320	0.028	9	0.0	0.0	11.576	B
D-ABC	0	0	60	0.000	0	0.0	0.0	0.000	A
C-D	4	1			4				
C-A	1124	281			1124				
C-B	23	6	291	0.080	23	0.1	0.1	13.451	B

**07:45 - 08:00**

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-CD	13	3	332	0.041	24	2.8	0.0	12.088	B
B-AD	21	5	94	0.220	35	3.8	0.3	71.853	F
A-B	46	11			46				
A-C	1054	263			1054				
A-D	7	2	366	0.020	7	0.0	0.0	10.023	B
D-ABC	0	0	173	0.000	0	0.0	0.0	0.000	A
C-D	4	0.90			4				
C-A	918	229			918				
C-B	19	5	350	0.054	19	0.1	0.1	10.874	B

**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-CD	11	3	415	0.027	11	0.0	0.0	8.918	A
B-AD	17	4	147	0.118	18	0.3	0.1	28.144	D
A-B	38	10			38				
A-C	882	221			882				
A-D	6	2	400	0.015	6	0.0	0.0	9.134	A
D-ABC	0	0	251	0.000	0	0.0	0.0	0.000	A
C-D	3	0.75			3				
C-A	769	192			769				
C-B	16	4	393	0.040	16	0.1	0.0	9.544	A

# 2030 Opening Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		12.08	B

### 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	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1238	100.000
B		ONE HOUR	✓	73	100.000
C		ONE HOUR	✓	1054	100.000
D		ONE HOUR	✓	6	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
From		A	B	C	D
	A	0	34	1201	3
	B	43	0	30	0
	C	1043	8	0	3
	D	5	0	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	3	5	0
	B	0	0	7	0
	C	5	12	0	0
	D	0	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-CD	1.13	391.81	4.3	F	28	41
B-AD	1.11	399.96	5.6	F	39	59
A-B					31	47
A-C					1102	1653
A-D	0.01	11.17	0.0	B	3	4
D-ABC	0.04	20.05	0.0	C	6	8
C-D					3	4
C-A					957	1436
C-B	0.03	13.74	0.0	B	7	11

### Main Results for each time segment

#### 15:45 - 16:00

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-CD	23	6	425	0.053	22	0.0	0.1	8.947	A
B-AD	32	8	199	0.163	32	0.0	0.2	21.397	C
A-B	26	6			26				
A-C	904	226			904				
A-D	2	0.56	404	0.006	2	0.0	0.0	8.957	A
D-ABC	5	1	419	0.011	4	0.0	0.0	8.690	A
C-D	2	0.56			2				
C-A	785	196			785				
C-B	6	2	359	0.017	6	0.0	0.0	10.207	B

#### 16:00 - 16:15

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-CD	27	7	361	0.075	27	0.1	0.1	10.763	B
B-AD	39	10	134	0.289	38	0.2	0.4	37.265	E
A-B	31	8			31				
A-C	1080	270			1080				
A-D	3	0.67	371	0.007	3	0.0	0.0	9.769	A
D-ABC	5	1	347	0.016	5	0.0	0.0	10.540	B
C-D	3	0.67			3				
C-A	938	234			938				
C-B	7	2	322	0.022	7	0.0	0.0	11.443	B

**16:15 - 16:30**

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-CD	33	8	29	1.127	22	0.1	2.9	344.510	F
B-AD	47	12	43	1.102	35	0.4	3.6	291.829	F
A-B	37	9			37				
A-C	1322	331			1322				
A-D	3	0.83	326	0.010	3	0.0	0.0	11.169	B
D-ABC	7	2	196	0.034	7	0.0	0.0	18.977	C
C-D	3	0.83			3				
C-A	1148	287			1148				
C-B	9	2	271	0.033	9	0.0	0.0	13.738	B

**16:30 - 16:45**

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-CD	33	8	31	1.071	27	2.9	4.3	391.809	F
B-AD	47	12	43	1.107	39	3.6	5.6	399.957	F
A-B	37	9			37				
A-C	1322	331			1322				
A-D	3	0.83	326	0.010	3	0.0	0.0	11.170	B
D-ABC	7	2	186	0.035	7	0.0	0.0	20.048	C
C-D	3	0.83			3				
C-A	1148	287			1148				
C-B	9	2	271	0.033	9	0.0	0.0	13.741	B

**16:45 - 17:00**

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-CD	27	7	323	0.083	44	4.3	0.1	13.635	B
B-AD	39	10	133	0.291	59	5.6	0.4	60.880	F
A-B	31	8			31				
A-C	1080	270			1080				
A-D	3	0.67	371	0.007	3	0.0	0.0	9.772	A
D-ABC	5	1	340	0.016	5	0.0	0.0	10.750	B
C-D	3	0.67			3				
C-A	938	234			938				
C-B	7	2	322	0.022	7	0.0	0.0	11.448	B

**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-CD	23	6	422	0.054	23	0.1	0.1	9.018	A
B-AD	32	8	199	0.162	33	0.4	0.2	21.806	C
A-B	26	6			26				
A-C	904	226			904				
A-D	2	0.56	404	0.006	2	0.0	0.0	8.958	A
D-ABC	5	1	418	0.011	5	0.0	0.0	8.697	A
C-D	2	0.56			2				
C-A	785	196			785				
C-B	6	2	359	0.017	6	0.0	0.0	10.209	B

# 2035 Future Year + com dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		10.68	B

### 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
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1252	100.000
B		ONE HOUR	✓	39	100.000
C		ONE HOUR	✓	1037	100.000
D		ONE HOUR	✓	3	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	53	1191	8
	B	23	0	16	0
	C	1012	21	0	4
	D	2	0	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	2	10	0
	B	30	0	6	0
	C	8	0	0	0
	D	0	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-CD	1.32	606.55	3.4	F	15	22
B-AD	1.28	549.78	4.6	F	21	32
A-B					49	73
A-C					1093	1639
A-D	0.03	11.50	0.0	B	7	11
D-ABC	0.00	0.00	0.0	A	0	0
C-D					4	6
C-A					929	1393
C-B	0.08	13.73	0.1	B	19	29

### Main Results for each time segment

#### 06:45 - 07:00

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-CD	12	3	416	0.029	12	0.0	0.0	8.906	A
B-AD	17	4	145	0.119	17	0.0	0.1	27.948	D
A-B	40	10			40				
A-C	897	224			897				
A-D	6	2	402	0.015	6	0.0	0.0	9.096	A
D-ABC	0	0	250	0.000	0	0.0	0.0	0.000	A
C-D	3	0.75			3				
C-A	762	190			762				
C-B	16	4	389	0.041	16	0.0	0.0	9.628	A

#### 07:00 - 07:15

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-CD	14	4	357	0.040	14	0.0	0.0	10.501	B
B-AD	21	5	93	0.223	20	0.1	0.3	49.328	E
A-B	48	12			48				
A-C	1071	268			1071				
A-D	7	2	368	0.020	7	0.0	0.0	9.971	A
D-ABC	0	0	174	0.000	0	0.0	0.0	0.000	A
C-D	4	0.90			4				
C-A	910	227			910				
C-B	19	5	346	0.055	19	0.0	0.1	11.014	B

**07:15 - 07:30**

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-CD	18	4	13	1.318	9	0.0	2.1	606.551	F
B-AD	25	6	20	1.276	15	0.3	2.8	513.974	F
A-B	58	15			58				
A-C	1311	328			1311				
A-D	9	2	322	0.027	9	0.0	0.0	11.492	B
D-ABC	0	0	60	0.000	0	0.0	0.0	0.000	A
C-D	4	1			4				
C-A	1114	279			1114				
C-B	23	6	285	0.081	23	0.1	0.1	13.721	B

**07:30 - 07:45**

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-CD	18	4	14	1.243	12	2.1	3.4	477.985	F
B-AD	25	6	20	1.281	18	2.8	4.6	549.777	F
A-B	58	15			58				
A-C	1311	328			1311				
A-D	9	2	322	0.027	9	0.0	0.0	11.496	B
D-ABC	0	0	58	0.000	0	0.0	0.0	0.000	A
C-D	4	1			4				
C-A	1114	279			1114				
C-B	23	6	285	0.081	23	0.1	0.1	13.733	B

**07:45 - 08:00**

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-CD	14	4	319	0.045	28	3.4	0.0	12.935	B
B-AD	21	5	92	0.224	38	4.6	0.3	82.995	F
A-B	48	12			48				
A-C	1071	268			1071				
A-D	7	2	368	0.020	7	0.0	0.0	9.976	A
D-ABC	0	0	171	0.000	0	0.0	0.0	0.000	A
C-D	4	0.90			4				
C-A	910	227			910				
C-B	19	5	346	0.055	19	0.1	0.1	11.026	B

**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-CD	12	3	413	0.029	12	0.0	0.0	8.973	A
B-AD	17	4	145	0.119	18	0.3	0.1	28.431	D
A-B	40	10			40				
A-C	897	224			897				
A-D	6	2	402	0.015	6	0.0	0.0	9.100	A
D-ABC	0	0	250	0.000	0	0.0	0.0	0.000	A
C-D	3	0.75			3				
C-A	762	190			762				
C-B	16	4	389	0.041	16	0.1	0.0	9.640	A

# 2035 Future Year + com dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		14.12	B

### 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
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1243	100.000
B		ONE HOUR	✓	75	100.000
C		ONE HOUR	✓	1068	100.000
D		ONE HOUR	✓	6	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	35	1205	3
	B	44	0	31	0
	C	1057	8	0	3
	D	5	0	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	3	5	0
	B	0	0	7	0
	C	5	12	0	0
	D	0	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-CD	1.25	436.71	5.3	F	28	43
B-AD	1.23	469.39	7.1	F	40	61
A-B					32	48
A-C					1106	1659
A-D	0.01	11.28	0.0	B	3	4
D-ABC	0.04	21.87	0.0	C	6	8
C-D					3	4
C-A					970	1455
C-B	0.03	13.80	0.0	B	7	11

### Main Results for each time segment

#### 15:45 - 16:00

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-CD	23	6	423	0.055	23	0.0	0.1	8.993	A
B-AD	33	8	197	0.168	32	0.0	0.2	21.801	C
A-B	26	7			26				
A-C	907	227			907				
A-D	2	0.56	402	0.006	2	0.0	0.0	9.007	A
D-ABC	5	1	415	0.011	4	0.0	0.0	8.768	A
C-D	2	0.56			2				
C-A	796	199			796				
C-B	6	2	358	0.017	6	0.0	0.0	10.229	B

#### 16:00 - 16:15

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-CD	28	7	358	0.078	28	0.1	0.1	10.898	B
B-AD	40	10	131	0.302	39	0.2	0.4	38.727	E
A-B	31	8			31				
A-C	1083	271			1083				
A-D	3	0.67	368	0.007	3	0.0	0.0	9.841	A
D-ABC	5	1	342	0.016	5	0.0	0.0	10.705	B
C-D	3	0.67			3				
C-A	950	238			950				
C-B	7	2	321	0.022	7	0.0	0.0	11.476	B

**16:15 - 16:30**

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-CD	34	9	27	1.252	21	0.1	3.3	398.464	F
B-AD	48	12	40	1.223	33	0.4	4.3	346.809	F
A-B	39	10			39				
A-C	1327	332			1327				
A-D	3	0.83	322	0.010	3	0.0	0.0	11.284	B
D-ABC	7	2	184	0.036	7	0.0	0.0	20.272	C
C-D	3	0.83			3				
C-A	1164	291			1164				
C-B	9	2	270	0.033	9	0.0	0.0	13.797	B

**16:30 - 16:45**

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-CD	34	9	29	1.194	26	3.3	5.3	436.710	F
B-AD	48	12	39	1.227	37	4.3	7.1	469.388	F
A-B	39	10			39				
A-C	1327	332			1327				
A-D	3	0.83	322	0.010	3	0.0	0.0	11.285	B
D-ABC	7	2	171	0.039	7	0.0	0.0	21.869	C
C-D	3	0.83			3				
C-A	1164	291			1164				
C-B	9	2	270	0.033	9	0.0	0.0	13.800	B

**16:45 - 17:00**

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-CD	28	7	303	0.092	49	5.3	0.1	15.297	C
B-AD	40	10	130	0.305	66	7.1	0.5	76.065	F
A-B	31	8			31				
A-C	1083	271			1083				
A-D	3	0.67	368	0.007	3	0.0	0.0	9.844	A
D-ABC	5	1	333	0.016	5	0.0	0.0	10.983	B
C-D	3	0.67			3				
C-A	950	238			950				
C-B	7	2	321	0.022	7	0.0	0.0	11.479	B

**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-CD	23	6	421	0.055	24	0.1	0.1	9.071	A
B-AD	33	8	197	0.168	34	0.5	0.2	22.261	C
A-B	26	7			26				
A-C	907	227			907				
A-D	2	0.56	402	0.006	2	0.0	0.0	9.008	A
D-ABC	5	1	415	0.011	5	0.0	0.0	8.777	A
C-D	2	0.56			2				
C-A	796	199			796				
C-B	6	2	358	0.017	6	0.0	0.0	10.234	B

# 2035 Future Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		41.58	E

### 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
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	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		ONE HOUR	✓	1268	100.000
B		ONE HOUR	✓	39	100.000
C		ONE HOUR	✓	1075	100.000
D		ONE HOUR	✓	3	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
From		A	B	C	D
	A	0	53	1207	8
	B	23	0	16	0
	C	1050	21	0	4
	D	2	0	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To				
	A	B	C	D	
A	0	2	10	0	
B	30	0	6	0	
C	8	0	0	0	
D	0	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-CD	2.27	2398.21	5.5	F	15	22
B-AD	2.20	2236.23	7.8	F	21	32
A-B					49	73
A-C					1108	1661
A-D	0.03	11.84	0.0	B	7	11
D-ABC	0.00	0.00	0.0	A	0	0
C-D					4	6
C-A					963	1445
C-B	0.08	13.96	0.1	B	19	29

### Main Results for each time segment

#### 06:45 - 07:00

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-CD	12	3	412	0.029	12	0.0	0.0	8.985	A
B-AD	17	4	139	0.124	17	0.0	0.1	29.246	D
A-B	40	10			40				
A-C	909	227			909				
A-D	6	2	395	0.015	6	0.0	0.0	9.242	A
D-ABC	0	0	240	0.000	0	0.0	0.0	0.000	A
C-D	3	0.75			3				
C-A	790	198			790				
C-B	16	4	387	0.041	16	0.0	0.0	9.703	A

#### 07:00 - 07:15

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-CD	14	4	351	0.041	14	0.0	0.0	10.698	B
B-AD	21	5	86	0.241	20	0.1	0.3	54.290	F
A-B	48	12			48				
A-C	1085	271			1085				
A-D	7	2	361	0.020	7	0.0	0.0	10.182	B
D-ABC	0	0	161	0.000	0	0.0	0.0	0.000	A
C-D	4	0.90			4				
C-A	944	236			944				
C-B	19	5	342	0.055	19	0.0	0.1	11.127	B

**07:15 - 07:30**

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-CD	18	4	8	2.274	6	0.0	3.0	1000.009	F
B-AD	25	6	12	2.194	10	0.3	4.2	944.959	F
A-B	58	15			58				
A-C	1329	332			1329				
A-D	9	2	313	0.028	9	0.0	0.0	11.839	B
D-ABC	0	0	43	0.000	0	0.0	0.0	0.000	A
C-D	4	1			4				
C-A	1156	289			1156				
C-B	23	6	281	0.082	23	0.1	0.1	13.946	B

**07:30 - 07:45**

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-CD	18	4	8	2.187	8	3.0	5.5	2398.210	F
B-AD	25	6	11	2.204	11	4.2	7.8	2236.230	F
A-B	58	15			58				
A-C	1329	332			1329				
A-D	9	2	313	0.028	9	0.0	0.0	11.843	B
D-ABC	0	0	40	0.000	0	0.0	0.0	0.000	A
C-D	4	1			4				
C-A	1156	289			1156				
C-B	23	6	281	0.082	23	0.1	0.1	13.957	B

**07:45 - 08:00**

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-CD	14	4	257	0.056	36	5.5	0.1	17.905	C
B-AD	21	5	85	0.243	50	7.8	0.4	154.183	F
A-B	48	12			48				
A-C	1085	271			1085				
A-D	7	2	361	0.020	7	0.0	0.0	10.187	B
D-ABC	0	0	157	0.000	0	0.0	0.0	0.000	A
C-D	4	0.90			4				
C-A	944	236			944				
C-B	19	5	342	0.055	19	0.1	0.1	11.141	B

**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-CD	12	3	409	0.029	12	0.1	0.0	9.067	A
B-AD	17	4	140	0.124	18	0.4	0.1	29.855	D
A-B	40	10			40				
A-C	909	227			909				
A-D	6	2	395	0.015	6	0.0	0.0	9.248	A
D-ABC	0	0	240	0.000	0	0.0	0.0	0.000	A
C-D	3	0.75			3				
C-A	790	198			790				
C-B	16	4	386	0.041	16	0.1	0.0	9.715	A

# 2035 Future Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		28.11	D

### 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
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	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		ONE HOUR	✓	1274	100.000
B		ONE HOUR	✓	75	100.000
C		ONE HOUR	✓	1084	100.000
D		ONE HOUR	✓	6	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
From		A	B	C	D
	A	0	35	1236	3
	B	44	0	31	0
	C	1073	8	0	3
	D	5	0	1	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	3	5	0
	B	0	0	7	0
	C	5	12	0	0
	D	0	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-CD	1.70	1298.21	8.0	F	28	43
B-AD	1.66	648.41	11.1	F	40	61
A-B					32	48
A-C					1134	1701
A-D	0.01	11.42	0.0	B	3	4
D-ABC	0.05	27.62	0.0	D	6	8
C-D					3	4
C-A					985	1477
C-B	0.03	14.18	0.0	B	7	11

### Main Results for each time segment

#### 15:45 - 16:00

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-CD	23	6	417	0.056	23	0.0	0.1	9.139	A
B-AD	33	8	189	0.175	32	0.0	0.2	22.801	C
A-B	26	7			26				
A-C	931	233			931				
A-D	2	0.56	399	0.006	2	0.0	0.0	9.065	A
D-ABC	5	1	409	0.011	4	0.0	0.0	8.899	A
C-D	2	0.56			2				
C-A	808	202			808				
C-B	6	2	353	0.017	6	0.0	0.0	10.369	B

#### 16:00 - 16:15

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-CD	28	7	347	0.080	28	0.1	0.1	11.263	B
B-AD	40	10	122	0.324	39	0.2	0.4	42.628	E
A-B	31	8			31				
A-C	1111	278			1111				
A-D	3	0.67	365	0.007	3	0.0	0.0	9.924	A
D-ABC	5	1	332	0.016	5	0.0	0.0	11.011	B
C-D	3	0.67			3				
C-A	965	241			965				
C-B	7	2	315	0.023	7	0.0	0.0	11.688	B

**16:15 - 16:30**

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-CD	34	9	20	1.704	17	0.1	4.5	628.514	F
B-AD	48	12	29	1.660	26	0.4	6.1	573.172	F
A-B	39	10			39				
A-C	1361	340			1361				
A-D	3	0.83	319	0.010	3	0.0	0.0	11.419	B
D-ABC	7	2	158	0.042	7	0.0	0.0	23.727	C
C-D	3	0.83			3				
C-A	1181	295			1181				
C-B	9	2	263	0.034	9	0.0	0.0	14.175	B

**16:30 - 16:45**

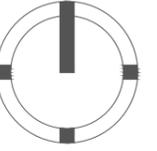
Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	34	9	21	1.641	20	4.5	8.0	1298.214	F
B-AD	48	12	29	1.665	28	6.1	11.1	648.405	F
A-B	39	10			39				
A-C	1361	340			1361				
A-D	3	0.83	319	0.010	3	0.0	0.0	11.419	B
D-ABC	7	2	137	0.048	7	0.0	0.0	27.617	D
C-D	3	0.83			3				
C-A	1181	295			1181				
C-B	9	2	263	0.034	9	0.0	0.0	14.178	B

**16:45 - 17:00**

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-CD	28	7	229	0.122	59	8.0	0.1	25.401	D
B-AD	40	10	119	0.331	82	11.1	0.6	152.953	F
A-B	31	8			31				
A-C	1111	278			1111				
A-D	3	0.67	365	0.007	3	0.0	0.0	9.925	A
D-ABC	5	1	318	0.017	6	0.0	0.0	11.512	B
C-D	3	0.67			3				
C-A	965	241			965				
C-B	7	2	315	0.023	7	0.0	0.0	11.691	B

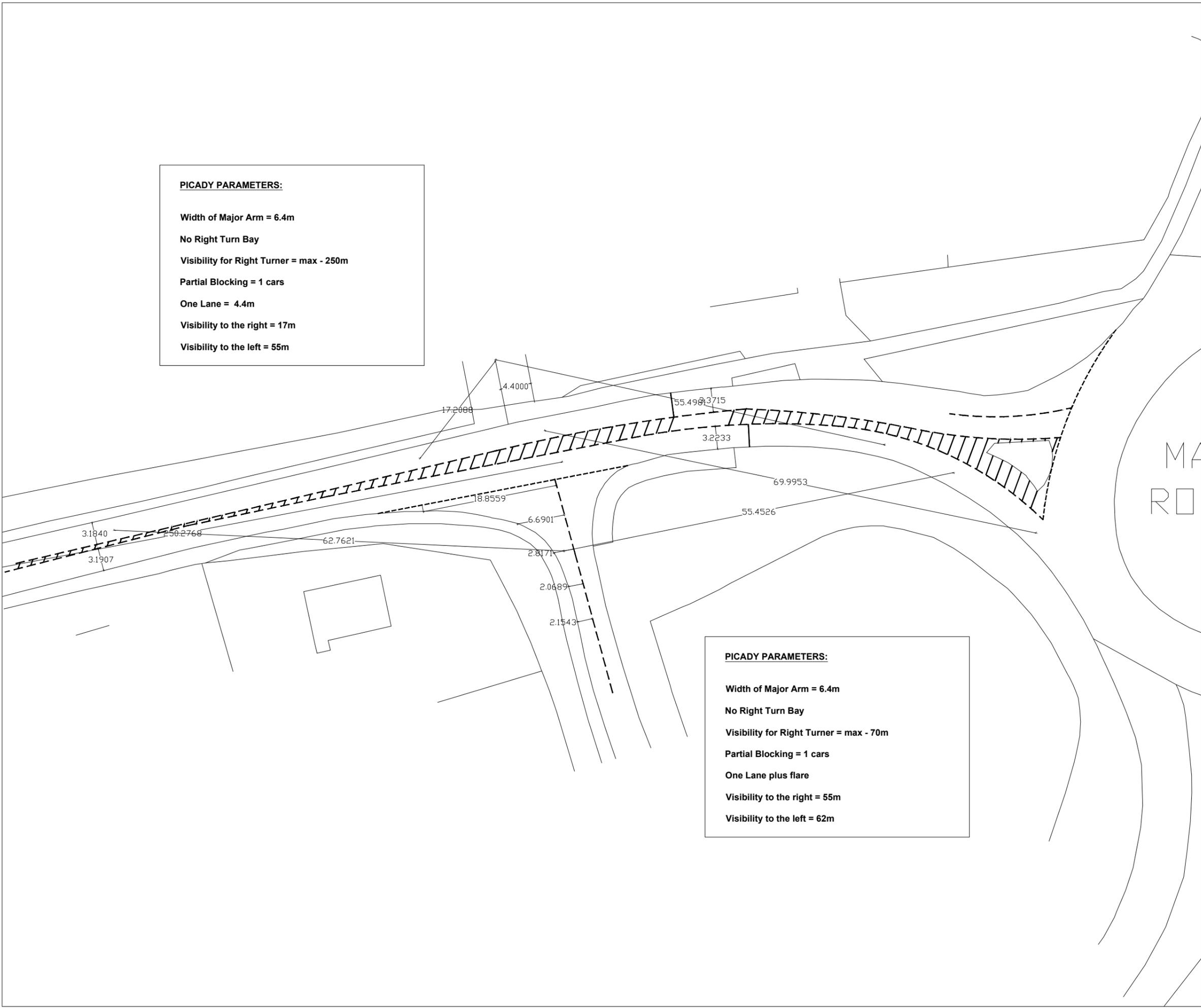
**17:00 - 17:15**

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-CD	23	6	414	0.056	24	0.1	0.1	9.238	A
B-AD	33	8	190	0.175	35	0.6	0.2	23.405	C
A-B	26	7			26				
A-C	931	233			931				
A-D	2	0.56	399	0.006	2	0.0	0.0	9.066	A
D-ABC	5	1	409	0.011	5	0.0	0.0	8.910	A
C-D	2	0.56			2				
C-A	808	202			808				
C-B	6	2	353	0.017	6	0.0	0.0	10.372	B



**PICADY PARAMETERS:**

- Width of Major Arm = 6.4m
- No Right Turn Bay
- Visibility for Right Turner = max - 250m
- Partial Blocking = 1 cars
- One Lane = 4.4m
- Visibility to the right = 17m
- Visibility to the left = 55m



**PICADY PARAMETERS:**

- Width of Major Arm = 6.4m
- No Right Turn Bay
- Visibility for Right Turner = max - 70m
- Partial Blocking = 1 cars
- One Lane plus flare
- Visibility to the right = 55m
- Visibility to the left = 62m

**NOTE:**  
Based on Topographical Survey.  
Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval.  
Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd.  
These drawings are intended for planning application purposes only, they are not to be used for construction.



Client	
<b>TEY GARDENS LLP</b>	
Project	
<b>TEY GARDENS, LITTLE TEY</b>	
Title	
<b>JUNCTION 5a - EXISTING PICADY MEASUREMENTS</b>	
Drawn	Checked
<b>A FIRMIN</b>	<b>AF</b>
Scale	Date
<b>1:1000 @ A3</b>	<b>MAY 2025</b>
Drawing No.	
-	

# APPENDIX K

---

JUNCTION 5B ARCADY OUTPUT

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
<b>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</b>

**Filename:** Junction 5b Existing.j9

**Path:** C:\Users\Andrew FTP\Firmin Transport Planning\FTP Cloud - Company FTP\Drawings\2025\2503.09 - Tey Gardens, Little Tey\Junction Capacity Modelling

**Report generation date:** 14/05/2025 10:53:45

- 
- »2025 Base, AM Peak Hour
  - »2025 Base, PM Peak Hour
  - »2030 Opening Year + com dev, AM Peak Hour
  - »2030 Opening Year + com dev, PM Peak Hour
  - »2030 Opening Year + com + proposed dev, AM Peak Hour
  - »2030 Opening Year + com + proposed dev, PM Peak Hour
  - »2035 Future Year + com dev, AM Peak Hour
  - »2035 Future Year + com dev, PM Peak Hour
  - »2035 Future Year + com + proposed dev, AM Peak Hour
  - »2035 Future Year + com + proposed dev, PM Peak Hour

## Summary of junction performance

	AM Peak Hour					PM Peak Hour				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
<b>2025 Base</b>										
Arm 1	D1	1.9	4.84	0.65	A	D2	1.4	3.98	0.59	A
Arm 2		0.2	3.75	0.20	A		0.3	3.53	0.24	A
Arm 3		3.3	11.59	0.77	B		4.3	14.03	0.82	B
Arm 4		0.3	5.03	0.21	A		0.2	5.28	0.16	A
<b>2030 Opening Year + com dev</b>										
Arm 1	D3	2.0	5.11	0.67	A	D4	1.6	4.17	0.61	A
Arm 2		0.3	3.86	0.21	A		0.3	3.67	0.26	A
Arm 3		4.0	13.37	0.80	B		5.3	16.73	0.85	C
Arm 4		0.3	5.22	0.22	A		0.2	5.48	0.17	A
<b>2030 Opening Year + com + proposed dev</b>										
Arm 1	D5	2.1	5.22	0.68	A	D6	1.6	4.32	0.62	A
Arm 2		0.3	3.91	0.21	A		0.4	3.74	0.26	A
Arm 3		4.8	15.76	0.83	C		5.8	18.15	0.86	C
Arm 4		0.3	5.39	0.22	A		0.2	5.56	0.17	A
<b>2035 Future Year + com dev</b>										
Arm 1	D7	2.2	5.44	0.69	A	D8	1.7	4.38	0.63	A
Arm 2		0.3	4.01	0.22	A		0.4	3.78	0.27	A
Arm 3		4.7	15.53	0.83	C		6.6	20.35	0.88	C
Arm 4		0.3	5.42	0.23	A		0.2	5.70	0.18	A
<b>2035 Future Year + com + proposed dev</b>										
Arm 1	D9	2.3	5.57	0.70	A	D10	1.7	4.43	0.64	A
Arm 2		0.3	4.05	0.23	A		0.4	3.83	0.27	A
Arm 3		5.5	17.71	0.85	C		7.3	22.39	0.89	C
Arm 4		0.3	5.56	0.23	A		0.2	5.78	0.18	A

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

## File summary

### File Description

Title	Junction 5b Existing
Location	Marks Tey Roundabout
Site number	5b
Date	14/05/2025
Version	
Status	Existing
Identifier	
Client	Tey Gardens
Jobnumber	2503.09
Enumerator	Andrew FTP
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

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2025 Base, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.25	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description
1	A120 East	
2	A12 Off-slip	
3	A120 West	
4	Station Road	

### Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	7.30	7.30	0.0	96.0	68.0	24.0	
2	7.00	7.00	0.0	81.0	68.0	15.0	
3	3.75	7.60	8.8	28.0	68.0	23.0	
4	3.30	7.10	11.0	14.5	68.0	24.0	

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.632	2344
2	0.634	2310
3	0.522	1684
4	0.491	1550

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)
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1268	100.000
2		✓	218	100.000
3		✓	961	100.000
4		✓	168	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From	To			
	1	2	3	4
1	58	0	1082	128
2	115	0	71	32
3	932	0	1	28
4	125	0	43	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To			
	1	2	3	4
1	9	0	9	0
2	5	0	23	0
3	9	0	0	0
4	0	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.65	4.84	1.9	A
2	0.20	3.75	0.2	A
3	0.77	11.59	3.3	B
4	0.21	5.03	0.3	A

### Main Results for each time segment

#### 06:45 - 07:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	955	33	2149	0.444	951	0.8	2.999	A
2	164	984	1486	0.110	164	0.1	2.722	A
3	723	250	1425	0.508	719	1.0	5.070	A
4	126	828	1108	0.114	126	0.1	3.662	A

**07:00 - 07:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1140	40	2145	0.531	1139	1.1	3.572	A
2	196	1178	1366	0.143	196	0.2	3.076	A
3	864	299	1401	0.617	862	1.6	6.647	A
4	151	992	1021	0.148	151	0.2	4.135	A

**07:15 - 07:30**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1396	48	2140	0.652	1393	1.8	4.803	A
2	240	1442	1203	0.200	240	0.2	3.739	A
3	1058	366	1368	0.774	1051	3.2	11.146	B
4	185	1211	904	0.205	185	0.3	5.000	A

**07:30 - 07:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1396	48	2140	0.652	1396	1.9	4.840	A
2	240	1444	1201	0.200	240	0.2	3.746	A
3	1058	367	1368	0.774	1058	3.3	11.587	B
4	185	1217	901	0.205	185	0.3	5.028	A

**07:45 - 08:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1140	40	2145	0.531	1143	1.1	3.601	A
2	196	1182	1363	0.144	196	0.2	3.084	A
3	864	300	1401	0.617	871	1.6	6.877	A
4	151	1001	1016	0.149	151	0.2	4.165	A

**08:00 - 08:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	955	33	2149	0.444	956	0.8	3.023	A
2	164	989	1483	0.111	164	0.1	2.731	A
3	723	251	1425	0.508	726	1.0	5.167	A
4	126	835	1105	0.114	127	0.1	3.683	A

# 2025 Base, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.95	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)
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1189	100.000
2		✓	298	100.000
3		✓	1043	100.000
4		✓	120	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1	2	3	4
From	1	84	0	1048	57
	2	169	0	85	44
	3	1020	0	1	22
	4	91	0	29	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	5	0	5	4
	2	5	0	8	0
	3	5	0	100	0
	4	2	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.59	3.98	1.4	A
2	0.24	3.53	0.3	A
3	0.82	14.03	4.3	B
4	0.16	5.28	0.2	A

### Main Results for each time segment

#### 15:45 - 16:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	895	22	2219	0.403	892	0.7	2.708	A
2	224	915	1618	0.139	224	0.2	2.580	A
3	785	266	1467	0.535	781	1.1	5.213	A
4	90	954	1042	0.087	90	0.1	3.779	A

#### 16:00 - 16:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1069	27	2216	0.482	1068	0.9	3.132	A
2	268	1095	1504	0.178	268	0.2	2.910	A
3	938	318	1440	0.651	935	1.8	7.089	A
4	108	1142	946	0.114	108	0.1	4.294	A

#### 16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1309	33	2212	0.592	1307	1.4	3.967	A
2	328	1340	1349	0.243	328	0.3	3.521	A
3	1148	389	1403	0.819	1139	4.2	13.186	B
4	132	1393	819	0.161	132	0.2	5.240	A

#### 16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1309	33	2212	0.592	1309	1.4	3.984	A
2	328	1342	1348	0.243	328	0.3	3.528	A
3	1148	390	1403	0.819	1148	4.3	14.033	B
4	132	1402	814	0.162	132	0.2	5.278	A

#### 16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1069	27	2216	0.482	1071	0.9	3.150	A
2	268	1098	1502	0.178	268	0.2	2.919	A
3	938	319	1439	0.651	947	1.9	7.454	A
4	108	1155	940	0.115	108	0.1	4.331	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	895	23	2219	0.403	896	0.7	2.725	A
2	224	919	1616	0.139	225	0.2	2.587	A
3	785	267	1466	0.536	788	1.2	5.331	A
4	90	962	1038	0.087	90	0.1	3.802	A

# 2030 Opening Year + com dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	8.08	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)
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1304	100.000
2		✓	226	100.000
3		✓	995	100.000
4		✓	172	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1	2	3	4
From	1	60	0	1113	131
	2	118	0	75	33
	3	965	0	1	29
	4	128	0	44	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	8	0	9	0
	2	5	0	21	0
	3	9	0	0	0
	4	0	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.67	5.11	2.0	A
2	0.21	3.86	0.3	A
3	0.80	13.37	4.0	B
4	0.22	5.22	0.3	A

### Main Results for each time segment

#### 06:45 - 07:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	982	34	2149	0.457	978	0.8	3.065	A
2	170	1012	1477	0.115	170	0.1	2.752	A
3	749	257	1422	0.527	745	1.1	5.280	A
4	129	857	1094	0.118	129	0.1	3.730	A

#### 07:00 - 07:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1172	40	2145	0.546	1171	1.2	3.690	A
2	203	1211	1352	0.150	203	0.2	3.131	A
3	894	307	1397	0.640	892	1.7	7.086	A
4	155	1026	1003	0.154	154	0.2	4.239	A

#### 07:15 - 07:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1436	49	2140	0.671	1432	2.0	5.064	A
2	249	1482	1184	0.210	248	0.3	3.849	A
3	1096	376	1363	0.804	1087	3.8	12.667	B
4	189	1251	883	0.214	189	0.3	5.184	A

#### 07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1436	50	2140	0.671	1436	2.0	5.111	A
2	249	1485	1182	0.211	249	0.3	3.859	A
3	1096	377	1363	0.804	1095	4.0	13.367	B
4	189	1259	879	0.215	189	0.3	5.220	A

#### 07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1172	41	2145	0.546	1175	1.2	3.723	A
2	203	1216	1349	0.151	204	0.2	3.144	A
3	894	308	1397	0.640	903	1.8	7.414	A
4	155	1037	997	0.155	155	0.2	4.276	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	982	34	2149	0.457	983	0.8	3.090	A
2	170	1017	1473	0.115	170	0.1	2.762	A
3	749	258	1422	0.527	752	1.1	5.396	A
4	129	864	1090	0.119	130	0.1	3.753	A

# 2030 Opening Year + com dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	9.13	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)
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1226	100.000
2		✓	309	100.000
3		✓	1077	100.000
4		✓	123	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1	2	3	4
From	1	86	0	1081	59
	2	174	0	90	45
	3	1053	0	1	23
	4	93	0	30	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	5	0	5	3
	2	5	0	8	0
	3	5	0	97	0
	4	2	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.61	4.17	1.6	A
2	0.26	3.67	0.3	A
3	0.85	16.73	5.3	C
4	0.17	5.48	0.2	A

### Main Results for each time segment

#### 15:45 - 16:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	923	23	2220	0.416	920	0.7	2.765	A
2	233	943	1600	0.145	232	0.2	2.629	A
3	811	273	1463	0.554	806	1.2	5.437	A
4	93	984	1027	0.090	92	0.1	3.850	A

#### 16:00 - 16:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1102	28	2217	0.497	1101	1.0	3.224	A
2	278	1129	1483	0.187	278	0.2	2.986	A
3	968	327	1435	0.674	965	2.0	7.599	A
4	111	1178	928	0.119	110	0.1	4.402	A

#### 16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1350	34	2213	0.610	1348	1.5	4.149	A
2	340	1382	1323	0.257	340	0.3	3.658	A
3	1186	400	1398	0.848	1174	5.0	15.305	C
4	135	1435	798	0.170	135	0.2	5.430	A

#### 16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1350	34	2213	0.610	1350	1.6	4.171	A
2	340	1384	1322	0.257	340	0.3	3.667	A
3	1186	401	1397	0.849	1185	5.3	16.732	C
4	135	1446	792	0.171	135	0.2	5.482	A

#### 16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1102	28	2217	0.497	1104	1.0	3.244	A
2	278	1132	1481	0.188	278	0.2	2.994	A
3	968	328	1435	0.675	981	2.1	8.137	A
4	111	1194	920	0.120	111	0.1	4.450	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	923	23	2219	0.416	924	0.7	2.780	A
2	233	947	1598	0.146	233	0.2	2.637	A
3	811	274	1463	0.554	814	1.3	5.583	A
4	93	993	1022	0.091	93	0.1	3.874	A

# 2030 Opening Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	9.11	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)
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1318	100.000
2		✓	228	100.000
3		✓	1033	100.000
4		✓	172	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1	2	3	4
From	1	60	0	1127	131
	2	118	0	77	33
	3	1003	0	1	29
	4	128	0	44	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	8	0	9	0
	2	5	0	21	0
	3	9	0	0	0
	4	0	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.68	5.22	2.1	A
2	0.21	3.91	0.3	A
3	0.83	15.76	4.8	C
4	0.22	5.39	0.3	A

### Main Results for each time segment

#### 06:45 - 07:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	992	34	2149	0.462	989	0.9	3.094	A
2	172	1023	1469	0.117	171	0.1	2.772	A
3	778	257	1422	0.547	773	1.2	5.507	A
4	129	885	1078	0.120	129	0.1	3.789	A

#### 07:00 - 07:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1185	40	2145	0.552	1183	1.2	3.739	A
2	205	1224	1343	0.153	205	0.2	3.161	A
3	929	307	1397	0.665	926	1.9	7.586	A
4	155	1060	985	0.157	154	0.2	4.331	A

#### 07:15 - 07:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1451	49	2140	0.678	1448	2.1	5.175	A
2	251	1497	1173	0.214	251	0.3	3.900	A
3	1137	376	1363	0.834	1127	4.6	14.603	B
4	189	1291	862	0.220	189	0.3	5.347	A

#### 07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1451	50	2140	0.678	1451	2.1	5.225	A
2	251	1501	1171	0.214	251	0.3	3.913	A
3	1137	377	1363	0.835	1137	4.8	15.763	C
4	189	1301	857	0.221	189	0.3	5.394	A

**07:45 - 08:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1185	41	2145	0.552	1188	1.2	3.777	A
2	205	1229	1340	0.153	205	0.2	3.174	A
3	929	308	1397	0.665	940	2.0	8.062	A
4	155	1074	978	0.158	155	0.2	4.377	A

**08:00 - 08:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	992	34	2149	0.462	994	0.9	3.119	A
2	172	1028	1465	0.117	172	0.1	2.784	A
3	778	258	1421	0.547	781	1.2	5.647	A
4	129	893	1074	0.121	130	0.1	3.815	A

# 2030 Opening Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	9.75	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)
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1253	100.000
2		✓	313	100.000
3		✓	1093	100.000
4		✓	123	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1	2	3	4
From	1	86	0	1108	59
	2	174	0	94	45
	3	1069	0	1	23
	4	93	0	30	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	5	0	5	3
	2	5	0	7	0
	3	5	0	97	0
	4	2	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.62	4.32	1.6	A
2	0.26	3.74	0.4	A
3	0.86	18.15	5.8	C
4	0.17	5.56	0.2	A

### Main Results for each time segment

#### 15:45 - 16:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	943	23	2220	0.425	940	0.7	2.809	A
2	236	964	1591	0.148	235	0.2	2.652	A
3	823	273	1463	0.562	818	1.3	5.535	A
4	93	996	1021	0.091	92	0.1	3.875	A

#### 16:00 - 16:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1126	28	2217	0.508	1125	1.0	3.295	A
2	281	1153	1471	0.191	281	0.2	3.024	A
3	983	327	1436	0.684	979	2.1	7.830	A
4	111	1192	921	0.120	110	0.1	4.441	A

#### 16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1380	34	2213	0.623	1377	1.6	4.294	A
2	345	1411	1308	0.264	344	0.4	3.734	A
3	1203	400	1398	0.861	1190	5.5	16.354	C
4	135	1451	789	0.172	135	0.2	5.499	A

#### 16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1380	34	2213	0.623	1380	1.6	4.320	A
2	345	1414	1306	0.264	345	0.4	3.743	A
3	1203	401	1397	0.861	1202	5.8	18.147	C
4	135	1463	783	0.173	135	0.2	5.557	A

**16:45 - 17:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1126	28	2217	0.508	1129	1.0	3.316	A
2	281	1157	1469	0.192	282	0.2	3.035	A
3	983	328	1435	0.685	997	2.2	8.471	A
4	111	1210	912	0.121	111	0.1	4.495	A

**17:00 - 17:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	943	23	2219	0.425	945	0.7	2.827	A
2	236	968	1589	0.148	236	0.2	2.663	A
3	823	274	1463	0.563	827	1.3	5.693	A
4	93	1005	1016	0.091	93	0.1	3.900	A

# 2035 Future Year + com dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	9.07	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)
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1342	100.000
2		✓	233	100.000
3		✓	1025	100.000
4		✓	177	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1	2	3	4
From	1	61	0	1146	135
	2	122	0	77	34
	3	994	0	1	30
	4	132	0	45	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	8	0	9	0
	2	5	0	21	0
	3	9	0	0	0
	4	0	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.69	5.44	2.2	A
2	0.22	4.01	0.3	A
3	0.83	15.53	4.7	C
4	0.23	5.42	0.3	A

### Main Results for each time segment

#### 06:45 - 07:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1010	34	2149	0.470	1007	0.9	3.144	A
2	175	1041	1459	0.120	175	0.1	2.802	A
3	772	264	1419	0.544	767	1.2	5.486	A
4	133	882	1080	0.123	133	0.1	3.798	A

#### 07:00 - 07:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1206	41	2145	0.562	1205	1.3	3.823	A
2	209	1246	1331	0.157	209	0.2	3.209	A
3	921	316	1393	0.662	919	1.9	7.543	A
4	159	1056	987	0.161	159	0.2	4.345	A

#### 07:15 - 07:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1478	51	2139	0.691	1474	2.2	5.379	A
2	257	1524	1157	0.222	256	0.3	3.992	A
3	1129	387	1358	0.831	1118	4.5	14.424	B
4	195	1287	864	0.225	194	0.3	5.370	A

#### 07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1478	51	2139	0.691	1477	2.2	5.437	A
2	257	1528	1155	0.222	257	0.3	4.006	A
3	1129	388	1357	0.831	1128	4.7	15.531	C
4	195	1296	859	0.227	195	0.3	5.419	A

#### 07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1206	41	2145	0.563	1210	1.3	3.867	A
2	209	1252	1328	0.158	210	0.2	3.223	A
3	921	317	1392	0.662	932	2.0	8.001	A
4	159	1070	980	0.162	160	0.2	4.391	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1010	35	2149	0.470	1012	0.9	3.173	A
2	175	1047	1455	0.121	176	0.1	2.815	A
3	772	265	1418	0.544	775	1.2	5.627	A
4	133	890	1076	0.124	133	0.1	3.820	A

# 2035 Future Year + com dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	10.67	B

### 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)
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1262	100.000
2		✓	319	100.000
3		✓	1109	100.000
4		✓	127	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1	2	3	4
From	1	89	0	1113	60
	2	179	0	93	47
	3	1085	0	1	23
	4	96	0	31	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	5	0	5	3
	2	4	0	8	0
	3	5	0	95	0
	4	2	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.63	4.38	1.7	A
2	0.27	3.78	0.4	A
3	0.88	20.35	6.6	C
4	0.18	5.70	0.2	A

### Main Results for each time segment

#### 15:45 - 16:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	950	24	2219	0.428	947	0.7	2.825	A
2	240	971	1591	0.151	239	0.2	2.661	A
3	835	281	1460	0.572	830	1.3	5.669	A
4	96	1014	1012	0.094	95	0.1	3.923	A

#### 16:00 - 16:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1135	29	2216	0.512	1133	1.0	3.322	A
2	287	1162	1470	0.195	287	0.2	3.042	A
3	997	337	1431	0.697	993	2.2	8.152	A
4	114	1213	911	0.125	114	0.1	4.516	A

#### 16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1389	35	2212	0.628	1387	1.7	4.349	A
2	351	1422	1305	0.269	351	0.4	3.772	A
3	1221	412	1392	0.877	1205	6.1	17.914	C
4	140	1475	778	0.180	140	0.2	5.635	A

#### 16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1389	35	2212	0.628	1389	1.7	4.375	A
2	351	1425	1303	0.270	351	0.4	3.781	A
3	1221	413	1392	0.877	1219	6.6	20.349	C
4	140	1489	771	0.181	140	0.2	5.703	A

#### 16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1135	29	2216	0.512	1137	1.1	3.345	A
2	287	1166	1467	0.195	287	0.2	3.053	A
3	997	338	1431	0.697	1014	2.4	8.960	A
4	114	1234	900	0.127	114	0.1	4.581	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	950	24	2219	0.428	951	0.8	2.841	A
2	240	975	1588	0.151	240	0.2	2.670	A
3	835	283	1459	0.572	839	1.4	5.844	A
4	96	1024	1007	0.095	96	0.1	3.949	A

# 2035 Future Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	10.01	B

### 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)
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1356	100.000
2		✓	235	100.000
3		✓	1063	100.000
4		✓	177	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1	2	3	4
From	1	61	0	1160	135
	2	122	0	79	34
	3	1032	0	1	30
	4	132	0	45	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	8	0	9	0
	2	5	0	20	0
	3	8	0	0	0
	4	0	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.70	5.57	2.3	A
2	0.23	4.05	0.3	A
3	0.85	17.71	5.5	C
4	0.23	5.56	0.3	A

### Main Results for each time segment

#### 06:45 - 07:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1021	34	2149	0.475	1017	0.9	3.171	A
2	177	1052	1455	0.122	176	0.1	2.813	A
3	800	264	1431	0.559	795	1.3	5.618	A
4	133	910	1069	0.125	133	0.1	3.843	A

#### 07:00 - 07:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1219	41	2145	0.568	1217	1.3	3.875	A
2	211	1259	1326	0.159	211	0.2	3.228	A
3	956	316	1405	0.680	952	2.1	7.890	A
4	159	1090	974	0.163	159	0.2	4.417	A

#### 07:15 - 07:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1493	51	2139	0.698	1489	2.3	5.504	A
2	259	1540	1150	0.225	258	0.3	4.034	A
3	1170	387	1370	0.854	1158	5.2	16.071	C
4	195	1326	849	0.230	194	0.3	5.499	A

#### 07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1493	51	2139	0.698	1493	2.3	5.568	A
2	259	1544	1148	0.225	259	0.3	4.048	A
3	1170	388	1370	0.855	1169	5.5	17.710	C
4	195	1338	843	0.231	195	0.3	5.558	A

**07:45 - 08:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1219	41	2145	0.568	1223	1.3	3.921	A
2	211	1264	1322	0.160	212	0.2	3.243	A
3	956	317	1405	0.680	969	2.2	8.500	A
4	159	1106	965	0.165	160	0.2	4.472	A

**08:00 - 08:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1021	35	2149	0.475	1023	0.9	3.203	A
2	177	1057	1452	0.122	177	0.1	2.826	A
3	800	265	1431	0.559	804	1.3	5.776	A
4	133	919	1064	0.125	133	0.1	3.871	A

# 2035 Future Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	11.52	B

### 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)
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1289	100.000
2		✓	323	100.000
3		✓	1125	100.000
4		✓	127	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1	2	3	4
From	1	89	0	1140	60
	2	179	0	97	47
	3	1101	0	1	23
	4	96	0	31	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	5	0	4	3
	2	4	0	7	0
	3	5	0	95	0
	4	2	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.64	4.43	1.7	A
2	0.27	3.83	0.4	A
3	0.89	22.39	7.3	C
4	0.18	5.78	0.2	A

### Main Results for each time segment

#### 15:45 - 16:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	970	24	2238	0.434	967	0.8	2.826	A
2	243	991	1587	0.153	242	0.2	2.675	A
3	847	281	1460	0.580	842	1.4	5.773	A
4	96	1025	1006	0.095	95	0.1	3.949	A

#### 16:00 - 16:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1159	29	2235	0.518	1158	1.1	3.339	A
2	290	1186	1464	0.198	290	0.2	3.065	A
3	1011	337	1431	0.707	1007	2.3	8.416	A
4	114	1228	904	0.126	114	0.1	4.557	A

#### 16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1419	35	2231	0.636	1417	1.7	4.406	A
2	356	1452	1297	0.274	355	0.4	3.822	A
3	1239	412	1392	0.890	1221	6.7	19.280	C
4	140	1491	770	0.182	140	0.2	5.706	A

#### 16:30 - 16:45

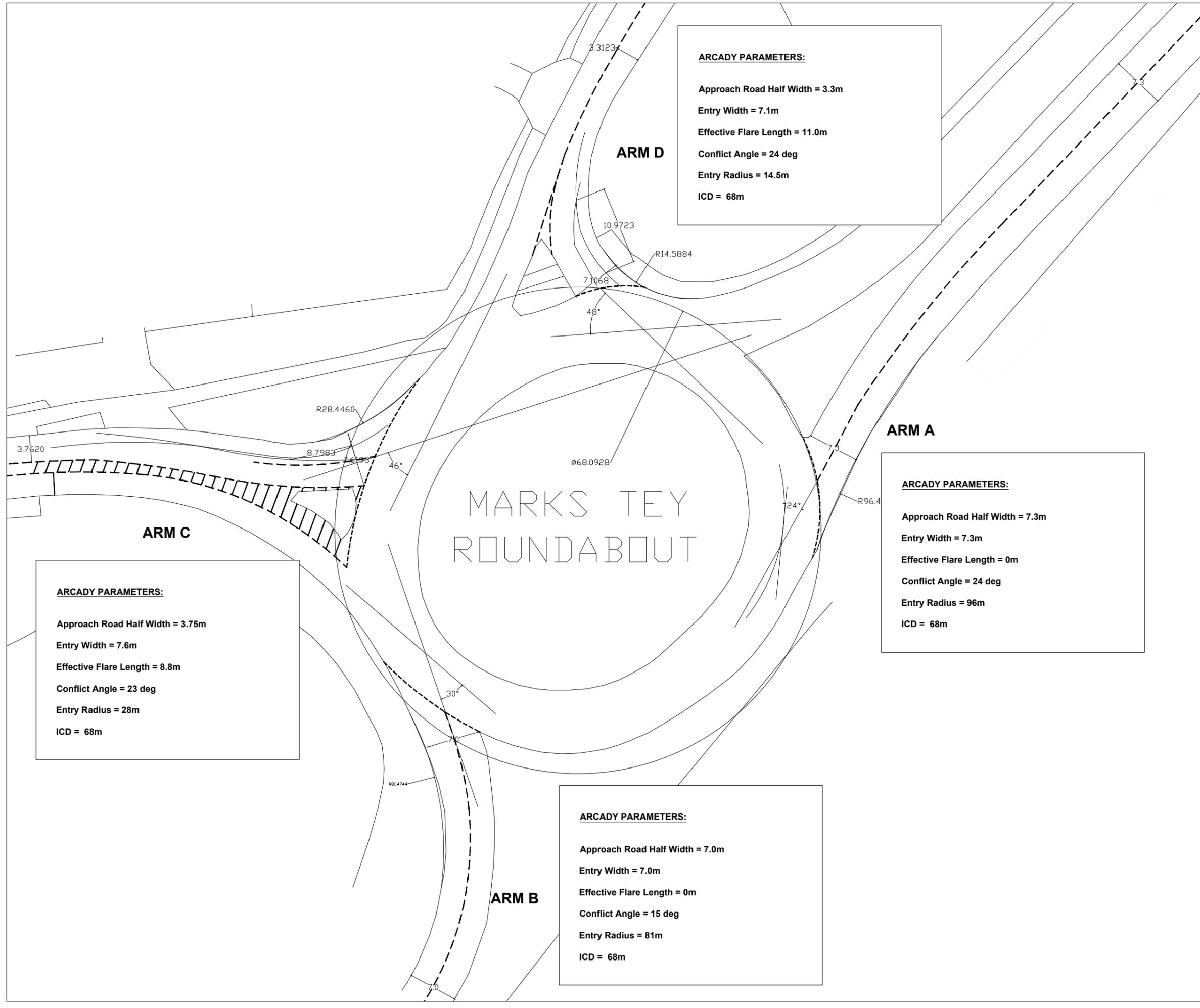
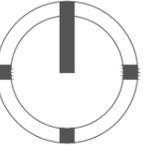
Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1419	35	2231	0.636	1419	1.7	4.434	A
2	356	1454	1295	0.275	356	0.4	3.831	A
3	1239	413	1392	0.890	1236	7.3	22.395	C
4	140	1506	762	0.183	140	0.2	5.783	A

**16:45 - 17:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1159	29	2235	0.519	1161	1.1	3.360	A
2	290	1190	1462	0.199	291	0.2	3.075	A
3	1011	338	1431	0.707	1031	2.5	9.403	A
4	114	1251	892	0.128	114	0.1	4.633	A

**17:00 - 17:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	970	24	2238	0.434	972	0.8	2.845	A
2	243	996	1585	0.153	243	0.2	2.684	A
3	847	283	1459	0.580	851	1.4	5.966	A
4	96	1036	1001	0.096	96	0.1	3.976	A



**ARCADY PARAMETERS:**

Approach Road Half Width = 3.3m

Entry Width = 7.1m

Effective Flare Length = 11.0m

Conflict Angle = 24 deg

Entry Radius = 14.5m

ICD = 68m

**ARCADY PARAMETERS:**

Approach Road Half Width = 7.3m

Entry Width = 7.3m

Effective Flare Length = 0m

Conflict Angle = 24 deg

Entry Radius = 96m

ICD = 68m

**ARCADY PARAMETERS:**

Approach Road Half Width = 3.75m

Entry Width = 7.6m

Effective Flare Length = 8.8m

Conflict Angle = 23 deg

Entry Radius = 28m

ICD = 68m

**ARCADY PARAMETERS:**

Approach Road Half Width = 7.0m

Entry Width = 7.0m

Effective Flare Length = 0m

Conflict Angle = 15 deg

Entry Radius = 81m

ICD = 68m

**NOTE:**  
Based on Topographical Survey.  
Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval.  
Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd.  
These drawings are intended for planning application purposes only, they are not to be used for construction.



Client	<b>TEY GARDENS LLP</b>	
Project	TEY GARDENS, LITTLE TEY	
Title	<b>JUNCTION 5b - EXISTING ARCADY MEASUREMENTS</b>	
Drawn	A FIRMIN	Checked AF
Scale	1:1000 @ A3	Date MAY 2025
Drawing No.	-	

# APPENDIX L

---

JUNCTION 6 ARCADY OUTPUT

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
<b>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</b>

**Filename:** Junction 6 Existing.j9

**Path:** C:\Users\Andrew FTP\Firmin Transport Planning\FTP Cloud - Company FTP\Drawings\2025\2503.09 - Tey Gardens, Little Tey\Junction Capacity Modelling

**Report generation date:** 16/05/2025 16:00:43

- 
- »2025 Base, AM Peak Hour
  - »2025 Base, PM Peak Hour
  - »2030 Opening Year + com dev, AM Peak Hour
  - »2030 Opening Year + com dev, PM Peak Hour
  - »2030 Opening Year + com + proposed dev, AM Peak Hour
  - »2030 Opening Year + com + proposed dev, PM Peak Hour
  - »2035 Future Year + com dev, AM Peak Hour
  - »2035 Future Year + com dev, PM Peak Hour
  - »2035 Future Year + com + proposed dev, AM Peak Hour
  - »2035 Future Year + com + proposed dev, PM Peak Hour

### Summary of junction performance

	AM Peak Hour					PM Peak Hour				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
<b>2025 Base</b>										
Arm 1	D1	1.0	6.04	0.50	A	D2	0.7	4.69	0.41	A
Arm 2		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Arm 3		0.1	3.77	0.07	A		0.1	3.40	0.11	A
Arm 4		0.2	1.84	0.19	A		0.3	1.90	0.24	A
Arm 5		1.3	4.23	0.56	A		1.0	3.79	0.51	A
<b>2030 Opening Year + com dev</b>										
Arm 1	D3	1.1	6.35	0.52	A	D4	0.7	4.92	0.43	A
Arm 2		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Arm 3		0.1	3.84	0.08	A		0.1	3.49	0.12	A
Arm 4		0.2	1.85	0.20	A		0.3	1.92	0.25	A
Arm 5		1.4	4.43	0.58	A		1.1	3.98	0.53	A
<b>2030 Opening Year + com + proposed dev</b>										
Arm 1	D5	1.1	6.44	0.52	A	D6	0.8	5.07	0.44	A
Arm 2		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Arm 3		0.1	3.85	0.08	A		0.1	3.55	0.12	A
Arm 4		0.3	1.86	0.21	A		0.3	1.93	0.25	A
Arm 5		1.4	4.46	0.58	A		1.2	4.09	0.54	A
<b>2035 Future Year + com dev</b>										
Arm 1	D7	1.2	6.74	0.54	A	D8	0.8	5.19	0.45	A
Arm 2		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Arm 3		0.1	3.92	0.08	A		0.1	3.58	0.12	A
Arm 4		0.3	1.86	0.21	A		0.3	1.92	0.26	A
Arm 5		1.4	4.57	0.59	A		1.2	4.17	0.55	A
<b>2035 Future Year + com + proposed dev</b>										
Arm 1	D9	1.2	6.90	0.55	A	D10	0.8	5.35	0.46	A
Arm 2		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Arm 3		0.1	3.96	0.08	A		0.1	3.64	0.12	A
Arm 4		0.3	1.87	0.21	A		0.3	1.93	0.26	A
Arm 5		1.5	4.69	0.60	A		1.3	4.30	0.56	A

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

<b>Title</b>	Junction 5b Existing
<b>Location</b>	Marks Tey Roundabout
<b>Site number</b>	5b
<b>Date</b>	14/05/2025
<b>Version</b>	
<b>Status</b>	Existing
<b>Identifier</b>	
<b>Client</b>	Tey Gardens
<b>Jobnumber</b>	2503.09
<b>Enumerator</b>	Andrew FTP
<b>Description</b>	

### 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

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2025 Base, AM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.18	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description
1	London Road (Copford)	
2	Access Road	
3	London Road (A12)	
4	A120 West	
5	A12 Off-Slip	

### Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.90	8.70	15.0	71.0	71.0	25.0	
2	3.80	3.80	0.0	3.5	71.0	29.5	
3	3.80	7.30	18.8	48.0	71.0	17.0	
4	7.25	8.45	17.1	33.4	71.0	20.0	
5	6.45	8.20	35.3	37.5	71.0	32.0	

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.560	2000
2	0.321	888
3	0.558	1950
4	0.659	2629
5	0.622	2450

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)
D1	2025 Base	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	539	100.000
2		✓	1	100.000
3		✓	70	100.000
4		✓	429	100.000
5		✓	975	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	0	1	184	354	0
	2	1	0	0	0	0
	3	21	0	0	49	0
	4	272	0	155	2	0
	5	45	0	65	865	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	0	7	5	0
	2	0	0	0	0	0
	3	10	0	0	10	0
	4	5	0	12	0	0
	5	0	0	18	10	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.50	6.04	1.0	A
2	0.00	0.00	0.0	A
3	0.07	3.77	0.1	A
4	0.19	1.84	0.2	A
5	0.56	4.23	1.3	A

### Main Results for each time segment

#### 06:45 - 07:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	406	816	1413	0.287	404	0.4	3.560	A
2	0	1219	462	0.000	0	0.0	0.000	A
3	53	916	1268	0.042	53	0.0	2.960	A
4	323	16	2435	0.133	322	0.2	1.703	A
5	734	338	2020	0.363	732	0.6	2.789	A

#### 07:00 - 07:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	485	976	1319	0.367	484	0.6	4.306	A
2	0	1459	378	0.000	0	0.0	0.000	A
3	63	1096	1169	0.054	63	0.1	3.253	A
4	386	19	2433	0.159	386	0.2	1.757	A
5	877	404	1980	0.443	876	0.8	3.256	A

#### 07:15 - 07:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	593	1195	1191	0.498	592	1.0	5.996	A
2	0	1786	263	0.000	0	0.0	0.000	A
3	77	1342	1034	0.075	77	0.1	3.759	A
4	472	23	2430	0.194	472	0.2	1.838	A
5	1073	495	1925	0.558	1072	1.2	4.209	A

#### 07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	593	1197	1190	0.499	593	1.0	6.037	A
2	0	1789	262	0.000	0	0.0	0.000	A
3	77	1344	1033	0.075	77	0.1	3.765	A
4	472	23	2430	0.194	472	0.2	1.838	A
5	1073	495	1925	0.558	1073	1.3	4.228	A

#### 07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	485	979	1318	0.368	486	0.6	4.337	A
2	0	1464	376	0.000	0	0.0	0.000	A
3	63	1100	1167	0.054	63	0.1	3.262	A
4	386	19	2433	0.159	386	0.2	1.758	A
5	877	405	1980	0.443	878	0.8	3.275	A

#### 08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	406	819	1411	0.288	407	0.4	3.586	A
2	0	1225	460	0.000	0	0.0	0.000	A
3	53	921	1266	0.042	53	0.0	2.966	A
4	323	16	2435	0.133	323	0.2	1.704	A
5	734	339	2020	0.363	735	0.6	2.805	A

# 2025 Base, PM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.47	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)
D2	2025 Base	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	480	100.000
2		✓	0	100.000
3		✓	121	100.000
4		✓	549	100.000
5		✓	893	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	0	165	312	0
	2	0	0	0	0	0
	3	48	0	0	73	0
	4	385	2	159	3	0
	5	45	2	51	795	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To				
	1	2	3	4	5
1	0	0	5	3	0
2	0	0	0	0	0
3	2	0	0	5	0
4	3	0	6	0	0
5	2	0	4	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.41	4.69	0.7	A
2	0.00	0.00	0.0	A
3	0.11	3.40	0.1	A
4	0.24	1.90	0.3	A
5	0.51	3.79	1.0	A

### Main Results for each time segment

#### 15:45 - 16:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	361	760	1498	0.241	360	0.3	3.162	A
2	0	1117	513	0.000	0	0.0	0.000	A
3	91	835	1410	0.065	91	0.1	2.729	A
4	413	38	2507	0.165	413	0.2	1.718	A
5	672	451	2061	0.326	670	0.5	2.585	A

#### 16:00 - 16:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	432	909	1413	0.305	431	0.4	3.664	A
2	0	1336	440	0.000	0	0.0	0.000	A
3	109	1000	1318	0.083	109	0.1	2.977	A
4	494	46	2502	0.197	493	0.2	1.791	A
5	803	539	2007	0.400	802	0.7	2.987	A

#### 16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	528	1113	1297	0.407	528	0.7	4.672	A
2	0	1636	339	0.000	0	0.0	0.000	A
3	133	1223	1192	0.112	133	0.1	3.399	A
4	604	56	2496	0.242	604	0.3	1.902	A
5	983	660	1932	0.509	982	1.0	3.783	A

**16:30 - 16:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	528	1114	1296	0.408	528	0.7	4.688	A
2	0	1638	338	0.000	0	0.0	0.000	A
3	133	1225	1191	0.112	133	0.1	3.402	A
4	604	56	2496	0.242	604	0.3	1.902	A
5	983	661	1932	0.509	983	1.0	3.793	A

**16:45 - 17:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	432	911	1412	0.306	432	0.4	3.679	A
2	0	1340	438	0.000	0	0.0	0.000	A
3	109	1002	1316	0.083	109	0.1	2.982	A
4	494	46	2502	0.197	494	0.2	1.794	A
5	803	540	2006	0.400	804	0.7	3.000	A

**17:00 - 17:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	361	763	1496	0.242	362	0.3	3.177	A
2	0	1121	512	0.000	0	0.0	0.000	A
3	91	839	1408	0.065	91	0.1	2.734	A
4	413	38	2507	0.165	414	0.2	1.721	A
5	672	452	2060	0.326	673	0.5	2.597	A

# 2030 Opening Year + com dev, AM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.36	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)
D3	2030 Opening Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	554	100.000
2		✓	1	100.000
3		✓	72	100.000
4		✓	441	100.000
5		✓	1003	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	0	1	189	364	0
	2	1	0	0	0	0
	3	22	0	0	50	0
	4	280	0	159	2	0
	5	46	0	67	890	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To				
	1	2	3	4	5
1	0	0	7	4	0
2	0	0	0	0	0
3	9	0	0	10	0
4	5	0	12	0	0
5	0	0	18	10	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.52	6.35	1.1	A
2	0.00	0.00	0.0	A
3	0.08	3.84	0.1	A
4	0.20	1.85	0.2	A
5	0.58	4.43	1.4	A

### Main Results for each time segment

#### 06:45 - 07:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	417	839	1408	0.296	415	0.4	3.618	A
2	0	1254	450	0.000	0	0.0	0.000	A
3	54	942	1259	0.043	54	0.0	2.987	A
4	332	17	2435	0.136	331	0.2	1.711	A
5	755	348	2015	0.375	753	0.6	2.848	A

#### 07:00 - 07:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	498	1004	1311	0.380	497	0.6	4.420	A
2	0	1500	364	0.000	0	0.0	0.000	A
3	65	1128	1157	0.056	65	0.1	3.295	A
4	396	20	2432	0.163	396	0.2	1.767	A
5	902	416	1973	0.457	901	0.8	3.353	A

#### 07:15 - 07:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	610	1229	1178	0.518	608	1.1	6.295	A
2	0	1836	247	0.000	0	0.0	0.000	A
3	79	1380	1018	0.078	79	0.1	3.833	A
4	486	24	2430	0.200	485	0.2	1.850	A
5	1104	510	1916	0.576	1102	1.3	4.412	A

**07:30 - 07:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	610	1231	1177	0.518	610	1.1	6.348	A
2	0	1840	246	0.000	0	0.0	0.000	A
3	79	1383	1016	0.078	79	0.1	3.840	A
4	486	24	2429	0.200	486	0.2	1.850	A
5	1104	510	1916	0.576	1104	1.4	4.434	A

**07:45 - 08:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	498	1007	1309	0.380	500	0.6	4.458	A
2	0	1506	362	0.000	0	0.0	0.000	A
3	65	1132	1154	0.056	65	0.1	3.305	A
4	396	20	2432	0.163	397	0.2	1.767	A
5	902	416	1973	0.457	904	0.8	3.375	A

**08:00 - 08:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	417	843	1406	0.297	418	0.4	3.646	A
2	0	1260	448	0.000	0	0.0	0.000	A
3	54	947	1256	0.043	54	0.0	2.996	A
4	332	17	2435	0.136	332	0.2	1.714	A
5	755	349	2014	0.375	756	0.6	2.863	A

# 2030 Opening Year + com dev, PM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.62	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)
D4	2030 Opening Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	494	100.000
2		✓	0	100.000
3		✓	124	100.000
4		✓	565	100.000
5		✓	922	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	0	169	322	0
	2	0	0	0	0	0
	3	49	0	0	75	0
	4	396	2	164	3	0
	5	46	2	52	822	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	0	5	3	0
	2	0	0	0	0	0
	3	2	0	0	5	0
	4	3	0	6	0	0
	5	2	0	4	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.43	4.92	0.7	A
2	0.00	0.00	0.0	A
3	0.12	3.49	0.1	A
4	0.25	1.92	0.3	A
5	0.53	3.98	1.1	A

### Main Results for each time segment

#### 15:45 - 16:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	372	785	1484	0.251	371	0.3	3.230	A
2	0	1152	501	0.000	0	0.0	0.000	A
3	93	863	1394	0.067	93	0.1	2.767	A
4	425	39	2507	0.170	425	0.2	1.728	A
5	694	464	2053	0.338	692	0.5	2.642	A

#### 16:00 - 16:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	444	939	1396	0.318	444	0.5	3.777	A
2	0	1379	425	0.000	0	0.0	0.000	A
3	111	1033	1299	0.086	111	0.1	3.031	A
4	508	47	2502	0.203	508	0.3	1.804	A
5	829	554	1997	0.415	828	0.7	3.078	A

#### 16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	544	1149	1277	0.426	543	0.7	4.899	A
2	0	1687	322	0.000	0	0.0	0.000	A
3	137	1264	1169	0.117	136	0.1	3.485	A
4	622	57	2495	0.249	622	0.3	1.922	A
5	1015	679	1921	0.529	1014	1.1	3.961	A

**16:30 - 16:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	544	1151	1276	0.426	544	0.7	4.919	A
2	0	1690	321	0.000	0	0.0	0.000	A
3	137	1266	1168	0.117	137	0.1	3.489	A
4	622	57	2495	0.249	622	0.3	1.922	A
5	1015	679	1920	0.529	1015	1.1	3.976	A

**16:45 - 17:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	444	941	1395	0.318	445	0.5	3.797	A
2	0	1383	424	0.000	0	0.0	0.000	A
3	111	1036	1297	0.086	112	0.1	3.036	A
4	508	47	2502	0.203	508	0.3	1.805	A
5	829	555	1997	0.415	830	0.7	3.092	A

**17:00 - 17:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	372	788	1482	0.251	372	0.3	3.248	A
2	0	1157	500	0.000	0	0.0	0.000	A
3	93	867	1392	0.067	93	0.1	2.772	A
4	425	39	2506	0.170	426	0.2	1.729	A
5	694	465	2052	0.338	695	0.5	2.653	A

# 2030 Opening Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	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)
D5	2030 Opening Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	557	100.000
2		✓	1	100.000
3		✓	72	100.000
4		✓	454	100.000
5		✓	1013	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	0	1	189	367	0
	2	1	0	0	0	0
	3	22	0	0	50	0
	4	288	0	164	2	0
	5	46	0	67	900	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To				
	1	2	3	4	5
1	0	0	7	4	0
2	0	0	0	0	0
3	9	0	0	10	0
4	5	0	12	0	0
5	0	0	18	9	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.52	6.44	1.1	A
2	0.00	0.00	0.0	A
3	0.08	3.85	0.1	A
4	0.21	1.86	0.3	A
5	0.58	4.46	1.4	A

### Main Results for each time segment

#### 06:45 - 07:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	419	850	1405	0.298	418	0.4	3.638	A
2	0	1267	448	0.000	0	0.0	0.000	A
3	54	952	1257	0.043	54	0.0	2.992	A
4	342	17	2435	0.140	341	0.2	1.719	A
5	763	358	2025	0.377	760	0.6	2.842	A

#### 07:00 - 07:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	501	1018	1307	0.383	500	0.6	4.455	A
2	0	1517	361	0.000	0	0.0	0.000	A
3	65	1139	1155	0.056	65	0.1	3.302	A
4	408	20	2432	0.168	408	0.2	1.777	A
5	911	428	1982	0.459	910	0.8	3.354	A

#### 07:15 - 07:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	613	1245	1174	0.522	611	1.1	6.382	A
2	0	1856	243	0.000	0	0.0	0.000	A
3	79	1394	1015	0.078	79	0.1	3.845	A
4	500	24	2429	0.206	500	0.3	1.864	A
5	1115	524	1923	0.580	1113	1.4	4.433	A

**07:30 - 07:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	613	1247	1173	0.523	613	1.1	6.436	A
2	0	1860	242	0.000	0	0.0	0.000	A
3	79	1397	1014	0.078	79	0.1	3.852	A
4	500	24	2429	0.206	500	0.3	1.864	A
5	1115	524	1923	0.580	1115	1.4	4.457	A

**07:45 - 08:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	501	1021	1306	0.384	503	0.6	4.492	A
2	0	1522	359	0.000	0	0.0	0.000	A
3	65	1144	1152	0.056	65	0.1	3.313	A
4	408	20	2432	0.168	408	0.2	1.780	A
5	911	428	1982	0.460	913	0.9	3.373	A

**08:00 - 08:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	419	854	1403	0.299	420	0.4	3.666	A
2	0	1273	446	0.000	0	0.0	0.000	A
3	54	957	1254	0.043	54	0.0	2.999	A
4	342	17	2434	0.140	342	0.2	1.722	A
5	763	359	2024	0.377	764	0.6	2.859	A

# 2030 Opening Year + com + proposed dev, PM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.71	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)
D6	2030 Opening Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	501	100.000
2		✓	0	100.000
3		✓	124	100.000
4		✓	570	100.000
5		✓	942	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	0	169	329	0
	2	0	0	0	0	0
	3	49	0	0	75	0
	4	399	2	166	3	0
	5	46	2	52	842	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	0	5	3	0
	2	0	0	0	0	0
	3	2	0	0	5	0
	4	3	0	6	0	0
	5	2	0	4	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.44	5.07	0.8	A
2	0.00	0.00	0.0	A
3	0.12	3.55	0.1	A
4	0.25	1.93	0.3	A
5	0.54	4.09	1.2	A

### Main Results for each time segment

#### 15:45 - 16:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	377	801	1474	0.256	376	0.3	3.272	A
2	0	1174	494	0.000	0	0.0	0.000	A
3	93	883	1383	0.068	93	0.1	2.791	A
4	429	39	2506	0.171	428	0.2	1.732	A
5	709	467	2051	0.346	707	0.5	2.679	A

#### 16:00 - 16:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	450	958	1385	0.325	450	0.5	3.847	A
2	0	1405	417	0.000	0	0.0	0.000	A
3	111	1057	1285	0.087	111	0.1	3.066	A
4	512	47	2502	0.205	512	0.3	1.808	A
5	847	559	1994	0.425	846	0.7	3.134	A

#### 16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	552	1173	1263	0.437	550	0.8	5.044	A
2	0	1719	311	0.000	0	0.0	0.000	A
3	137	1294	1153	0.118	136	0.1	3.542	A
4	628	57	2495	0.252	627	0.3	1.927	A
5	1037	684	1917	0.541	1035	1.2	4.074	A

**16:30 - 16:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	552	1175	1262	0.437	552	0.8	5.066	A
2	0	1722	310	0.000	0	0.0	0.000	A
3	137	1296	1151	0.119	137	0.1	3.546	A
4	628	57	2495	0.252	628	0.3	1.927	A
5	1037	685	1917	0.541	1037	1.2	4.092	A

**16:45 - 17:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	450	961	1384	0.326	452	0.5	3.867	A
2	0	1409	415	0.000	0	0.0	0.000	A
3	111	1060	1283	0.087	112	0.1	3.074	A
4	512	47	2501	0.205	513	0.3	1.809	A
5	847	560	1994	0.425	849	0.7	3.149	A

**17:00 - 17:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	377	804	1473	0.256	378	0.3	3.291	A
2	0	1179	492	0.000	0	0.0	0.000	A
3	93	887	1380	0.068	93	0.1	2.798	A
4	429	39	2506	0.171	429	0.2	1.732	A
5	709	469	2050	0.346	710	0.5	2.689	A

# 2035 Future Year + com dev, AM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.54	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)
D7	2035 Future Year + com dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	570	100.000
2		✓	1	100.000
3		✓	74	100.000
4		✓	454	100.000
5		✓	1033	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	0	1	194	375	0
	2	1	0	0	0	0
	3	22	0	0	52	0
	4	288	0	164	2	0
	5	48	0	69	916	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To				
From		1	2	3	4	5
	1	0	0	7	4	0
	2	0	0	0	0	0
	3	9	0	0	10	0
	4	5	0	12	0	0
	5	0	0	17	9	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.54	6.74	1.2	A
2	0.00	0.00	0.0	A
3	0.08	3.92	0.1	A
4	0.21	1.86	0.3	A
5	0.59	4.57	1.4	A

### Main Results for each time segment

#### 06:45 - 07:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	429	864	1398	0.307	427	0.4	3.703	A
2	0	1291	440	0.000	0	0.0	0.000	A
3	56	970	1247	0.045	56	0.0	3.021	A
4	342	17	2435	0.140	341	0.2	1.719	A
5	778	358	2026	0.384	775	0.6	2.871	A

#### 07:00 - 07:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	512	1034	1298	0.395	512	0.6	4.571	A
2	0	1544	352	0.000	0	0.0	0.000	A
3	67	1161	1143	0.058	66	0.1	3.344	A
4	408	20	2432	0.168	408	0.2	1.777	A
5	929	428	1983	0.468	928	0.9	3.407	A

#### 07:15 - 07:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	628	1265	1163	0.540	626	1.2	6.678	A
2	0	1890	232	0.000	0	0.0	0.000	A
3	81	1420	1001	0.081	81	0.1	3.915	A
4	500	24	2429	0.206	500	0.3	1.864	A
5	1137	524	1924	0.591	1135	1.4	4.548	A

**07:30 - 07:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	628	1267	1161	0.540	628	1.2	6.744	A
2	0	1894	231	0.000	0	0.0	0.000	A
3	81	1424	999	0.082	81	0.1	3.922	A
4	500	24	2429	0.206	500	0.3	1.864	A
5	1137	524	1924	0.591	1137	1.4	4.574	A

**07:45 - 08:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	512	1037	1296	0.395	514	0.7	4.615	A
2	0	1550	350	0.000	0	0.0	0.000	A
3	67	1166	1140	0.058	67	0.1	3.353	A
4	408	20	2432	0.168	408	0.2	1.780	A
5	929	428	1983	0.468	931	0.9	3.430	A

**08:00 - 08:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	429	868	1396	0.307	430	0.4	3.730	A
2	0	1297	438	0.000	0	0.0	0.000	A
3	56	975	1244	0.045	56	0.0	3.030	A
4	342	17	2434	0.140	342	0.2	1.719	A
5	778	359	2026	0.384	779	0.6	2.888	A

# 2035 Future Year + com dev, PM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.78	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)
D8	2035 Future Year + com dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	510	100.000
2		✓	0	100.000
3		✓	128	100.000
4		✓	582	100.000
5		✓	951	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	0	175	332	0
	2	0	0	0	0	0
	3	51	0	0	77	0
	4	408	2	169	3	0
	5	48	2	54	847	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To					
	1	2	3	4	5	
From	1	0	0	5	3	0
	2	0	0	0	0	0
	3	2	0	0	5	0
	4	2	0	6	0	0
	5	2	0	4	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.45	5.19	0.8	A
2	0.00	0.00	0.0	A
3	0.12	3.58	0.1	A
4	0.26	1.92	0.3	A
5	0.55	4.17	1.2	A

### Main Results for each time segment

#### 15:45 - 16:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	384	809	1470	0.261	383	0.4	3.306	A
2	0	1188	489	0.000	0	0.0	0.000	A
3	96	889	1379	0.070	96	0.1	2.805	A
4	438	41	2523	0.174	437	0.2	1.726	A
5	716	478	2046	0.350	714	0.5	2.697	A

#### 16:00 - 16:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	458	967	1380	0.332	458	0.5	3.902	A
2	0	1422	411	0.000	0	0.0	0.000	A
3	115	1064	1281	0.090	115	0.1	3.086	A
4	523	49	2517	0.208	523	0.3	1.804	A
5	855	572	1989	0.430	854	0.7	3.171	A

#### 16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	562	1184	1257	0.447	560	0.8	5.160	A
2	0	1740	304	0.000	0	0.0	0.000	A
3	141	1302	1148	0.123	141	0.1	3.574	A
4	641	59	2510	0.255	640	0.3	1.925	A
5	1047	700	1910	0.548	1045	1.2	4.153	A

**16:30 - 16:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	562	1186	1256	0.447	561	0.8	5.186	A
2	0	1743	303	0.000	0	0.0	0.000	A
3	141	1305	1146	0.123	141	0.1	3.579	A
4	641	59	2510	0.255	641	0.3	1.925	A
5	1047	700	1910	0.548	1047	1.2	4.170	A

**16:45 - 17:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	458	970	1378	0.333	460	0.5	3.925	A
2	0	1426	410	0.000	0	0.0	0.000	A
3	115	1068	1279	0.090	115	0.1	3.092	A
4	523	49	2517	0.208	524	0.3	1.807	A
5	855	572	1989	0.430	857	0.8	3.185	A

**17:00 - 17:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	384	812	1468	0.262	385	0.4	3.325	A
2	0	1193	488	0.000	0	0.0	0.000	A
3	96	893	1377	0.070	96	0.1	2.810	A
4	438	41	2522	0.174	438	0.2	1.729	A
5	716	479	2045	0.350	717	0.5	2.710	A

# 2035 Future Year + com + proposed dev, AM Peak Hour

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.63	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)
D9	2035 Future Year + com + proposed dev	AM Peak Hour	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	573	100.000
2		✓	1	100.000
3		✓	74	100.000
4		✓	467	100.000
5		✓	1043	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	0	1	194	378	0
	2	1	0	0	0	0
	3	22	0	0	52	0
	4	296	0	169	2	0
	5	48	0	69	926	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To				
From		1	2	3	4	5
	1	0	0	7	4	0
	2	0	0	0	0	0
	3	9	0	0	10	0
	4	5	0	11	0	0
	5	0	0	17	9	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.55	6.90	1.2	A
2	0.00	0.00	0.0	A
3	0.08	3.96	0.1	A
4	0.21	1.87	0.3	A
5	0.60	4.69	1.5	A

### Main Results for each time segment

#### 06:45 - 07:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	431	875	1392	0.310	430	0.4	3.735	A
2	0	1304	436	0.000	0	0.0	0.000	A
3	56	980	1242	0.045	56	0.0	3.034	A
4	352	17	2443	0.144	351	0.2	1.720	A
5	785	367	2021	0.389	783	0.6	2.901	A

#### 07:00 - 07:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	515	1047	1291	0.399	514	0.7	4.629	A
2	0	1561	347	0.000	0	0.0	0.000	A
3	67	1173	1136	0.059	66	0.1	3.364	A
4	420	20	2440	0.172	420	0.2	1.780	A
5	938	439	1977	0.474	937	0.9	3.457	A

#### 07:15 - 07:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	631	1281	1154	0.547	629	1.2	6.827	A
2	0	1909	226	0.000	0	0.0	0.000	A
3	81	1434	993	0.082	81	0.1	3.948	A
4	514	24	2437	0.211	514	0.3	1.870	A
5	1148	538	1917	0.599	1146	1.5	4.657	A

**07:30 - 07:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	631	1284	1153	0.547	631	1.2	6.899	A
2	0	1913	224	0.000	0	0.0	0.000	A
3	81	1438	991	0.082	81	0.1	3.956	A
4	514	24	2437	0.211	514	0.3	1.870	A
5	1148	538	1916	0.599	1148	1.5	4.686	A

**07:45 - 08:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	515	1050	1289	0.400	517	0.7	4.676	A
2	0	1567	344	0.000	0	0.0	0.000	A
3	67	1178	1134	0.059	67	0.1	3.376	A
4	420	20	2440	0.172	420	0.2	1.781	A
5	938	440	1977	0.474	940	0.9	3.481	A

**08:00 - 08:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	431	879	1390	0.310	432	0.5	3.765	A
2	0	1310	433	0.000	0	0.0	0.000	A
3	56	985	1239	0.045	56	0.0	3.042	A
4	352	17	2443	0.144	352	0.2	1.721	A
5	785	368	2020	0.389	786	0.6	2.918	A

# 2035 Future Year + com + proposed dev, PM Peak Hour

### Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.88	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)
D10	2035 Future Year + com + proposed dev	PM Peak Hour	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	517	100.000
2		✓	0	100.000
3		✓	128	100.000
4		✓	587	100.000
5		✓	971	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	0	175	339	0
	2	0	0	0	0	0
	3	51	0	0	77	0
	4	411	2	171	3	0
	5	48	2	54	867	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To					
	1	2	3	4	5	
From	1	0	0	5	3	0
	2	0	0	0	0	0
	3	2	0	0	5	0
	4	2	0	6	0	0
	5	2	0	4	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.46	5.35	0.8	A
2	0.00	0.00	0.0	A
3	0.12	3.64	0.1	A
4	0.26	1.93	0.3	A
5	0.56	4.30	1.3	A

### Main Results for each time segment

#### 15:45 - 16:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	389	825	1461	0.266	388	0.4	3.351	A
2	0	1210	482	0.000	0	0.0	0.000	A
3	96	910	1368	0.070	96	0.1	2.830	A
4	442	41	2523	0.175	441	0.2	1.729	A
5	731	482	2044	0.358	729	0.6	2.733	A

#### 16:00 - 16:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	465	987	1369	0.340	464	0.5	3.977	A
2	0	1448	402	0.000	0	0.0	0.000	A
3	115	1088	1268	0.091	115	0.1	3.122	A
4	528	49	2517	0.210	527	0.3	1.808	A
5	873	576	1986	0.440	872	0.8	3.228	A

#### 16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	569	1208	1243	0.458	568	0.8	5.323	A
2	0	1772	294	0.000	0	0.0	0.000	A
3	141	1332	1131	0.125	141	0.1	3.634	A
4	646	59	2510	0.257	646	0.3	1.931	A
5	1069	705	1907	0.561	1067	1.3	4.277	A

16:30 - 16:45

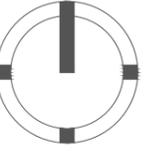
Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	569	1210	1242	0.458	569	0.8	5.350	A
2	0	1775	293	0.000	0	0.0	0.000	A
3	141	1334	1130	0.125	141	0.1	3.639	A
4	646	59	2510	0.257	646	0.3	1.931	A
5	1069	706	1907	0.561	1069	1.3	4.297	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	465	990	1367	0.340	466	0.5	4.001	A
2	0	1452	401	0.000	0	0.0	0.000	A
3	115	1092	1266	0.091	115	0.1	3.131	A
4	528	49	2517	0.210	528	0.3	1.809	A
5	873	577	1986	0.440	875	0.8	3.245	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	389	828	1459	0.267	390	0.4	3.368	A
2	0	1215	480	0.000	0	0.0	0.000	A
3	96	914	1366	0.071	96	0.1	2.838	A
4	442	41	2522	0.175	442	0.2	1.729	A
5	731	483	2043	0.358	732	0.6	2.747	A



**ARCADY PARAMETERS:**

Approach Road Half Width = 7.25m  
 Entry Width = 8.45m  
 Effective Flare Length = 17.1m  
 Conflict Angle = 20 deg  
 Entry Radius = 33.4m  
 ICD = 71m

**ARCADY PARAMETERS:**

Approach Road Half Width = 6.45m  
 Entry Width = 8.2m  
 Effective Flare Length = 35.3m  
 Conflict Angle = 32 deg  
 Entry Radius = 37.5m  
 ICD = 71m

**ARCADY PARAMETERS:**

Approach Road Half Width = 3.8m  
 Entry Width = 7.3m  
 Effective Flare Length = 18.8m  
 Conflict Angle = 17 deg  
 Entry Radius = 48m  
 ICD = 71m

**ARCADY PARAMETERS:**

Approach Road Half Width = 3.9m  
 Entry Width = 8.7m  
 Effective Flare Length = 15m  
 Conflict Angle = 25 deg  
 Entry Radius = 71m  
 ICD = 71m

**ARCADY PARAMETERS:**

Approach Road Half Width = 3.8m  
 Entry Width = 3.8m  
 Effective Flare Length = 0m  
 Conflict Angle = 29.5 deg  
 Entry Radius = 3.5m  
 ICD = 71m

**NOTE:**

Based on Topographical Survey.  
 Subject to highway boundary and land ownership, capacity assessment, safety audit, detailed design and Council / Highway Authority Approval.  
 Use figured dimensions only. Do not scale from this drawing except for planning purposes. All dimensions must be checked on site prior to any work commencing. This drawing is the copyright of Firmin Transport Planning Ltd. All rights are reserved and no part of this work may be produced without prior permission in writing from Firmin Transport Planning Ltd.  
 These drawings are intended for planning application purposes only, they are not to be used for construction.



Client

**TEY GARDENS LLP**

Project

**TEY GARDENS, LITTLE TEY**

Title

**JUNCTION 6 - EXISTING  
 ARCADY MEASUREMENTS**

Drawn **A FIRMIN** Checked **AF**

Scale **1:1000 @ A3** Date **MAY 2025**

Drawing No. -

