Appendix Y

RPS A12 Junction 12 RPS Risk Assessment Report

LAND NORTH OF SHENFIELD
ESSEX

GG104 Risk Assessment

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GG104 Risk Assessment
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Document Status

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1 PLANNING THE RISK ASSESSMENT

Introduction

1.1 RPS has been commissioned by Croudace Strategic Ltd, Redrow Homes Limited, Countryside Partnerships PLC and Stonebond Properties Ltd to prepare a Safety Risk Assessment in relation to the impact of the Brentwood Local Plan 2016 - 2033 site allocations in Policy R03 'Land North of Shenfield'.

1.2 The requirement for the risk assessment has been identified by National Highways (NH) to consider the risk associated with development impacts at the A12 Junction 12 roundabout.

1.3 The risk assessment has been undertaken in general accordance with GG104 'Requirements for Safety Risk Assessment'. GG104 provides a framework that sets out the approach for safety risk assessment when undertaking any activity that may have an impact in safety of the strategic road network.

Background

1.4 The R03 site comprises four parcels of land, located both east and north of Chelmsford Road. The overall development allocation assumes around 825 residential dwellings and 2ha of employment space, which is a combination of developments from Croudace, Redrow, Countryside, and Stonebond.

1.5 However, the development of the masterplan for the four development sites has resulted in an overall reduction in the number of homes expected to be delivered to **680**. The anticipated breakdown for assessment purposes is as follows:

- Croudace **330** homes
- Redrow **185** homes
- Countryside **120** homes + **235** employees
- Stonebond **45** homes

1.6 The above figures are considered the maximum and already have some buffer over detailed layouts. The employment element on the Countryside parcel is retained as a robust assessment. It is likely that a lower trip generating use than 235 employees will come forward.

1.7 Chelmsford Road connects to the A12 Junction 12 to the north east of the R03 allocation sites, via a large grade separated roundabout junction. The A12 Junction 12 is a key local junction as it provides access to Greater London / M25 motorway to the west of the A12 corridor that routes through Essex to the east providing connections to the city of Chelmsford and other towns and villages.

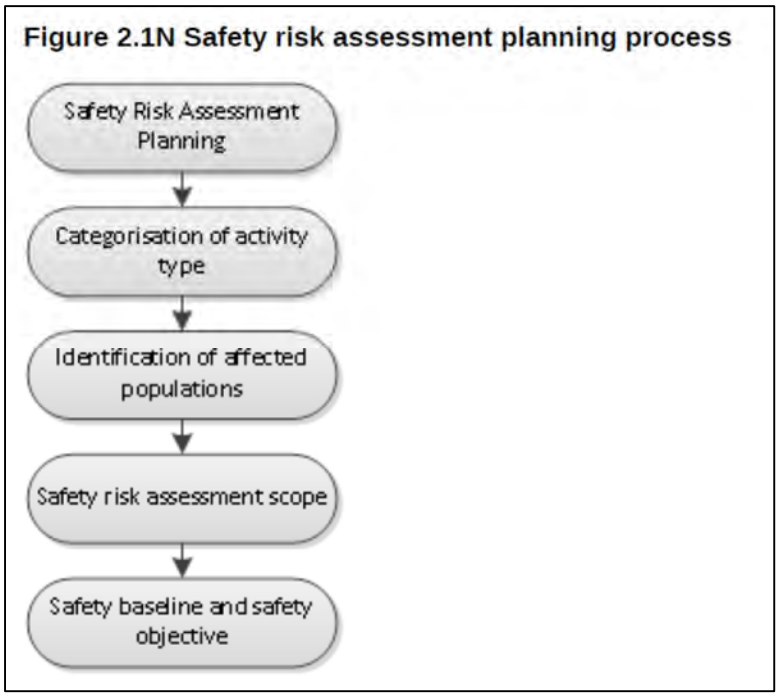
1.8 The capacity of the A12 Junction 12 roundabout has been subject to initial assessment by RPS as part of the preparation of a Transport Assessment for the Redrow Homes site (planning reference 22/01324/FUL). Following modelling review comments by Aecom (on behalf of National Highways) and an update to the anticipated development content as set out above, the junction assessment has been updated within this document.

Planning the Risk Assessment

1.9 The risk assessment has been undertaken in accordance with the framework risk assessment process presented in Appendix A of GG104.

1.10 In preparing this report the framework process required by GG104 Figure 2.1 has been followed. The process detailed in Figure 2.1 is replicated below in **Figure 1.1**.

Figure 1.1: Safety Risk Assessment Planning Process



1.11 The risk assessment includes reference to the following information:

- RPS Transport Assessment – Land off Chelmsford Road, Shenfield Essex – November 2022 (planning reference 22/01324/FUL);
- Collision Data for A12 Junction 12 Roundabout for the last 5 years;
- Non-motorised user survey A12 Junction 12 Roundabout; and
- GG142 WCHAR Assessment – Land North of Shenfield, Shenfield, Essex - A12Junction 12.

1.12 The Transport Assessment provided details of the baseline conditions and proposed traffic generation associated with the R03 site allocations.

Risk Assessment Objectives

1.13 The objectives of the risk assessment are to establish:

- The level of risk associated with the existing roundabout layout and operation; and

- The level of risk associated with the addition of the R03 development in terms of traffic, pedestrian and cycle impact.

Report Framework

1.14 The safety risk assessment follows the general framework contained in GG104 which is structured around the following key steps:

- Categorisation of activity type;
- Affected populations;
- Scope;
- Safety baseline and safety objectives;
- Hazard and risk;
- Update requirements; and
- Validation and monitoring requirements.

2 CATEGORISATION OF ACTIVITY TYPE

2.1 The complexity of the Safety Risk Assessment has been determined by categorisation of the activity type. In accordance with the categories listed in Table 2.6 of GG104, which are repeated below, with blue outline highlighting the assessor's interpretation of the scope and complexity of the activity concerned and applicable category.

Figure 2.1: Categorisation of Activity Type

Feature	Selection criteria	
	Type	Indicator
Extent of prior experience of activity. The degree of knowledge available from undertaking the activity previously or the degree to which knowledge is available from the activity being undertaken by other industries or organisations.	A	Activities for which there is significant experience within Highways England. Previous safety studies and data are available, and some activity features are codified in a standard or formal procedure.
	B	Activities for which there is limited experience within Highways England but there is transferable experience elsewhere in the UK or internationally. Activities for which there is limited experience in Highways England but there is experience elsewhere in the UK or internationally, including in different industries, which is deemed sufficiently similar to the activity in question to be deemed relevant. Activities for which there is experience within Highways England but that experience is in a different application of the activity and some adaptation will be required. There might also be local and site specific issues to take into account that can affect the relevance of the available experience.
	C	Activities for which there is no previous applicable experience from either Highways England or other industries.

Feature	Selection criteria	
	Type	Indicator
Statutory and formal processes and procedures (including standards and legislation) Consideration of the applicability of current standards, formal processes or procedures, guidance and legislation.	A	The activity is substantially or entirely within the scope of existing standards, guidance, formal processes or procedures and applicable legislation. The activity requires minimal or no safety related departures from standard or safety related changes to formal processes or procedures (including any legislation).
	B	The activity is largely within the scope of existing standards, guidance, formal processes or procedures. There can be some safety related departures from standards needed and/or safety related changes to formal processes or procedures. The activity can need minor changes to existing legislation.
	C	Activities that are not within the scope of existing standards, formal processes or procedures and require new ones to be developed. Activities for which significant departures from standards, formal processes or procedures are required. Activities which require significant changes to existing legislation or new legislation to be written. Whilst the number of safety departures from standards, formal processes or procedures can affect the categorisation, the most important element in determining this is the nature and type of the departures. For example, a large number of safety departures that can be addressed straightforwardly will have less impact on feature type than a single safety departure that cannot and requires a detailed risk assessment to support it.

Feature	Selection criteria	
	Type	Indicator
Impact on the organisation The effect that the activity will have on current Highways England processes, procedures, structure, roles and responsibilities, competences, policies and strategy, in addition to contractual and workforce arrangements	A	The activity has no impact on Highways England. The activity has a minor impact on any of these for a finite period of time. Length of time Highways England is affected by decision to undertake the activity is short term.
	B	The activity can lead to permanent minor changes to any of these. These minor changes can introduce new roles and responsibilities, policies, contractual and workforce arrangements. The activity can require a change to organisational arrangements. Length of time Highways England is affected by decision to undertake the activity is medium term.
	C	The activity has significant impact on any of these. The activity can change core safety roles and responsibilities. Length of time Highways England is affected by decision to undertake the activity is long term.
Activity scale. Consideration of the size and/or scale of the activity. Does or can the activity have an impact on the motorway and all-purpose trunk roads, either directly or indirectly.	A	The impact of the activity is limited in nature or scale.
	B	The impact of the activity is significant in nature or scale.
	C	The impact of the activity is wide ranging across the network, and/or significantly impacts infrastructure, interventions or workforce.
Technical. Measure of technical and/or technological novelty and/or innovation the activity involves.	A	An activity where any processes, techniques, methodologies and/or technologies involved are currently in widespread use and re-examination is unlikely to be needed.
	B	There can be some experience of the processes, techniques, methodologies and/or technologies. The experience can be from use in either another application, or by another road authority, supplier, industry or perhaps from overseas in which case some additional work can be required to adapt them and/or to demonstrate that safety can be assured for the intended application.
	C	Activities that use new processes, techniques, methodologies and/or technologies for which there is no previous experience in the UK or elsewhere.

Feature	Selection criteria	
	Type	Indicator
Stakeholder impact and interest. The quantity and/or impact of stakeholders, their interest in and resulting ability to influence on/impact on the activity. The degree to which the safety issues, as perceived, are capable of being understood and fully addressed.	A	Activities for which the quantity and/or impact of stakeholders, their interest in and resulting ability to influence or impact the activity is low.
	B	Activities that have only a single or a few stakeholders but their impact, in terms of their attitude towards, or ability to influence, and/or interest in the successful achievement of the activities aim can be significant. Alternatively it will represent an activity that has several stakeholders but the amount, or type, of safety issues involved are limited.
	C	Activities for which there are a large number of stakeholders and their impact in terms of their attitude towards, or ability to influence can be significant. Stakeholders with a strong interest in the potential safety impact of the activity on themselves. Activities where there are conflicting needs arising from different stakeholders or stakeholder groups.

2.2 The above tables indicate that the complexity types for all features are identified as Type A. Where all activity features are categorised as Type A, the entire activity is classed as Type A. Type A covers relatively routine and familiar assessments, such as considering the intensification of use at an existing junction.

3 AFFECTED POPULATIONS

3.1 The safety risk assessment needs to clearly identify all populations that may be affected by the activity. Table 1.3 contained in GG104 describes all affected populations and this is replicated below.

Table 3.1: Populations on the Motorway and All-Purpose Trunk Roads

Table 1.3 Populations on the motorway and all-purpose trunk roads

Population	Classification
People directly employed by Highways England and who work on the motorway and all-purpose trunk roads either permanently e.g. traffic officers, or periodically e.g. those undertaking site visits; AND People in a contractual relationship with Highways England, including our national vehicle recovery contract operatives, all workers engaged in traffic management activities and incident support services, and any other activities where traffic is present, such as persons carrying out survey and inspection work.	Workers
All road users, including the police and emergency services, equestrians, cyclists and pedestrians, as well as those others, who are at work but are not in a contractual relationship with Highways England such as privately contracted vehicle recovery and vehicle repair providers.	Users
Other parties includes any person or persons who could be affected by the Highways England motorway and all-purpose trunk roads, but who are neither using it, nor working on it i.e. living or working adjacent to the motorway and all-purpose trunk roads, using other transport networks that intersect with the motorway and all-purpose trunk roads.	Other parties

3.2 Based on the above populations it is considered that users will be affected by the increase in movements at the A12 Junction 12 roundabout. Users will therefore be included in the assessment.

3.3 The following considerations are relevant to the consideration of risk associated with workers. There have been no collisions involving road workers in the vicinity of the A12 Junction 12 roundabout in the last 5 years. The forecast increases in traffic at the junction marginally increases the likelihood of collisions and consequently the number of call outs for incident support services. However, the size of the increase in collisions is unlikely to change the existing extremely low risk of collisions involving workers.

3.4 Possible hazards for other parties are limited to an individual within properties adjacent to the junction being impacted by an errant vehicle. There are no properties located on Roman Road to the north of the A12 Junction 12 roundabout. The A1023 Chelmsford Road southern arm of the roundabout is bounded by a BP garage and residential properties on the eastern side. However, these properties are set back from a wide highway verge. The risk probability of an errant vehicle colliding with other parties within properties adjacent to Chelmsford Road is extremely low and it is considered that this will not change because of the development proposal.

3.5 Consequently, this assessment considers the risks to user population only.

4 DETERMINE SAFETY RISK ASSESSMENT SCOPE

Safety Questions

4.1 The safety risk assessment is to consider and answer the following questions:

- To identify the existing level of risk at the existing roundabout layout;
- To consider the risk associated with intensification of use at the existing roundabout; and
- To identify the level of risk with the proposed partially signalised roundabout.

Extent of the Geographical Area

4.2 The R03 allocation sites are located to the north of Shenfield town centre and to the south of the A12 Junction 12 roundabout, within the Borough of Brentwood and the County of Essex. The R03 site comprises four parcels of land, located both east and north of Chelmsford Road. The overall development masterplan proposes around 680 residential dwellings and 2ha of employment space, which is a combination of developments from, Croudace, Redrow, Countryside and Stonebond.

4.3 Chelmsford Road connects to the A12 Junction 12 to the north east of the R03 allocation sites, via a large grade separated roundabout junction. The A12 Junction 12 is a key local junction as it provides access to Greater London / M25 motorway to the west of the A12 corridor that routes through Essex to the east providing connections to the city of Chelmsford and other towns and villages.

4.4 Based on the safety question the following extents of the local and strategic road network will be considered:

- A12 Junction 12 Roundabout – This will include the roundabout circulatory carriageway and all the approaches to roundabout.

5 SAFETY BASELINE AND SAFETY OBJECTIVES

Introduction

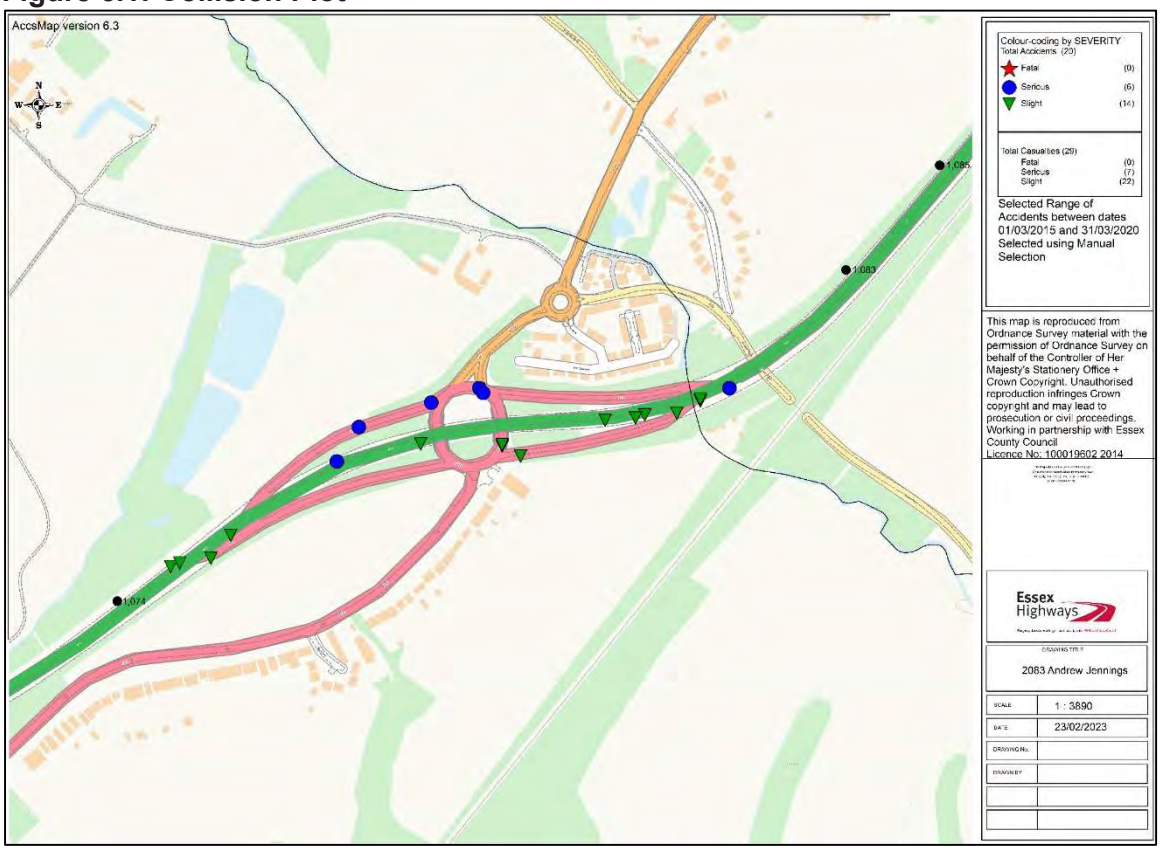
5.1 This section considers the existing A12 Junction 12 roundabout arrangement and operation and baseline risk exposure levels. This will be considered based on a review of the existing collision history for the previous five years.

Collision Analysis

5.2 A review has been undertaken of road traffic collisions at the A12 Junction 12 roundabout and immediate approaches including the slip roads involving personal injury over a five-year period. Collision data has been obtained from ECC for the period 01 March 2015 to 31 March 2020. This period has been chosen to avoid the effects of changing movement patterns during Covid. The full outputs are not presented as there appear to be some full numberplates and details within descriptions that could breach data protection. Therefore, a summary table and plot is provided below.

5.3 The location and brief details of the recorded collisions are shown in **Figure 5.1.**

Figure 5.1: Collision Plot



5.4 **Table 5.1** provides the full details of the above collisions.

Table 5.1: Collision Data – A12 Junction 12

Location / Reference	Date / Time	Severity	Conditions	Summary / Causation Factor
A12 Southbound Junction 12 – I29550915	14 Sep 2015 15:47	Slight	Wet carriageway / Daylight	**Vehicle Type(s): All cars (3)** A car abruptly stopped, causing a trailing car to perform an emergency stop. Separate car crashed into trailing car as well. Causation Factor – Car likely failed to look and accurately judge path and/or speed. Possible 2nd car following too close.
A12 Ingatestone Bypass / Chelmsford Road – I29630915	16 Sep 2015 08:20	Slight	Wet carriageway / Daylight	**Vehicle Type(s): All cars (4)** Initial collision caused by 2 cars, with a third stopping behind. A fourth car failed to stop and collided with the third car, causing a chain reaction. Causation Factor – Fourth car was going too fast and failed to stop and accurately judge the situation ahead.
A12 / Brentwood Bypass / West of J12 – 1536765	25 Dec 2015 12:03	Slight	Wet carriageway / Daylight	**Vehicle Type(s): All cars (3)** A car collided with the side mirror of a different car. Initial car eventually collides with something after fleeing the scene, but further info is undiscernible due to abrupt stop in description. Causation Factor – stolen car and chase, collision.
75m east of A12 / Chelmsford Road Junction – **1647631**	28 Feb 2016 19:25	Slight	Dry carriageway / Daylight	**Vehicle Type(s): Car** Car became unstable when undergoing right-hand turn along bend of A12. Spun out and collided with left-side barrier; right-side tyres punctured. Causation Factor – Unclear; none given
A12 / Chelmsford Road / Roman Road junction - 1679480	24 June 2016 15:44	Slight	Dry carriageway / Daylight	**Vehicle Type(s): Car, LGV (unknown weight)** LGV brakes but car failed to stop in time. Causation Factor – Car failed to judge braking situation ahead.
A12 / Chelmsford Road / Roman Road junction - 1683978	07 July 2016 18:10	Slight	Dry carriageway / Daylight	**Vehicle Type(s): All cars (5)** A car fails to stop and hits another. Chain reaction causes 3 more cars to collide. Causation Factor – Car failed to stop + judge braking situation ahead.
A12 / Chelmsford Road / Roman Road junction -16108461	22 Sep 2016 08:07	Slight	Dry carriageway / Daylight	**Vehicle Type(s): LGV, All others cars** A car failed to stop when three other cars stopped in front. LGV collided with second car and caused a chain reaction. Causation Factor Car failed to stop + judge braking situation ahead.
A12 / Chelmsford Road / Roman	13 Oct 2016 17:15	Serious	Dry carriageway / Daylight	**Vehicle Type(s): LGV, All others cars (3)** A car had to brake heavily because of the traffic ahead, and LGV collided into the back of the car. Another car also had to brake hard behind

Location / Reference	Date / Time	Severity	Conditions	Summary / Causation Factor
Road junction - 16115799				LGV but managed to stop. However, an additional car could not stop in time and crashed into the back of the 2nd car. Causation Factor – chain reaction caused by Vehicles 1 and 4 failing to stop + judge braking situation ahead
A12 / Chelmsford Road / Roman Road junction - 16130161	03 Nov 2016 09:30	Slight	Dry carriageway / Daylight	**Vehicle Type(s): LGV, car** ?GV collides with rear of car. Causation Factor – LGV failed to stop + judge traffic situation ahead.
A12 / Chelmsford Road / Roman Road junction - 16128737	01 Mar 2016 17:20	Serious	Wet carriageway / Darkness	**Vehicle Type(s): car, motorcycle** Car pulls in front of motorcycle. Motorcycle does not brake in time to avoid collision and occupant is thrown off motorcycle. Causation Factor – Vehicle 1 failed to look at oncoming roundabout traffic.
A12 / Chelmsford Road / Roman Road junction – 17205435	29 July 2017 18:10	Serious	Wet carriageway / Daylight	**Vehicle Type(s): car, motorcycle** Car pulls in front of motorcycle on roundabout. Motorcycle takes evasive action but collides with kerb. Car does not stop. Causation Factor – Car failed to judge oncoming traffic situation on roundabout
A12 / Chelmsford Road / Roman Road junction - 17245948	25 Sep 2017 13:55	Slight	Dry carriageway / Daylight	**Vehicle Type(s): car, pedal cycle** Car collides with push bike at roundabout. Causation Factor – Car failed to look at oncoming roundabout traffic.
A12 / Chelmsford Road / Roman Road junction - 18271611	19 Feb 2018 18:10	Serious	Wet carriageway / Darkness	**Vehicle Type(s): All cars (2)** A car failed to stop + judge braking situation ahead. Causation factor – Car possibly failed to drive safely according to road conditions. Is possible car followed too close to another car and failed to judge braking situation ahead.
A12 / Chelmsford Road / Roman Road junction - 18352285	20 Dec 2018 11:40	Slight	Dry carriageway / Daylight	**Vehicle Type(s): All cars (2)** Car collided with the rear of another car at the roundabout. Causation factor – 1st car impaired by drugs
A12 / Chelmsford Road / Roman Road junction - 19830478	10 Apr 2019 06:43	Serious	Dry carriageway / Daylight	**Vehicle Type(s): LGV, Motorcycle** LGV collides with the side of a motorcycle as motorcycle is passing in outside lane Causation factor – LGV possibly failed to signal. Failed to judge approaching rear traffic.
A12 / Chelmsford Road / Roman Road junction – 19847178	29 Apr 2019 08:15	Serious	Dry carriageway / Daylight	**Vehicle Type(s): All cars (2)** Car collides with the rear of another car as it's waiting to enter roundabout Causation factor – Rear car failed to look and stop according to traffic situation ahead

Location / Reference	Date / Time	Severity	Conditions	Summary / Causation Factor
A12 / Chelmsford Road / Roman Road junction – 19842622	27 May 2019 19:29	Slight	Dry carriageway / Daylight	**Vehicle Type(s): All cars (2)** Car occupant fell asleep at the wheel and crashed into the rear of another car. Causation factor – 1st car occupant loss of control due to falling asleep
A12 / Chelmsford Road / Roman Road junction – 19907074	05 Dec 2019 07:45	Slight	Wet carriageway / Daylight	**Vehicle Type(s): All cars (2)** Car failed to stop in traffic and crashed into rear of another car Causation factor – Car possibly following too close and possible failure to stop according to traffic situation ahead.
A12 / Chelmsford Road / Roman Road junction – 20923366	26 Jan 2020 06:04	Slight	Wet carriageway / Darkness	**Vehicle Type(s): All cars (2)** Car changes lanes in and crosses in front of another car. Both vehicles collide. Causation factor – 1st car failed to judge approaching traffic situation and yield accordingly.
A12 / Chelmsford Road / Roman Road junction – 20928536	08 Feb 2020 19:01	Slight	Dry carriageway / Darkness	**Vehicle Type(s): All cars (2)** Car indicates left turn; another car enters same lane and both vehicles collide. Causation factor – 1st car possible failure to judge traffic speed or path during process of changing lanes

5.5 The above tables indicate that there have been no pedestrian collisions in the period under consideration.

5.6 One collision involved a cyclist resulting in a slight injury.

5.7 Three collisions involved motorcyclists but with no common theme.

5.8 The remainder of the collisions are seen as typical in nature for the junction form and level of flow. There does not appear to be any pattern of collisions on the slip roads that would indicate high speed to low speed queue issues.

Safety Objective

5.9 The above collision analysis indicates that 'road users' are the only population likely to be affected. The baseline risk will therefore only be assessed for this population. The risks associated with the development scenario will be compared with the baseline risk.

5.10 The safety objective for the risk assessment at the planning stage is:

> **"To consider the risk associated with intensification of use at the existing roundabout and any adverse impact on safety of the local and strategic road network. To demonstrate that there would not be an adverse impact on the safety of the roundabout and strategic road network because of the additional trips caused by the R03 development."**

6 SITE ASSESSMENT

Introduction

6.1 Before moving onto the risk assessment, this section sets out the details of the capacity assessment work undertaken at the A12 Junction Roundabout

6.2 The assessment work includes analysis of the impact of the wider R03 site allocations at the A12 Junction 12 roundabout for the following scenarios during the morning and evening peak hours:

- 2022 Observed;
- 2032 Future Base;
- 2032 Future Base + Proposed R03 site allocations.

6.3 2032 has been chosen as the 'opening year' for the purposes of assessing the junction. For a development that is phased housing delivery, occupations will occur over a period of time and trip generation will steadily increase rather than a development coming online at a particular moment. 2032 has been chosen as a reasonable future year where all of the development could be completed and occupied.

6.4 The potential for traffic growth on the local network has been established using TEMPro. However as the R03 development comprises the majority of the change in the area, it needs to be removed from the growth figures to avoid double counting as set out in WebTag unit M4 (para 7.3.5).

6.5 Using this approach, the following growth factors are output:

- 2022 – 2032 Morning Peak = 1.004; and
- 2022 – 2032 Evening Peak = 1.005.

6.6 The worked outputs from TEMPro are set out in **Appendix 1**.

Development Trip Generation, Distribution and Assignment

6.7 The R03 allocation has been assessed using the same trips rates for the residential development regardless of where in the allocation the trips originate. Distribution has also been established using the same approach for all areas of the development. however, assignment of vehicle trips has been based on the access points onto the network for the various development accesses based on the anticipated number of dwellings.

Residential Trip Generation

6.8 The residential trip generation for both the proposed allocation has been based on the TRICS database for other similar developments, in terms of size and location. The following approach to trip generation was discussed and agreed with ECC in pre-application scoping discussions. To ensure that the sites selected are comparable to the proposed residential development the following selection parameters are proposed:

- Land use: Residential;
- Category: Houses Privately Owned;
- Number of Dwellings Range 200 -1,000;
- Location: Edge of town and suburban;
- Multi-modal trip rates;
- Sites in England only, excluding Greater London;
- Location type: Edge of Town and Suburban Area;
- Data Range: TRICS default 8 years cut-off; and
- Parameter: Number of dwellings.

6.9 The selection based upon private housing sites will represent the worst-case scenario in terms of traffic generation for the site, as affordable / rented accommodation generally has a lower trip rate than private housing. A copy of the TRICS output is provided at **Appendix 2** of this report. The details of the surveys from the residential trip rates were derived are detailed in **Table 6.1** below.

Table 6.1: Residential Survey Selection

Reference	Location	Location Type	Number of Dwellings
ES-03-A-03	Polegate, East Sussex	Edge of town	212
KC-03-A-06	Herne Bay	Suburban	363
KC-03-A-07	Herne Bay	Edge of town	288
SC-03-A-05	Horley	Edge of town	207
ST-03-A-07	Stafford	Edge of town	248
WS-03-A-11	Horsham	Edge of town	799

6.10 The TRICS outputs allow a pedestrian and cycle trip rate per dwelling to be established. These are set out in **Table 6.2** below and are used to inform the assessment.

Table 6.2: Total Pedestrian and Cycle Trip Rates

	Arrivals		Departures		Total	
	Peds	Cycles	Peds	Cycles	Peds	Cycles
AM 08:00-09:00	0.03	0.003	0.112	0.016	0.142	0.019
PM 17:00-18:00	0.03	0.008	0.029	0.004	0.059	0.012
Daily	0.341	0.048	0.347	0.046	0.688	0.094

6.11 The expected pedestrian and cycle trip generation for 680 homes is set out in **Table 6.3** below.

Table 6.3: Total Pedestrian and Cycle Trips

	Arrivals		Departures		Total	
	Peds	Cycles	Peds	Cycles	Peds	Cycles
AM 08:00-09:00	20	2	76	11	97	13
PM 17:00-18:00	20	5	20	3	40	8
Daily	232	33	236	31	468	64

6.12 The proposed residential development of 680 residential units has the potential to result in 97 pedestrians and 13 cyclists in the busiest hour, with a total of 468 off-site pedestrian movements and 64 off-site cycle movements daily.

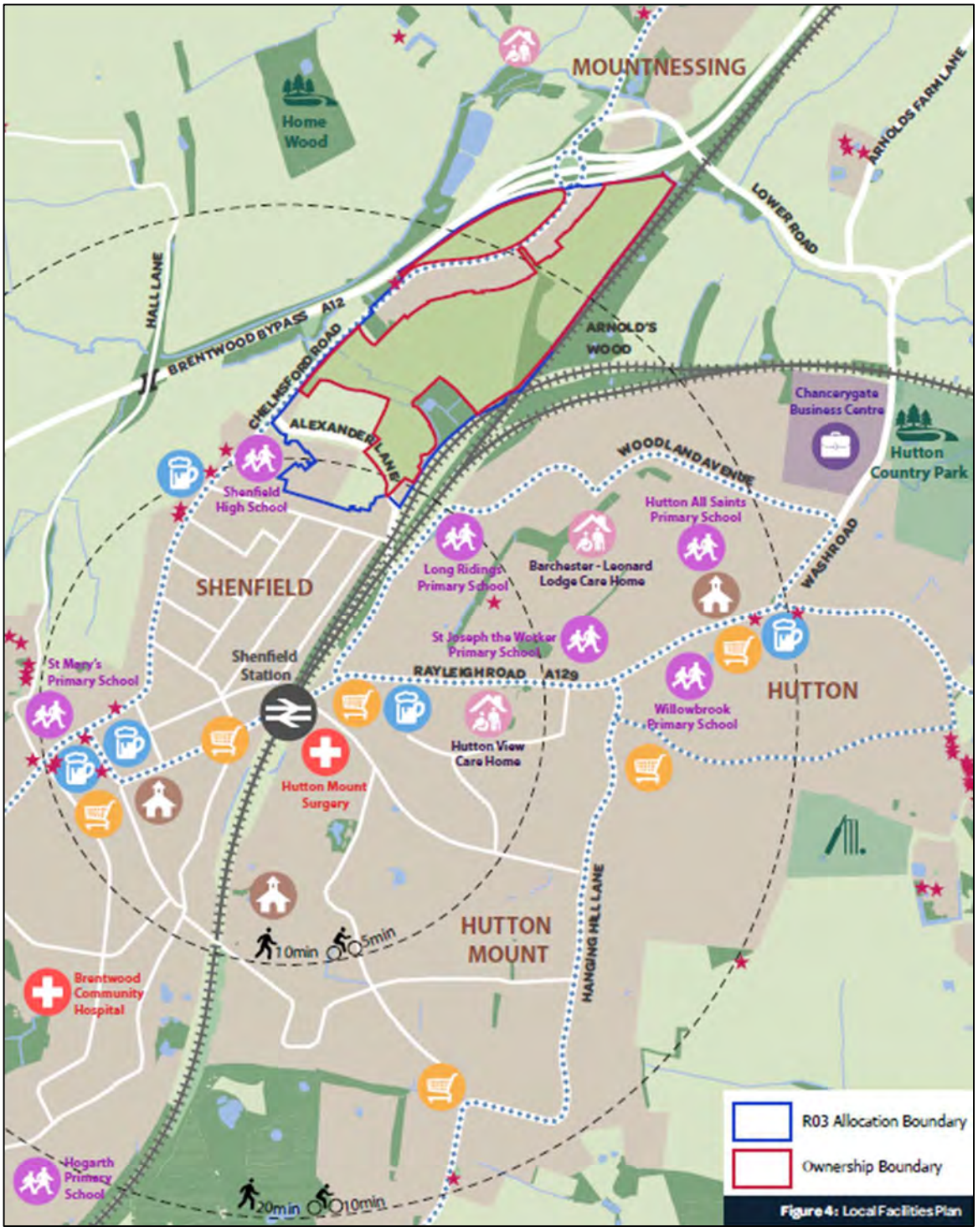
6.13 From the development sites, the main destinations on foot and by bicycle will be towards Shenfield and Brentwood. The schools and station are to the south, the main retail destinations are to the south and the masterplan has been developed to ensure that connections through the developments enable pedestrian and cycle movements through each other to access these facilities.

6.14 There is an existing off-route cycle path along Chelmsford Road providing connections towards the town and facilities to the south.

6.15 An extract of the joint masterplanning study showing local facilities is provided in **Figure 6.1** below. The dotted lines represent bus routes.

6.16 Aside from the petrol station and shop, located before the A12 junction, it is considered that there will be a limited desire to travel to the north of the sites on foot or cycle.

Figure 6.1: Local Facilities



6.17 The TRICS outputs also allow a vehicle trip rate per dwelling to be established. These are set out in **Table 6.4** below and are used to inform the traffic assessment.

Table 6.4: Total Vehicle Trip Rates

	Arrivals	Departures	Total
AM 08:00-09:00	0.142	0.417	0.559
PM 17:00-18:00	0.401	0.164	0.565
Daily	2.357	2.334	4.691

6.18 The expected vehicle trip generation for 680 homes is set out in **Table 6.5** below.

Table 6.5: Total Vehicle Trips

	Arrivals	Departures	Total
AM 08:00-09:00	97	284	380
PM 17:00-18:00	273	112	384
Daily	1603	1587	3190

6.19 The proposed residential development of 200 residential units has the potential to result in 380 total vehicle trips in the morning peak hour and 384 total vehicle trips in the evening peak hour.

Residential Traffic Distribution

6.20 The distribution of the residential trips has been reviewed based on the 2011 Census database, which provides details of where residents within Brentwood MSOA area 005 are likely to work. The Census 2011 data is still the most comprehensive dataset available for this purpose, although it is acknowledged that recent changes in working practices may change travel habits, it is considered that the general attractiveness of nearby areas is unlikely to have significantly changed.

6.21 The residential traffic based on the Census journey to work data results in the following distribution:

Eastbound:

- 71% eastbound Chelmsford Road of which:
  - 40% routes via A12 west;
  - 14% routes via A12 east; and
  - 17% routes via Roman Road north;

Westbound:

- 29% westbound Chelmsford Road of which:
  - 21% continues towards Shenfield;
  - 4% routes via Oliver Road; and
  - 4% routes via Hutton Road.

Employment Trip Generation and Distribution

6.22 The employment element trip generation and distribution has been undertaken using the following assumptions:

- An estimate of 235 employees in relation to the 2ha allocation (taken from the Local Plan Transport Assessment, Stantec, 2020);
- Trip generation from TRICS using Office use on a per-employee basis to establish total person trips;
- Vehicle trips established using census 2011 mode split of 70% for journeys to work into Brentwood MSOA area 005; and
- Trip distribution using the above residential distribution assumption.

6.23 Vehicles have been assigned to the most appropriate routes based on the distribution using route planning software.

Assessment Periods

6.24 In reviewing the traffic flow data collected on the local road network it is apparent that the AM Peak flows occur 07:30-08:30 for most junctions in the study area. The difference between 07:30-08:30 and 08:00-09:00 is circa 10% and consequently it is considered appropriate to assess this period as the AM peak. In order to ensure a consistent approach, the AM peak development flows (and equivalent for committed development) have been taken from TRICS for 07:30-08:30. Where only hourly flows are available the average of 07:00-08:00 and 08:00-09:00 has been used.

6.25 The PM peak is 17:00-18:00 on the observed flows and this is assessed as the PM peak within the junction modelling.

Traffic Flow Diagrams

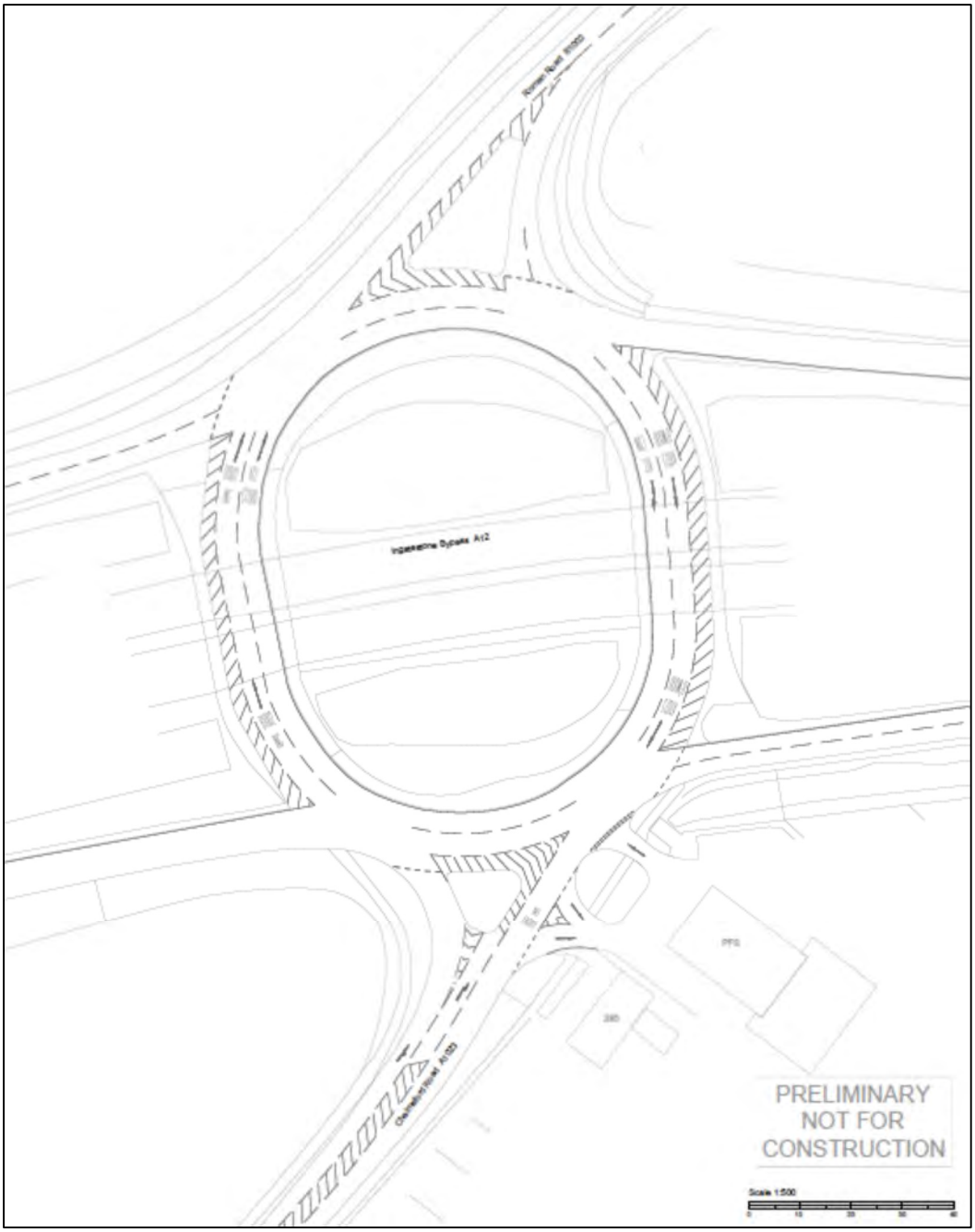
6.26 The existing observed traffic, along with the future assessment scenarios are presented on traffic flow diagrams at **Appendix 3**.

A12 Junction A12 – Existing Layout and Operation

6.27 Chelmsford Road connects to the A12 Junction 12 to the north east of the development site via a large grade separated roundabout junction. The A12 Junction 12 is a key junction as it provides access to Greater London / M25 motorway to the west and the A12 corridor that routes through Essex to the east providing connections to the city of Chelmsford and other towns and villages.

6.28 The existing layout of the A12 Junction 12 roundabout is detailed in **Figure 6.2** below.

Figure 6.2: Existing A12 Junction 12 Roundabout Layout



6.29 The junction also provides access to a petrol filling station including food retail unit located to the south east of the roundabout circulatory carriageway. **Figure 6.3** below provides a satellite image of the A12 Junction 12.

Figure 6.3: A12 Junction 12 Roundabout Satellite Image

2022 Observed

6.30 To understand the existing operation the junction has been modelled in Junctions 10 with the outputs provided at **Appendix 4**.

6.31 The outputs have been updated following a review by Aecom on behalf of National Highways. The Lane Simulation mode in Junctions 10 has now been utilised.

6.32 Queue lengths have also been reviewed based on guidance received from TRL on the correct approach to understanding queue length outputs in Junctions 10 under lane simulation mode. Queue length data is provided at **Appendix 5**.

6.33 A summary of the results of the assessment scenarios is provided in **Table 6.6**.

Table 6.6: A12 Junction 12 Modelling Results – 2022 Base – Existing Roundabout

	AM Peak			PM Peak		
Arm	Queue	RFC	Delay (s)	Queue	RFC	Delay
A12 (E)	11.2	0.916	48.64	1.9	0.532	7.82
Chelmsford Road	1.1	0.498	4.06	1.1	0.476	3.59
A12 (W)	1.3	0.448	5.95	1.6	0.550	7.24
Roman Road	1.5	0.592	5.24	0.8	0.393	3.44

6.34 The results of the modelling of the junction in its existing form indicate that the morning peak is currently seeing queuing and delay on the westbound off-slip with an RFC of 0.916 and average queue length of around 11 vehicles (in the longest lane). Average delay is around 49 seconds for this arm. This aligns with the observed queue lengths from the collected survey data where the average queue lengths are circa 12 vehicles (72m). No intercept adjustments have been made, however a capacity adjustment increase of 5% has been applied to the A12 (E) arm to calibrate it as close as possible to the observed queues. The remaining arms didn't require any further calibration as the modelled queues match the observed ones. Given the TRL guidance on adjustments to capacity based on queue length it is considered that the base results are representative of the existing situation.

6.35 The existing queues on the A12 off slips do not impact on the operation of the A12 mainline. The existing off slips are circa 450m and allow sufficient deceleration length to allow vehicles to leave the mainline and stop at the back of the queue.

2032 Base

6.36 This scenario is the 2022 base year plus the TEMPro adjusted growth over the 10-year period. It provides a baseline without any development traffic.

6.37 A summary of the results of the assessment scenarios is provided in **Table 6.7**.

Table 6.7: A12 Junction 12 Modelling Results – 2032 Base – Existing Roundabout

	AM Peak			PM Peak		
Arm	Queue	RFC	Delay (s)	Queue	RFC	Delay
A12 (E)	12.3	0.917	53.12	1.5	0.523	7.46
Chelmsford Road	1.2	0.493	4.17	1.1	0.495	3.62
A12 (W)	1.2	0.448	5.99	1.9	0.557	7.52
Roman Road	1.7	0.593	5.23	1.0	0.398	3.48

6.38 The results of the modelling of the junction in its existing form in 2032 indicate that the morning peak will continue seeing queuing and delay on the westbound off-slip with an RFC of 0.917 and average queue length of around 12 vehicles (in the longest lane). Average delay is predicted to be around 53 seconds for this arm.

6.39 Notwithstanding the marginal increases in terms of queueing and delay in each arm of the junction from the 2022 base scenario, the junction will continue to operate within capacity in 2032.

2032 Base + Proposed R03 Site Allocation

6.40 To understand the existing operation for a future year of 2032 and with the proposed R03 allocation, the junction has been modelled in Junctions 10, the outputs are provided at **Appendix 4**. A summary of the results of the assessment scenarios is proposed in **Table 6.8**.

Table 6.8: A12 Junction 12 Modelling Results – 2032 Base + Proposed R03 Site allocations

	AM Peak			PM Peak		
Arm	Queue	RFC	Delay (s)	Queue	RFC	Delay
A12 (E)	24.8	0.990	97.50	2.0	0.626	9.94
Chelmsford Road	1.7	0.593	5.12	1.3	0.527	4.04
A12 (W)	1.4	0.464	6.38	2.4	0.559	7.60
Roman Road	2.0	0.648	6.07	1.0	0.449	4.10

6.41 The addition of the R03 site allocation increases the flow at the roundabout junction and the junction is anticipated to operate close to theoretical capacity. The westbound off slip seeing RFC of 0.990 and average 25 vehicle queue on the slip road in the morning peak. This equates to a queue length of circa 150m based on a vehicle length of 6m. The predicted average queue length does not exceed the length of the slip road, which is circa 450m to the diverge. Even allowing for queue fluctuation, the queues are considered likely to remain within the slip road lengths.

6.42 The existing off slips are circa 450m and allow sufficient deceleration length to allow vehicles to leave the mainline and stop at the back of the queue. Therefore, there is no safety risk in terms of the future traffic anticipated.

6.43 There is an increase in overall delay for vehicles using this slip road of around 40 seconds. It is not considered that this increase in delay justifies mitigation measures as it will be imperceptible over the length of journeys made on the strategic road network.

6.44 It is noted that there is some occurrence in the AM peak of drivers using the southbound off-slip and then southbound on-slip to skip part of a queue forming on the A12 approach to the Brook Street roundabout. This will become less desirable as delays at the junction give way line increase, so may reduce flows until a delay equilibrium is reached.

Conclusions

6.45 The assessment of the pedestrian and cycle trip generation and distribution concludes that there is likely to be very little desire for pedestrian or cycle movements from the allocation to cross the A12.

6.46 The results of the modelling of the junction in its existing form indicate that the morning peak is currently seeing queuing and delay on the westbound off-slip with an RFC of 0.916 and average queue length of 11 vehicles. This equates to a queue length of circa 66m based on a vehicle length of 6m. This aligns with the observed queue lengths from the collected survey data. No current PM issues are evident. The remaining arms of the roundabout operate within design capacity in both the morning and evening peak hours.

6.47 The existing queues on the A12 off slips do not impact on the operation of the A12 mainline. The existing off slips are circa 450m and allow sufficient deceleration length to allow vehicles to leave the mainline and stop at the back of the queue.

6.48 The addition of the traffic growth and the R03 site allocations increases the flows at the roundabout junction and the junction is anticipated to operate close to theoretical capacity. The predicted queue length (150m) does not exceed the length of the slip road, which is circa 450m to the diverge. The existing off slips are predicted to allow sufficient deceleration length to allow vehicles to leave the mainline and stop at the back of the queue. Therefore, there is no safety risk in terms of the future traffic anticipated.

6.49 The additional traffic associated with the proposed R03 development will increase queues and delay during the AM peak, but it is not considered that the impacts are ‘severe’ and do not have a significant increase in safety risk. Therefore, the A12 Junction 12 roundabout will not require any mitigation to accommodate the R03 site allocations.

7 SAFETY RISK ASSESSMENT PROCESS

7.1 The safety risk assessment process is set out in GG104, as below in **Figure 7.1**.

Figure 7.1: Safety Risk Assessment Process

Hazard Identification and Analysis

7.2 The purpose of the hazard identification and analysis is to identify all reasonably foreseeable hazards with an activity and the associated consequences. Through identifying hazards from an early stage and throughout the project, the design of the scheme can be modified to either remove the hazards completely or reduce the risk from hazards as soon as they are identified.

Safety Risk Assessment

7.3 The level of detail for any safety risk shall be proportionate to the safety risks being assessed and the activity type categorisation. As a relatively straight forward scheme categorised as 'Type A' this report presents the required safety risk assessment in the tables overleaf.

7.4 **Table 7.1**, which is based on Table D.1 in GG104, details the 'Risk Matrix' used in estimating the 'Risk Value' for each identified hazard based on an assessment of the likelihood of the risk being realised and the potential severity of the consequences. The 'Risk Value' falls into three categories; Low, Medium or High.

7.5 **Table 7.2**, based on Table D.2 in GG104, describes each of the scheme hazards identified for the existing roundabout, existing roundabout with development and proposed mitigation scheme with development. The table details for each hazard the response / control measures proposed to be implemented to reduce the likelihood of a risk being realised or lessen the severity of the potential outcome.

7.6 The safety risk mitigation measures follow the ERIC hierarchy – Eliminate, Reduce, Isolate and Control for each safety risk and are 'reasonably required' for road user populations.

Table 7.1: Risk Value, Likelihood and Severity of Outcome Matrix Based on GG 104 (June 2018)

Likelihood (L) x Severity (S) = Risk Value (R)			Severity (S)				
			1. Minor harm	2. Moderate harm	3. Serious harm	4. Major harm	5. Extreme harm
			Minor damage or loss, no injury	Slight injury or illness, moderate damage or loss	Serious injury or illness, substantial damage or loss	Fatal injury, major damage or loss	Multiple fatalities, extreme loss or damage
Likelihood (L)	1	Very unlikely; highly improbable, not known to occur	1	2	3	4	5
	2	Unlikely; less than 1 per 10 years	2	4	6	8	10
	3	May happen; once every 5 – 10 years	3	6	9	12	15
	4	Likely; Once every 1- 4 years	4	8	12	16	20
	5	Almost certain; Once a year or more	5	10	15	20	25

Risk Value (R)	Required Action
Low (1-9)	Ensure assumed control measures are maintained and reviewed as necessary.
Medium (10-19)	Additional control measures needed to reduce risk rating to a level which is equivalent to a test of “reasonably required” for the population concerned.
High (20-25)	Activity not permitted. Hazard to be avoided or risk to be reduced to tolerable.

Notes: Risk is the likelihood of potential harm from a hazard being realised.

The extent of the risk will depend on:

- The likelihood of that harm occurring;
- The potential severity of that harm; and
- The population which might be affected.

Table 7.2: Hazard identification and Risk Mitigation

Project	Land North of Shenfield, Essex – Mitigation Scheme at A12 Junction 12								
Activity / Decision	For Planning				Date	24.11.22			
Decision Maker / Assessor	Matthew Brown				Contact Details	RPS London			
Ref	Hazard / Risk Description	L	S	R	Response / Control Measure	L	S	R	Details
1 Existing A12 Junction 12 roundabout	**Vehicles** The capacity assessment identifies that the existing roundabout operates within design capacity. The existing queue on the A12 off slips do not impact on the operation of the A12 mainline. The collision data does not identity common patterns of vehicular collisions due to the characteristics of the roundabout. Therefore, the risk value for vehicles at the roundabout is considered low with no hazards identified for vehicles	2	3	6	No control measures identified for vehicles				
	Pedestrians and Cycles No collisions involving pedestrians have been recorded and there is one cycle collision.	2	3	6	No control measures required.				
2. Existing A12 Junction 12 roundabout with R03 site allocations	**Vehicles** The capacity assessment identifies that the existing roundabout operates within design capacity. The existing queue on the A12 off slips extends as a result of the proposals but does not impact on the operation of the A12 mainline. There is an increase in delay for	3	3	9	No control measures identified for vehicles				

	drivers on the southbound off-slip of around 40 seconds The increase in queuing, delay and volume of movements may increase likelihood of an accident, but not the severity								
	Pedestrians and Cycles Assessment of trip generation and distribution of pedestrian and cycle movements from the site indicates that no material change in movements through the junction is expected as a result of the proposed R03 development.	2	3	6	No control measures required.				

8 DOCUMENTATION, MONITORING AND REVIEW

8.1 The safety risk assessment should be documented, monitored and reviewed to ensure any safety risk mitigations are performing as expected.

8.2 This safety risk assessment report should be updated throughout the development and operational lifecycle of the project with its ownership regularly reviewed. This will enable any changes in safety or related actions or decisions to be documented to ensure that the safety objectives continue to be realised.

8.3 Once the construction phase commences the performance of the scheme will be monitored by National Highways to ensure that it is operating as expected and to ensure any necessary corrective action is undertaken.

8.4 For a 'Type A' category activity it is acceptable for monitoring to be part of routine performance measurement.

Appendices

Appendix 1 – TEMPro Output

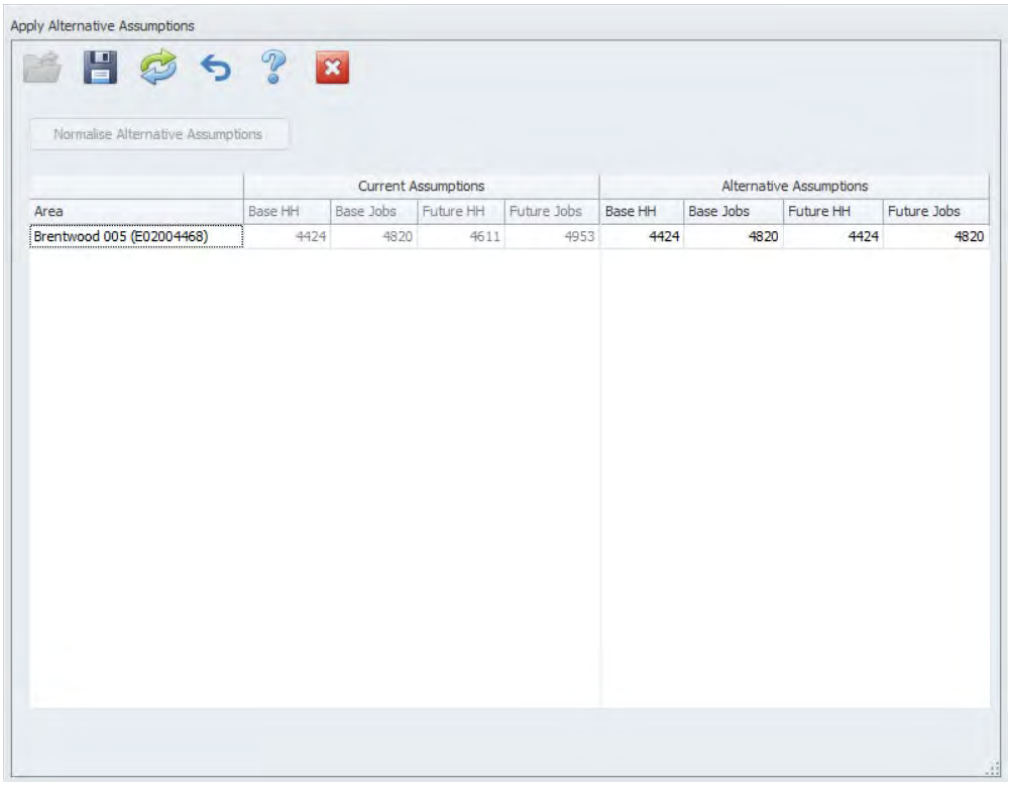
Appendix 1 - TEMPro Outputs

1.1 The potential for traffic growth on the local network has been established using TEMPro Version 7.2 and the NTM for Brentwood MSOA area 005. For the purposes of considering the A12 junction, National Highways require a 10-year assessment horizon (2022 – 2032).

1.2 However, as the R03 development comprises the majority of the change in the area, it needs to be removed from the growth figures to avoid double counting as set out in WebTag unit M4 (para 7.3.5).

1.3 **Figure 1** shows the alternative assumptions applied to predict the future AM and PM growth factors in 2032. More specifically, to avoid double counting the number of future households and future jobs remains as per existing 2022 base figures. These assumptions discount 187 households and 133 jobs from the future growth factor calculations as these are going to be provided by the R03 development.

Figure 1: TEMPro Alternative Assumptions



1.4 **Figure 2** and **Figure 3** show the NTM traffic growth calculations for the AM and PM Peak periods respectively. The latest "RTF 2018 Scenario 1 – Reference (2015 – 2050)" dataset has been used for a "Principal" road type within the Brentwood MSOA area 005.

Figure 2: TEMPro 2032 Traffic Growth Calculations (AM Peak)

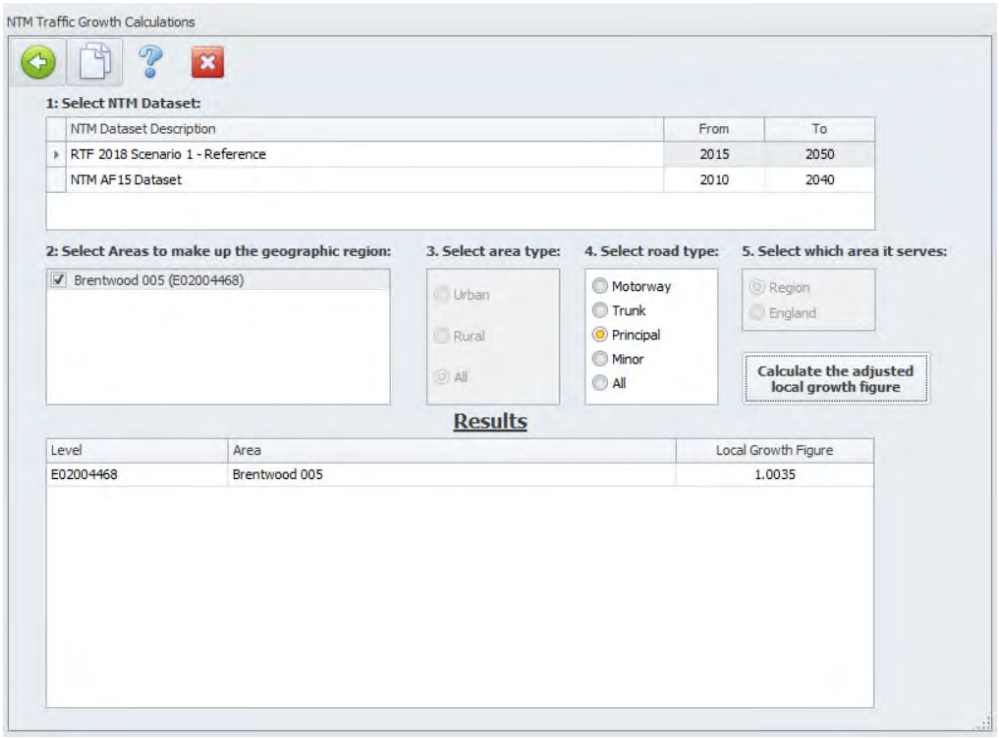
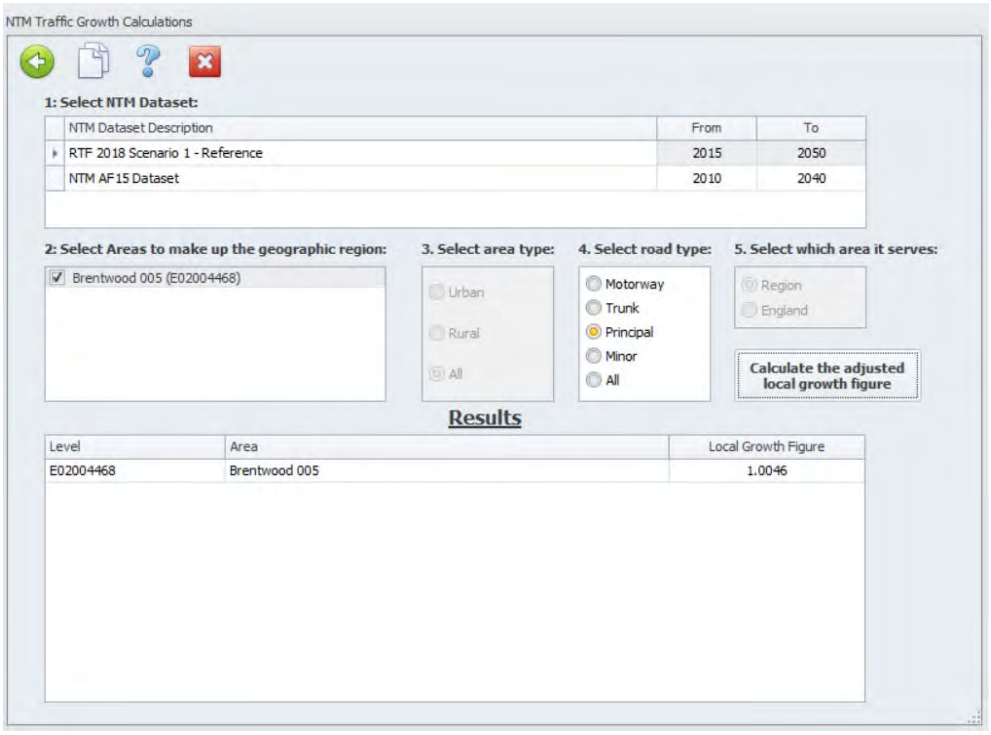


Figure 3: TEMPro 2032 Traffic Growth Calculations (PM Peak)



1.5 Using this robust approach, the following growth factors are output (as shown in **Figure 2** and **Figure 3**):

- 2022 – 2032 AM Peak = 1.0035; and
- 2022 – 2032 PM Peak = 1.0046.

Appendix 2 – TRICS

Calculation Reference: AUDIT-515506-210412-0423

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	KC	KENT	2 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 207 to 918 (units:)
Range Selected by User: 200 to 1000 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 24/09/19

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

Selected survey days:

Monday	2 days
Tuesday	1 days
Wednesday	3 days

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

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	5

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	6

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

Secondary Filtering selection:

Use Class:

C3	6 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

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

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

Population within 5 miles:

50,001 to 75,000	2 days
75,001 to 100,000	2 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

1.1 to 1.5	5 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	2 days
No	4 days

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

PTAL Rating:

No PTAL Present	6 days

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

LIST OF SITES relevant to selection parameters

1 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

2 KC-03-A-06 MIXED HOUSES & FLATS KENT
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

3 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

4 SC-03-A-05 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total No of Dwellings: 207
Survey date: MONDAY *01/04/19* *Survey Type: MANUAL*

5 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total No of Dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

6 WS-03-A-11 MIXED HOUSES WEST SUSSEX
ELLIS ROAD
WEST HORSHAM
S BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total No of Dwellings: 918
Survey date: TUESDAY *02/04/19* *Survey Type: MANUAL*

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.082	6	373	0.306	6	373	0.388
08:00 - 09:00	6	373	0.142	6	373	0.417	6	373	0.559
09:00 - 10:00	6	373	0.134	6	373	0.162	6	373	0.296
10:00 - 11:00	6	373	0.109	6	373	0.136	6	373	0.245
11:00 - 12:00	6	373	0.123	6	373	0.146	6	373	0.269
12:00 - 13:00	6	373	0.152	6	373	0.140	6	373	0.292
13:00 - 14:00	6	373	0.149	6	373	0.148	6	373	0.297
14:00 - 15:00	6	373	0.175	6	373	0.181	6	373	0.356
15:00 - 16:00	6	373	0.263	6	373	0.173	6	373	0.436
16:00 - 17:00	6	373	0.294	6	373	0.172	6	373	0.466
17:00 - 18:00	6	373	0.401	6	373	0.164	6	373	0.565
18:00 - 19:00	6	373	0.333	6	373	0.189	6	373	0.522
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.357			2.334			4.691

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	207 - 918 (units:)
Survey date date range:	01/01/13 - 24/09/19
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.002	6	373	0.002	6	373	0.004
08:00 - 09:00	6	373	0.005	6	373	0.004	6	373	0.009
09:00 - 10:00	6	373	0.002	6	373	0.000	6	373	0.002
10:00 - 11:00	6	373	0.000	6	373	0.001	6	373	0.001
11:00 - 12:00	6	373	0.001	6	373	0.002	6	373	0.003
12:00 - 13:00	6	373	0.001	6	373	0.001	6	373	0.002
13:00 - 14:00	6	373	0.001	6	373	0.000	6	373	0.001
14:00 - 15:00	6	373	0.003	6	373	0.003	6	373	0.006
15:00 - 16:00	6	373	0.005	6	373	0.004	6	373	0.009
16:00 - 17:00	6	373	0.003	6	373	0.003	6	373	0.006
17:00 - 18:00	6	373	0.001	6	373	0.001	6	373	0.002
18:00 - 19:00	6	373	0.000	6	373	0.001	6	373	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.022			0.046

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.000	6	373	0.000	6	373	0.000
08:00 - 09:00	6	373	0.001	6	373	0.002	6	373	0.003
09:00 - 10:00	6	373	0.002	6	373	0.000	6	373	0.002
10:00 - 11:00	6	373	0.002	6	373	0.003	6	373	0.005
11:00 - 12:00	6	373	0.001	6	373	0.001	6	373	0.002
12:00 - 13:00	6	373	0.002	6	373	0.004	6	373	0.006
13:00 - 14:00	6	373	0.002	6	373	0.000	6	373	0.002
14:00 - 15:00	6	373	0.000	6	373	0.001	6	373	0.001
15:00 - 16:00	6	373	0.001	6	373	0.002	6	373	0.003
16:00 - 17:00	6	373	0.002	6	373	0.001	6	373	0.003
17:00 - 18:00	6	373	0.001	6	373	0.001	6	373	0.002
18:00 - 19:00	6	373	0.000	6	373	0.000	6	373	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.014			0.015			0.029

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.001	6	373	0.001	6	373	0.002
08:00 - 09:00	6	373	0.002	6	373	0.001	6	373	0.003
09:00 - 10:00	6	373	0.001	6	373	0.002	6	373	0.003
10:00 - 11:00	6	373	0.001	6	373	0.001	6	373	0.002
11:00 - 12:00	6	373	0.001	6	373	0.001	6	373	0.002
12:00 - 13:00	6	373	0.001	6	373	0.001	6	373	0.002
13:00 - 14:00	6	373	0.001	6	373	0.001	6	373	0.002
14:00 - 15:00	6	373	0.001	6	373	0.001	6	373	0.002
15:00 - 16:00	6	373	0.001	6	373	0.001	6	373	0.002
16:00 - 17:00	6	373	0.001	6	373	0.001	6	373	0.002
17:00 - 18:00	6	373	0.001	6	373	0.001	6	373	0.002
18:00 - 19:00	6	373	0.000	6	373	0.000	6	373	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.012			0.024

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.001	6	373	0.005	6	373	0.006
08:00 - 09:00	6	373	0.003	6	373	0.016	6	373	0.019
09:00 - 10:00	6	373	0.001	6	373	0.003	6	373	0.004
10:00 - 11:00	6	373	0.002	6	373	0.001	6	373	0.003
11:00 - 12:00	6	373	0.002	6	373	0.002	6	373	0.004
12:00 - 13:00	6	373	0.004	6	373	0.002	6	373	0.006
13:00 - 14:00	6	373	0.000	6	373	0.000	6	373	0.000
14:00 - 15:00	6	373	0.003	6	373	0.001	6	373	0.004
15:00 - 16:00	6	373	0.004	6	373	0.001	6	373	0.005
16:00 - 17:00	6	373	0.012	6	373	0.005	6	373	0.017
17:00 - 18:00	6	373	0.008	6	373	0.004	6	373	0.012
18:00 - 19:00	6	373	0.008	6	373	0.006	6	373	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.048			0.046			0.094

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.105	6	373	0.470	6	373	0.575
08:00 - 09:00	6	373	0.185	6	373	0.747	6	373	0.932
09:00 - 10:00	6	373	0.183	6	373	0.230	6	373	0.413
10:00 - 11:00	6	373	0.154	6	373	0.200	6	373	0.354
11:00 - 12:00	6	373	0.172	6	373	0.215	6	373	0.387
12:00 - 13:00	6	373	0.216	6	373	0.195	6	373	0.411
13:00 - 14:00	6	373	0.216	6	373	0.211	6	373	0.427
14:00 - 15:00	6	373	0.247	6	373	0.241	6	373	0.488
15:00 - 16:00	6	373	0.462	6	373	0.243	6	373	0.705
16:00 - 17:00	6	373	0.498	6	373	0.264	6	373	0.762
17:00 - 18:00	6	373	0.657	6	373	0.247	6	373	0.904
18:00 - 19:00	6	373	0.534	6	373	0.310	6	373	0.844
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.629			3.573			7.202

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.012	6	373	0.023	6	373	0.035
08:00 - 09:00	6	373	0.030	6	373	0.112	6	373	0.142
09:00 - 10:00	6	373	0.019	6	373	0.019	6	373	0.038
10:00 - 11:00	6	373	0.017	6	373	0.021	6	373	0.038
11:00 - 12:00	6	373	0.012	6	373	0.011	6	373	0.023
12:00 - 13:00	6	373	0.015	6	373	0.010	6	373	0.025
13:00 - 14:00	6	373	0.017	6	373	0.015	6	373	0.032
14:00 - 15:00	6	373	0.022	6	373	0.026	6	373	0.048
15:00 - 16:00	6	373	0.090	6	373	0.025	6	373	0.115
16:00 - 17:00	6	373	0.041	6	373	0.014	6	373	0.055
17:00 - 18:00	6	373	0.030	6	373	0.029	6	373	0.059
18:00 - 19:00	6	373	0.036	6	373	0.042	6	373	0.078
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.341			0.347			0.688

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.002	6	373	0.025	6	373	0.027
08:00 - 09:00	6	373	0.000	6	373	0.014	6	373	0.014
09:00 - 10:00	6	373	0.002	6	373	0.006	6	373	0.008
10:00 - 11:00	6	373	0.003	6	373	0.004	6	373	0.007
11:00 - 12:00	6	373	0.001	6	373	0.005	6	373	0.006
12:00 - 13:00	6	373	0.001	6	373	0.003	6	373	0.004
13:00 - 14:00	6	373	0.003	6	373	0.004	6	373	0.007
14:00 - 15:00	6	373	0.004	6	373	0.004	6	373	0.008
15:00 - 16:00	6	373	0.016	6	373	0.006	6	373	0.022
16:00 - 17:00	6	373	0.018	6	373	0.004	6	373	0.022
17:00 - 18:00	6	373	0.013	6	373	0.003	6	373	0.016
18:00 - 19:00	6	373	0.019	6	373	0.006	6	373	0.025
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.082			0.084			0.166

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.000	6	373	0.009	6	373	0.009
08:00 - 09:00	6	373	0.000	6	373	0.008	6	373	0.008
09:00 - 10:00	6	373	0.000	6	373	0.004	6	373	0.004
10:00 - 11:00	6	373	0.000	6	373	0.004	6	373	0.004
11:00 - 12:00	6	373	0.000	6	373	0.002	6	373	0.002
12:00 - 13:00	6	373	0.001	6	373	0.001	6	373	0.002
13:00 - 14:00	6	373	0.001	6	373	0.000	6	373	0.001
14:00 - 15:00	6	373	0.001	6	373	0.000	6	373	0.001
15:00 - 16:00	6	373	0.005	6	373	0.001	6	373	0.006
16:00 - 17:00	6	373	0.004	6	373	0.000	6	373	0.004
17:00 - 18:00	6	373	0.008	6	373	0.001	6	373	0.009
18:00 - 19:00	6	373	0.006	6	373	0.001	6	373	0.007
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.026			0.031			0.057

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.000	6	373	0.000	6	373	0.000
08:00 - 09:00	6	373	0.000	6	373	0.001	6	373	0.001
09:00 - 10:00	6	373	0.000	6	373	0.000	6	373	0.000
10:00 - 11:00	6	373	0.000	6	373	0.000	6	373	0.000
11:00 - 12:00	6	373	0.000	6	373	0.000	6	373	0.000
12:00 - 13:00	6	373	0.000	6	373	0.000	6	373	0.000
13:00 - 14:00	6	373	0.000	6	373	0.000	6	373	0.000
14:00 - 15:00	6	373	0.000	6	373	0.000	6	373	0.000
15:00 - 16:00	6	373	0.000	6	373	0.000	6	373	0.000
16:00 - 17:00	6	373	0.000	6	373	0.000	6	373	0.000
17:00 - 18:00	6	373	0.000	6	373	0.000	6	373	0.000
18:00 - 19:00	6	373	0.000	6	373	0.000	6	373	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.001			0.001

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.003	6	373	0.034	6	373	0.037
08:00 - 09:00	6	373	0.000	6	373	0.024	6	373	0.024
09:00 - 10:00	6	373	0.002	6	373	0.011	6	373	0.013
10:00 - 11:00	6	373	0.003	6	373	0.008	6	373	0.011
11:00 - 12:00	6	373	0.001	6	373	0.007	6	373	0.008
12:00 - 13:00	6	373	0.002	6	373	0.004	6	373	0.006
13:00 - 14:00	6	373	0.004	6	373	0.004	6	373	0.008
14:00 - 15:00	6	373	0.006	6	373	0.004	6	373	0.010
15:00 - 16:00	6	373	0.022	6	373	0.007	6	373	0.029
16:00 - 17:00	6	373	0.022	6	373	0.004	6	373	0.026
17:00 - 18:00	6	373	0.021	6	373	0.004	6	373	0.025
18:00 - 19:00	6	373	0.025	6	373	0.007	6	373	0.032
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.111			0.118			0.229

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.121	6	373	0.533	6	373	0.654
08:00 - 09:00	6	373	0.217	6	373	0.898	6	373	1.115
09:00 - 10:00	6	373	0.205	6	373	0.262	6	373	0.467
10:00 - 11:00	6	373	0.175	6	373	0.230	6	373	0.405
11:00 - 12:00	6	373	0.187	6	373	0.234	6	373	0.421
12:00 - 13:00	6	373	0.236	6	373	0.211	6	373	0.447
13:00 - 14:00	6	373	0.238	6	373	0.231	6	373	0.469
14:00 - 15:00	6	373	0.277	6	373	0.273	6	373	0.550
15:00 - 16:00	6	373	0.578	6	373	0.277	6	373	0.855
16:00 - 17:00	6	373	0.573	6	373	0.288	6	373	0.861
17:00 - 18:00	6	373	0.716	6	373	0.285	6	373	1.001
18:00 - 19:00	6	373	0.602	6	373	0.364	6	373	0.966
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.125			4.086			8.211

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.064	6	373	0.275	6	373	0.339
08:00 - 09:00	6	373	0.122	6	373	0.385	6	373	0.507
09:00 - 10:00	6	373	0.107	6	373	0.141	6	373	0.248
10:00 - 11:00	6	373	0.088	6	373	0.116	6	373	0.204
11:00 - 12:00	6	373	0.102	6	373	0.121	6	373	0.223
12:00 - 13:00	6	373	0.129	6	373	0.117	6	373	0.246
13:00 - 14:00	6	373	0.127	6	373	0.126	6	373	0.253
14:00 - 15:00	6	373	0.148	6	373	0.156	6	373	0.304
15:00 - 16:00	6	373	0.239	6	373	0.144	6	373	0.383
16:00 - 17:00	6	373	0.262	6	373	0.147	6	373	0.409
17:00 - 18:00	6	373	0.368	6	373	0.145	6	373	0.513
18:00 - 19:00	6	373	0.315	6	373	0.175	6	373	0.490
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.071			2.048			4.119

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.013	6	373	0.026	6	373	0.039
08:00 - 09:00	6	373	0.012	6	373	0.020	6	373	0.032
09:00 - 10:00	6	373	0.021	6	373	0.018	6	373	0.039
10:00 - 11:00	6	373	0.017	6	373	0.015	6	373	0.032
11:00 - 12:00	6	373	0.017	6	373	0.020	6	373	0.037
12:00 - 13:00	6	373	0.019	6	373	0.017	6	373	0.036
13:00 - 14:00	6	373	0.018	6	373	0.021	6	373	0.039
14:00 - 15:00	6	373	0.023	6	373	0.020	6	373	0.043
15:00 - 16:00	6	373	0.015	6	373	0.021	6	373	0.036
16:00 - 17:00	6	373	0.025	6	373	0.018	6	373	0.043
17:00 - 18:00	6	373	0.026	6	373	0.014	6	373	0.040
18:00 - 19:00	6	373	0.014	6	373	0.011	6	373	0.025
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.220			0.221			0.441

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	373	0.000	6	373	0.002	6	373	0.002
08:00 - 09:00	6	373	0.000	6	373	0.004	6	373	0.004
09:00 - 10:00	6	373	0.000	6	373	0.000	6	373	0.000
10:00 - 11:00	6	373	0.000	6	373	0.000	6	373	0.000
11:00 - 12:00	6	373	0.000	6	373	0.001	6	373	0.001
12:00 - 13:00	6	373	0.000	6	373	0.000	6	373	0.000
13:00 - 14:00	6	373	0.000	6	373	0.000	6	373	0.000
14:00 - 15:00	6	373	0.000	6	373	0.000	6	373	0.000
15:00 - 16:00	6	373	0.001	6	373	0.001	6	373	0.002
16:00 - 17:00	6	373	0.001	6	373	0.002	6	373	0.003
17:00 - 18:00	6	373	0.003	6	373	0.000	6	373	0.003
18:00 - 19:00	6	373	0.003	6	373	0.001	6	373	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.011			0.019

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Calculation Reference: AUDIT-515506-210413-0416

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	1 days
08	NORTH WEST		
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	TW	TYNE & WEAR	1 days

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

Primary Filtering selection:

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

Parameter: No of Employees
Actual Range: 115 to 400 (units:)
Range Selected by User: 100 to 500 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 13/11/18

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

Selected survey days:

Tuesday	3 days
Friday	1 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	1
Built-Up Zone	2
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

Not Known	4 days

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

Filter by Site Operations Breakdown:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 500m Range:
All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
25,001 to 50,000	2 days

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

Population within 5 miles:

125,001 to 250,000	2 days
500,001 or More	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	1 days

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

Travel Plan:

No	4 days

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

PTAL Rating:

No PTAL Present	4 days

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

LIST OF SITES relevant to selection parameters

1 LC-02-A-09 OFFICES LANCASHIRE
FURTHERGATE
BLACKBURN

Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total No of Employees: 150
Survey date: TUESDAY *04/06/13* *Survey Type: MANUAL*

2 MS-02-A-02 SCIENCE PARK OFFICES MERSEYSIDE
MOUNT PLEASANT
LIVERPOOL

Edge of Town
Built-Up Zone
Total No of Employees: 400
Survey date: TUESDAY *13/11/18* *Survey Type: MANUAL*

3 TW-02-A-08 HOUSING ASSOCIATION OFFICE TYNE & WEAR
BENTON PARK ROAD
NEWCASTLE UPON TYNE
LONGBENTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Employees: 300
Survey date: FRIDAY *19/10/18* *Survey Type: MANUAL*

4 WY-02-A-05 OFFICES WEST YORKSHIRE
PIONEER WAY
CASTLEFORD
WHITWOOD
Edge of Town
No Sub Category
Total No of Employees: 115
Survey date: TUESDAY *23/05/17* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.013	4	241	0.003	4	241	0.016
07:30 - 08:00	4	241	0.030	4	241	0.010	4	241	0.040
08:00 - 08:30	4	241	0.069	4	241	0.009	4	241	0.078
08:30 - 09:00	4	241	0.106	4	241	0.031	4	241	0.137
09:00 - 09:30	4	241	0.063	4	241	0.030	4	241	0.093
09:30 - 10:00	4	241	0.026	4	241	0.021	4	241	0.047
10:00 - 10:30	4	241	0.025	4	241	0.025	4	241	0.050
10:30 - 11:00	4	241	0.024	4	241	0.013	4	241	0.037
11:00 - 11:30	4	241	0.018	4	241	0.022	4	241	0.040
11:30 - 12:00	4	241	0.012	4	241	0.021	4	241	0.033
12:00 - 12:30	4	241	0.023	4	241	0.024	4	241	0.047
12:30 - 13:00	4	241	0.048	4	241	0.053	4	241	0.101
13:00 - 13:30	4	241	0.037	4	241	0.038	4	241	0.075
13:30 - 14:00	4	241	0.042	4	241	0.024	4	241	0.066
14:00 - 14:30	4	241	0.013	4	241	0.016	4	241	0.029
14:30 - 15:00	4	241	0.019	4	241	0.020	4	241	0.039
15:00 - 15:30	4	241	0.022	4	241	0.029	4	241	0.051
15:30 - 16:00	4	241	0.009	4	241	0.023	4	241	0.032
16:00 - 16:30	4	241	0.015	4	241	0.048	4	241	0.063
16:30 - 17:00	4	241	0.025	4	241	0.070	4	241	0.095
17:00 - 17:30	4	241	0.020	4	241	0.087	4	241	0.107
17:30 - 18:00	4	241	0.015	4	241	0.034	4	241	0.049
18:00 - 18:30	3	283	0.008	3	283	0.008	3	283	0.016
18:30 - 19:00	3	283	0.002	3	283	0.019	3	283	0.021
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.684			0.678			1.362

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	115 - 400 (units:)
Survey date date range:	01/01/13 - 13/11/18
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TAXIS
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.000	4	241	0.000	4	241	0.000
07:30 - 08:00	4	241	0.000	4	241	0.000	4	241	0.000
08:00 - 08:30	4	241	0.001	4	241	0.001	4	241	0.002
08:30 - 09:00	4	241	0.005	4	241	0.005	4	241	0.010
09:00 - 09:30	4	241	0.002	4	241	0.003	4	241	0.005
09:30 - 10:00	4	241	0.001	4	241	0.001	4	241	0.002
10:00 - 10:30	4	241	0.000	4	241	0.000	4	241	0.000
10:30 - 11:00	4	241	0.000	4	241	0.000	4	241	0.000
11:00 - 11:30	4	241	0.001	4	241	0.001	4	241	0.002
11:30 - 12:00	4	241	0.000	4	241	0.000	4	241	0.000
12:00 - 12:30	4	241	0.001	4	241	0.001	4	241	0.002
12:30 - 13:00	4	241	0.002	4	241	0.001	4	241	0.003
13:00 - 13:30	4	241	0.001	4	241	0.002	4	241	0.003
13:30 - 14:00	4	241	0.000	4	241	0.000	4	241	0.000
14:00 - 14:30	4	241	0.000	4	241	0.000	4	241	0.000
14:30 - 15:00	4	241	0.000	4	241	0.000	4	241	0.000
15:00 - 15:30	4	241	0.001	4	241	0.001	4	241	0.002
15:30 - 16:00	4	241	0.000	4	241	0.000	4	241	0.000
16:00 - 16:30	4	241	0.000	4	241	0.000	4	241	0.000
16:30 - 17:00	4	241	0.002	4	241	0.001	4	241	0.003
17:00 - 17:30	4	241	0.004	4	241	0.004	4	241	0.008
17:30 - 18:00	4	241	0.002	4	241	0.003	4	241	0.005
18:00 - 18:30	3	283	0.000	3	283	0.000	3	283	0.000
18:30 - 19:00	3	283	0.000	3	283	0.000	3	283	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.023			0.024			0.047

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL OGVS
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.000	4	241	0.000	4	241	0.000
07:30 - 08:00	4	241	0.000	4	241	0.000	4	241	0.000
08:00 - 08:30	4	241	0.001	4	241	0.001	4	241	0.002
08:30 - 09:00	4	241	0.000	4	241	0.000	4	241	0.000
09:00 - 09:30	4	241	0.001	4	241	0.001	4	241	0.002
09:30 - 10:00	4	241	0.000	4	241	0.000	4	241	0.000
10:00 - 10:30	4	241	0.000	4	241	0.000	4	241	0.000
10:30 - 11:00	4	241	0.000	4	241	0.000	4	241	0.000
11:00 - 11:30	4	241	0.000	4	241	0.000	4	241	0.000
11:30 - 12:00	4	241	0.000	4	241	0.000	4	241	0.000
12:00 - 12:30	4	241	0.000	4	241	0.000	4	241	0.000
12:30 - 13:00	4	241	0.000	4	241	0.000	4	241	0.000
13:00 - 13:30	4	241	0.000	4	241	0.000	4	241	0.000
13:30 - 14:00	4	241	0.000	4	241	0.000	4	241	0.000
14:00 - 14:30	4	241	0.001	4	241	0.001	4	241	0.002
14:30 - 15:00	4	241	0.000	4	241	0.000	4	241	0.000
15:00 - 15:30	4	241	0.000	4	241	0.000	4	241	0.000
15:30 - 16:00	4	241	0.000	4	241	0.000	4	241	0.000
16:00 - 16:30	4	241	0.000	4	241	0.000	4	241	0.000
16:30 - 17:00	4	241	0.000	4	241	0.000	4	241	0.000
17:00 - 17:30	4	241	0.000	4	241	0.000	4	241	0.000
17:30 - 18:00	4	241	0.000	4	241	0.000	4	241	0.000
18:00 - 18:30	3	283	0.000	3	283	0.000	3	283	0.000
18:30 - 19:00	3	283	0.000	3	283	0.000	3	283	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.003			0.003			0.006

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PSVS
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.000	4	241	0.000	4	241	0.000
07:30 - 08:00	4	241	0.000	4	241	0.000	4	241	0.000
08:00 - 08:30	4	241	0.001	4	241	0.000	4	241	0.001
08:30 - 09:00	4	241	0.002	4	241	0.000	4	241	0.002
09:00 - 09:30	4	241	0.000	4	241	0.000	4	241	0.000
09:30 - 10:00	4	241	0.000	4	241	0.000	4	241	0.000
10:00 - 10:30	4	241	0.000	4	241	0.000	4	241	0.000
10:30 - 11:00	4	241	0.000	4	241	0.000	4	241	0.000
11:00 - 11:30	4	241	0.000	4	241	0.000	4	241	0.000
11:30 - 12:00	4	241	0.000	4	241	0.000	4	241	0.000
12:00 - 12:30	4	241	0.000	4	241	0.000	4	241	0.000
12:30 - 13:00	4	241	0.000	4	241	0.000	4	241	0.000
13:00 - 13:30	4	241	0.000	4	241	0.000	4	241	0.000
13:30 - 14:00	4	241	0.000	4	241	0.000	4	241	0.000
14:00 - 14:30	4	241	0.000	4	241	0.000	4	241	0.000
14:30 - 15:00	4	241	0.000	4	241	0.000	4	241	0.000
15:00 - 15:30	4	241	0.000	4	241	0.000	4	241	0.000
15:30 - 16:00	4	241	0.000	4	241	0.000	4	241	0.000
16:00 - 16:30	4	241	0.000	4	241	0.000	4	241	0.000
16:30 - 17:00	4	241	0.000	4	241	0.000	4	241	0.000
17:00 - 17:30	4	241	0.000	4	241	0.001	4	241	0.001
17:30 - 18:00	4	241	0.000	4	241	0.000	4	241	0.000
18:00 - 18:30	3	283	0.000	3	283	0.000	3	283	0.000
18:30 - 19:00	3	283	0.000	3	283	0.000	3	283	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.003			0.001			0.004

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL CYCLISTS
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.000	4	241	0.000	4	241	0.000
07:30 - 08:00	4	241	0.002	4	241	0.000	4	241	0.002
08:00 - 08:30	4	241	0.002	4	241	0.000	4	241	0.002
08:30 - 09:00	4	241	0.003	4	241	0.000	4	241	0.003
09:00 - 09:30	4	241	0.001	4	241	0.000	4	241	0.001
09:30 - 10:00	4	241	0.002	4	241	0.000	4	241	0.002
10:00 - 10:30	4	241	0.000	4	241	0.000	4	241	0.000
10:30 - 11:00	4	241	0.000	4	241	0.000	4	241	0.000
11:00 - 11:30	4	241	0.001	4	241	0.000	4	241	0.001
11:30 - 12:00	4	241	0.000	4	241	0.000	4	241	0.000
12:00 - 12:30	4	241	0.000	4	241	0.000	4	241	0.000
12:30 - 13:00	4	241	0.000	4	241	0.000	4	241	0.000
13:00 - 13:30	4	241	0.001	4	241	0.002	4	241	0.003
13:30 - 14:00	4	241	0.000	4	241	0.000	4	241	0.000
14:00 - 14:30	4	241	0.000	4	241	0.001	4	241	0.001
14:30 - 15:00	4	241	0.000	4	241	0.000	4	241	0.000
15:00 - 15:30	4	241	0.000	4	241	0.000	4	241	0.000
15:30 - 16:00	4	241	0.000	4	241	0.001	4	241	0.001
16:00 - 16:30	4	241	0.000	4	241	0.003	4	241	0.003
16:30 - 17:00	4	241	0.000	4	241	0.002	4	241	0.002
17:00 - 17:30	4	241	0.000	4	241	0.004	4	241	0.004
17:30 - 18:00	4	241	0.000	4	241	0.000	4	241	0.000
18:00 - 18:30	3	283	0.000	3	283	0.000	3	283	0.000
18:30 - 19:00	3	283	0.000	3	283	0.000	3	283	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.012			0.013			0.025

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.016	4	241	0.004	4	241	0.020
07:30 - 08:00	4	241	0.034	4	241	0.011	4	241	0.045
08:00 - 08:30	4	241	0.080	4	241	0.011	4	241	0.091
08:30 - 09:00	4	241	0.132	4	241	0.037	4	241	0.169
09:00 - 09:30	4	241	0.073	4	241	0.033	4	241	0.106
09:30 - 10:00	4	241	0.030	4	241	0.026	4	241	0.056
10:00 - 10:30	4	241	0.029	4	241	0.029	4	241	0.058
10:30 - 11:00	4	241	0.027	4	241	0.016	4	241	0.043
11:00 - 11:30	4	241	0.020	4	241	0.024	4	241	0.044
11:30 - 12:00	4	241	0.016	4	241	0.024	4	241	0.040
12:00 - 12:30	4	241	0.027	4	241	0.030	4	241	0.057
12:30 - 13:00	4	241	0.057	4	241	0.063	4	241	0.120
13:00 - 13:30	4	241	0.049	4	241	0.051	4	241	0.100
13:30 - 14:00	4	241	0.053	4	241	0.028	4	241	0.081
14:00 - 14:30	4	241	0.022	4	241	0.021	4	241	0.043
14:30 - 15:00	4	241	0.020	4	241	0.022	4	241	0.042
15:00 - 15:30	4	241	0.023	4	241	0.036	4	241	0.059
15:30 - 16:00	4	241	0.010	4	241	0.025	4	241	0.035
16:00 - 16:30	4	241	0.019	4	241	0.055	4	241	0.074
16:30 - 17:00	4	241	0.031	4	241	0.079	4	241	0.110
17:00 - 17:30	4	241	0.030	4	241	0.114	4	241	0.144
17:30 - 18:00	4	241	0.019	4	241	0.042	4	241	0.061
18:00 - 18:30	3	283	0.011	3	283	0.009	3	283	0.020
18:30 - 19:00	3	283	0.002	3	283	0.022	3	283	0.024
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.830			0.812			1.642

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.002	4	241	0.000	4	241	0.002
07:30 - 08:00	4	241	0.013	4	241	0.004	4	241	0.017
08:00 - 08:30	4	241	0.013	4	241	0.001	4	241	0.014
08:30 - 09:00	4	241	0.023	4	241	0.004	4	241	0.027
09:00 - 09:30	4	241	0.017	4	241	0.008	4	241	0.025
09:30 - 10:00	4	241	0.009	4	241	0.005	4	241	0.014
10:00 - 10:30	4	241	0.011	4	241	0.010	4	241	0.021
10:30 - 11:00	4	241	0.004	4	241	0.009	4	241	0.013
11:00 - 11:30	4	241	0.006	4	241	0.008	4	241	0.014
11:30 - 12:00	4	241	0.009	4	241	0.011	4	241	0.020
12:00 - 12:30	4	241	0.019	4	241	0.018	4	241	0.037
12:30 - 13:00	4	241	0.022	4	241	0.027	4	241	0.049
13:00 - 13:30	4	241	0.025	4	241	0.027	4	241	0.052
13:30 - 14:00	4	241	0.027	4	241	0.017	4	241	0.044
14:00 - 14:30	4	241	0.013	4	241	0.012	4	241	0.025
14:30 - 15:00	4	241	0.004	4	241	0.005	4	241	0.009
15:00 - 15:30	4	241	0.006	4	241	0.007	4	241	0.013
15:30 - 16:00	4	241	0.005	4	241	0.002	4	241	0.007
16:00 - 16:30	4	241	0.004	4	241	0.004	4	241	0.008
16:30 - 17:00	4	241	0.007	4	241	0.015	4	241	0.022
17:00 - 17:30	4	241	0.005	4	241	0.021	4	241	0.026
17:30 - 18:00	4	241	0.001	4	241	0.012	4	241	0.013
18:00 - 18:30	3	283	0.000	3	283	0.007	3	283	0.007
18:30 - 19:00	3	283	0.000	3	283	0.004	3	283	0.004
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.245			0.238			0.483

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.002	4	241	0.000	4	241	0.002
07:30 - 08:00	4	241	0.010	4	241	0.001	4	241	0.011
08:00 - 08:30	4	241	0.027	4	241	0.000	4	241	0.027
08:30 - 09:00	4	241	0.036	4	241	0.002	4	241	0.038
09:00 - 09:30	4	241	0.028	4	241	0.003	4	241	0.031
09:30 - 10:00	4	241	0.009	4	241	0.006	4	241	0.015
10:00 - 10:30	4	241	0.016	4	241	0.008	4	241	0.024
10:30 - 11:00	4	241	0.008	4	241	0.002	4	241	0.010
11:00 - 11:30	4	241	0.007	4	241	0.002	4	241	0.009
11:30 - 12:00	4	241	0.007	4	241	0.005	4	241	0.012
12:00 - 12:30	4	241	0.015	4	241	0.012	4	241	0.027
12:30 - 13:00	4	241	0.011	4	241	0.024	4	241	0.035
13:00 - 13:30	4	241	0.023	4	241	0.024	4	241	0.047
13:30 - 14:00	4	241	0.013	4	241	0.011	4	241	0.024
14:00 - 14:30	4	241	0.007	4	241	0.002	4	241	0.009
14:30 - 15:00	4	241	0.002	4	241	0.009	4	241	0.011
15:00 - 15:30	4	241	0.006	4	241	0.008	4	241	0.014
15:30 - 16:00	4	241	0.003	4	241	0.008	4	241	0.011
16:00 - 16:30	4	241	0.002	4	241	0.025	4	241	0.027
16:30 - 17:00	4	241	0.006	4	241	0.031	4	241	0.037
17:00 - 17:30	4	241	0.002	4	241	0.024	4	241	0.026
17:30 - 18:00	4	241	0.000	4	241	0.026	4	241	0.026
18:00 - 18:30	3	283	0.000	3	283	0.006	3	283	0.006
18:30 - 19:00	3	283	0.000	3	283	0.000	3	283	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.240			0.239			0.479

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.002	4	241	0.000	4	241	0.002
07:30 - 08:00	4	241	0.008	4	241	0.000	4	241	0.008
08:00 - 08:30	4	241	0.010	4	241	0.000	4	241	0.010
08:30 - 09:00	4	241	0.021	4	241	0.001	4	241	0.022
09:00 - 09:30	4	241	0.016	4	241	0.002	4	241	0.018
09:30 - 10:00	4	241	0.004	4	241	0.001	4	241	0.005
10:00 - 10:30	4	241	0.004	4	241	0.006	4	241	0.010
10:30 - 11:00	4	241	0.002	4	241	0.002	4	241	0.004
11:00 - 11:30	4	241	0.004	4	241	0.002	4	241	0.006
11:30 - 12:00	4	241	0.003	4	241	0.003	4	241	0.006
12:00 - 12:30	4	241	0.006	4	241	0.008	4	241	0.014
12:30 - 13:00	4	241	0.006	4	241	0.017	4	241	0.023
13:00 - 13:30	4	241	0.013	4	241	0.016	4	241	0.029
13:30 - 14:00	4	241	0.012	4	241	0.009	4	241	0.021
14:00 - 14:30	4	241	0.004	4	241	0.002	4	241	0.006
14:30 - 15:00	4	241	0.002	4	241	0.002	4	241	0.004
15:00 - 15:30	4	241	0.004	4	241	0.004	4	241	0.008
15:30 - 16:00	4	241	0.003	4	241	0.004	4	241	0.007
16:00 - 16:30	4	241	0.001	4	241	0.009	4	241	0.010
16:30 - 17:00	4	241	0.004	4	241	0.015	4	241	0.019
17:00 - 17:30	4	241	0.001	4	241	0.008	4	241	0.009
17:30 - 18:00	4	241	0.000	4	241	0.015	4	241	0.015
18:00 - 18:30	3	283	0.000	3	283	0.004	3	283	0.004
18:30 - 19:00	3	283	0.000	3	283	0.000	3	283	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.130			0.130			0.260

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.004	4	241	0.000	4	241	0.004
07:30 - 08:00	4	241	0.019	4	241	0.001	4	241	0.020
08:00 - 08:30	4	241	0.037	4	241	0.000	4	241	0.037
08:30 - 09:00	4	241	0.057	4	241	0.003	4	241	0.060
09:00 - 09:30	4	241	0.044	4	241	0.005	4	241	0.049
09:30 - 10:00	4	241	0.013	4	241	0.007	4	241	0.020
10:00 - 10:30	4	241	0.020	4	241	0.015	4	241	0.035
10:30 - 11:00	4	241	0.010	4	241	0.004	4	241	0.014
11:00 - 11:30	4	241	0.011	4	241	0.004	4	241	0.015
11:30 - 12:00	4	241	0.010	4	241	0.008	4	241	0.018
12:00 - 12:30	4	241	0.021	4	241	0.021	4	241	0.042
12:30 - 13:00	4	241	0.018	4	241	0.040	4	241	0.058
13:00 - 13:30	4	241	0.036	4	241	0.039	4	241	0.075
13:30 - 14:00	4	241	0.026	4	241	0.021	4	241	0.047
14:00 - 14:30	4	241	0.011	4	241	0.004	4	241	0.015
14:30 - 15:00	4	241	0.004	4	241	0.011	4	241	0.015
15:00 - 15:30	4	241	0.010	4	241	0.012	4	241	0.022
15:30 - 16:00	4	241	0.006	4	241	0.012	4	241	0.018
16:00 - 16:30	4	241	0.003	4	241	0.034	4	241	0.037
16:30 - 17:00	4	241	0.010	4	241	0.046	4	241	0.056
17:00 - 17:30	4	241	0.003	4	241	0.032	4	241	0.035
17:30 - 18:00	4	241	0.000	4	241	0.040	4	241	0.040
18:00 - 18:30	3	283	0.000	3	283	0.009	3	283	0.009
18:30 - 19:00	3	283	0.000	3	283	0.000	3	283	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.373			0.368			0.741

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.022	4	241	0.004	4	241	0.026
07:30 - 08:00	4	241	0.068	4	241	0.017	4	241	0.085
08:00 - 08:30	4	241	0.133	4	241	0.012	4	241	0.145
08:30 - 09:00	4	241	0.215	4	241	0.045	4	241	0.260
09:00 - 09:30	4	241	0.134	4	241	0.047	4	241	0.181
09:30 - 10:00	4	241	0.055	4	241	0.038	4	241	0.093
10:00 - 10:30	4	241	0.060	4	241	0.054	4	241	0.114
10:30 - 11:00	4	241	0.041	4	241	0.029	4	241	0.070
11:00 - 11:30	4	241	0.038	4	241	0.036	4	241	0.074
11:30 - 12:00	4	241	0.035	4	241	0.044	4	241	0.079
12:00 - 12:30	4	241	0.066	4	241	0.068	4	241	0.134
12:30 - 13:00	4	241	0.096	4	241	0.131	4	241	0.227
13:00 - 13:30	4	241	0.111	4	241	0.119	4	241	0.230
13:30 - 14:00	4	241	0.106	4	241	0.065	4	241	0.171
14:00 - 14:30	4	241	0.047	4	241	0.038	4	241	0.085
14:30 - 15:00	4	241	0.028	4	241	0.038	4	241	0.066
15:00 - 15:30	4	241	0.039	4	241	0.056	4	241	0.095
15:30 - 16:00	4	241	0.022	4	241	0.040	4	241	0.062
16:00 - 16:30	4	241	0.026	4	241	0.096	4	241	0.122
16:30 - 17:00	4	241	0.049	4	241	0.141	4	241	0.190
17:00 - 17:30	4	241	0.038	4	241	0.171	4	241	0.209
17:30 - 18:00	4	241	0.020	4	241	0.095	4	241	0.115
18:00 - 18:30	3	283	0.011	3	283	0.026	3	283	0.037
18:30 - 19:00	3	283	0.002	3	283	0.026	3	283	0.028
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.462			1.436			2.898

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL CARS
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.011	4	241	0.003	4	241	0.014
07:30 - 08:00	4	241	0.021	4	241	0.008	4	241	0.029
08:00 - 08:30	4	241	0.042	4	241	0.005	4	241	0.047
08:30 - 09:00	4	241	0.037	4	241	0.018	4	241	0.055
09:00 - 09:30	4	241	0.020	4	241	0.013	4	241	0.033
09:30 - 10:00	4	241	0.009	4	241	0.006	4	241	0.015
10:00 - 10:30	4	241	0.015	4	241	0.015	4	241	0.030
10:30 - 11:00	4	241	0.015	4	241	0.007	4	241	0.022
11:00 - 11:30	4	241	0.009	4	241	0.011	4	241	0.020
11:30 - 12:00	4	241	0.006	4	241	0.012	4	241	0.018
12:00 - 12:30	4	241	0.011	4	241	0.015	4	241	0.026
12:30 - 13:00	4	241	0.022	4	241	0.026	4	241	0.048
13:00 - 13:30	4	241	0.022	4	241	0.018	4	241	0.040
13:30 - 14:00	4	241	0.027	4	241	0.015	4	241	0.042
14:00 - 14:30	4	241	0.007	4	241	0.007	4	241	0.014
14:30 - 15:00	4	241	0.007	4	241	0.007	4	241	0.014
15:00 - 15:30	4	241	0.012	4	241	0.013	4	241	0.025
15:30 - 16:00	4	241	0.007	4	241	0.015	4	241	0.022
16:00 - 16:30	4	241	0.007	4	241	0.024	4	241	0.031
16:30 - 17:00	4	241	0.012	4	241	0.056	4	241	0.068
17:00 - 17:30	4	241	0.012	4	241	0.028	4	241	0.040
17:30 - 18:00	4	241	0.009	4	241	0.016	4	241	0.025
18:00 - 18:30	3	283	0.006	3	283	0.005	3	283	0.011
18:30 - 19:00	3	283	0.002	3	283	0.005	3	283	0.007
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.348			0.348			0.696

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL LGVS
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.000	4	241	0.000	4	241	0.000
07:30 - 08:00	4	241	0.002	4	241	0.001	4	241	0.003
08:00 - 08:30	4	241	0.002	4	241	0.000	4	241	0.002
08:30 - 09:00	4	241	0.003	4	241	0.004	4	241	0.007
09:00 - 09:30	4	241	0.007	4	241	0.006	4	241	0.013
09:30 - 10:00	4	241	0.006	4	241	0.004	4	241	0.010
10:00 - 10:30	4	241	0.004	4	241	0.003	4	241	0.007
10:30 - 11:00	4	241	0.004	4	241	0.002	4	241	0.006
11:00 - 11:30	4	241	0.004	4	241	0.003	4	241	0.007
11:30 - 12:00	4	241	0.000	4	241	0.002	4	241	0.002
12:00 - 12:30	4	241	0.002	4	241	0.001	4	241	0.003
12:30 - 13:00	4	241	0.006	4	241	0.007	4	241	0.013
13:00 - 13:30	4	241	0.002	4	241	0.003	4	241	0.005
13:30 - 14:00	4	241	0.002	4	241	0.002	4	241	0.004
14:00 - 14:30	4	241	0.001	4	241	0.001	4	241	0.002
14:30 - 15:00	4	241	0.003	4	241	0.001	4	241	0.004
15:00 - 15:30	4	241	0.002	4	241	0.006	4	241	0.008
15:30 - 16:00	4	241	0.001	4	241	0.002	4	241	0.003
16:00 - 16:30	4	241	0.002	4	241	0.001	4	241	0.003
16:30 - 17:00	4	241	0.002	4	241	0.002	4	241	0.004
17:00 - 17:30	4	241	0.000	4	241	0.002	4	241	0.002
17:30 - 18:00	4	241	0.000	4	241	0.000	4	241	0.000
18:00 - 18:30	3	283	0.001	3	283	0.000	3	283	0.001
18:30 - 19:00	3	283	0.000	3	283	0.001	3	283	0.001
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.056			0.054			0.110

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

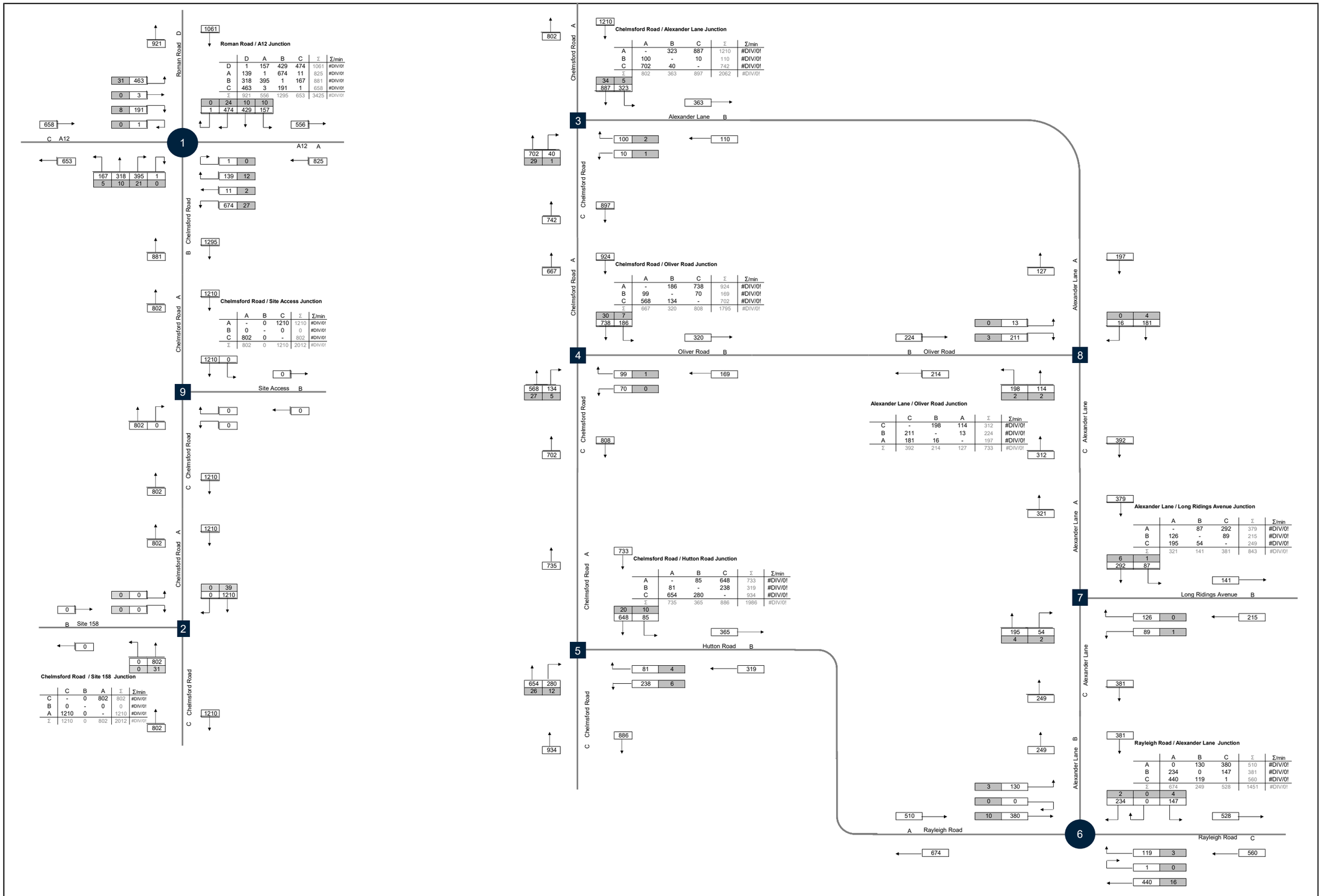
TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL MOTOR CYCLES
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	241	0.000	4	241	0.000	4	241	0.000
07:30 - 08:00	4	241	0.000	4	241	0.000	4	241	0.000
08:00 - 08:30	4	241	0.001	4	241	0.000	4	241	0.001
08:30 - 09:00	4	241	0.000	4	241	0.000	4	241	0.000
09:00 - 09:30	4	241	0.001	4	241	0.000	4	241	0.001
09:30 - 10:00	4	241	0.000	4	241	0.000	4	241	0.000
10:00 - 10:30	4	241	0.000	4	241	0.000	4	241	0.000
10:30 - 11:00	4	241	0.000	4	241	0.000	4	241	0.000
11:00 - 11:30	4	241	0.001	4	241	0.000	4	241	0.001
11:30 - 12:00	4	241	0.000	4	241	0.000	4	241	0.000
12:00 - 12:30	4	241	0.000	4	241	0.000	4	241	0.000
12:30 - 13:00	4	241	0.000	4	241	0.000	4	241	0.000
13:00 - 13:30	4	241	0.000	4	241	0.000	4	241	0.000
13:30 - 14:00	4	241	0.000	4	241	0.000	4	241	0.000
14:00 - 14:30	4	241	0.000	4	241	0.000	4	241	0.000
14:30 - 15:00	4	241	0.000	4	241	0.000	4	241	0.000
15:00 - 15:30	4	241	0.000	4	241	0.000	4	241	0.000
15:30 - 16:00	4	241	0.000	4	241	0.000	4	241	0.000
16:00 - 16:30	4	241	0.000	4	241	0.001	4	241	0.001
16:30 - 17:00	4	241	0.000	4	241	0.001	4	241	0.001
17:00 - 17:30	4	241	0.000	4	241	0.001	4	241	0.001
17:30 - 18:00	4	241	0.000	4	241	0.000	4	241	0.000
18:00 - 18:30	3	283	0.000	3	283	0.000	3	283	0.000
18:30 - 19:00	3	283	0.000	3	283	0.000	3	283	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.003			0.003			0.006

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Appendix 3 – Traffic Flow Diagrams



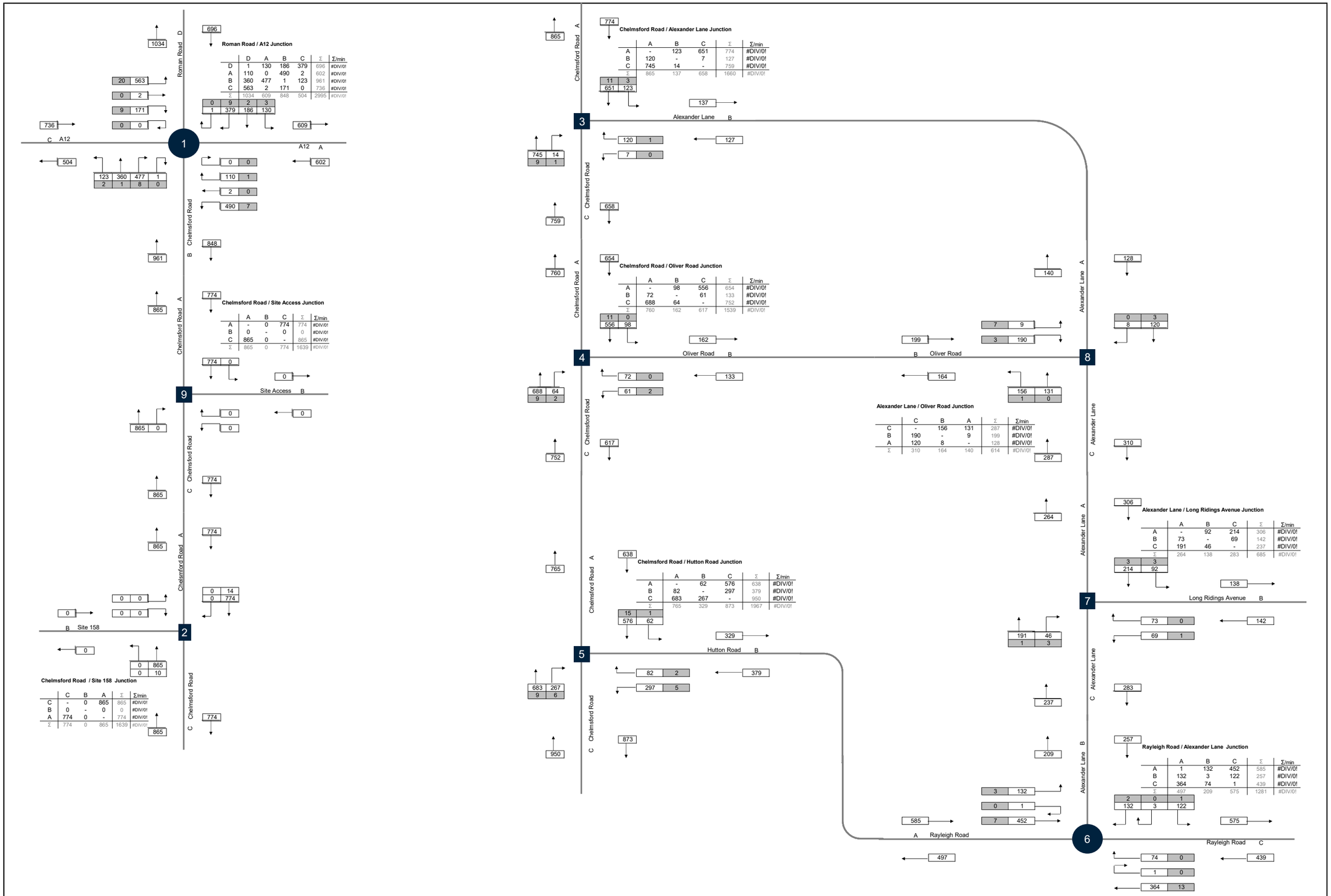
Notes: Total Vehicles; HGVs

MAKING COMPLEX EASY

Transport and Engineering

Project Name: Shenfield
Job Number: JNY10935
Title: 2022 Observed AM
AM Peak 07:30-08:30

Figure No. 1



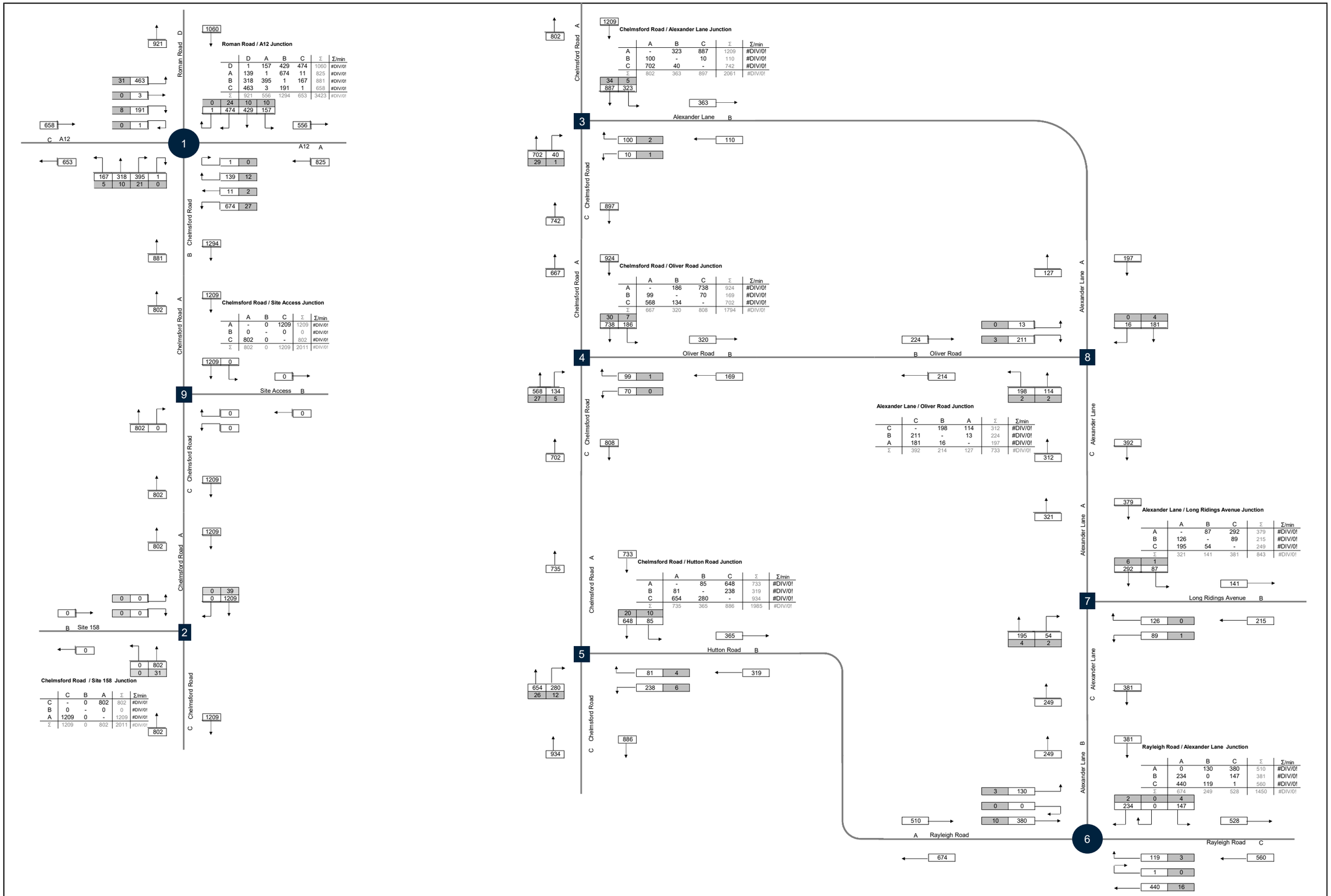
Notes

Project Name: Shenfield
Job Number: JNY10935
Title: 2022 Observed PM
PM Peak 17:00-18:00

Figure No. 2

MAKING COMPLEX EASY

Transport and Engineering



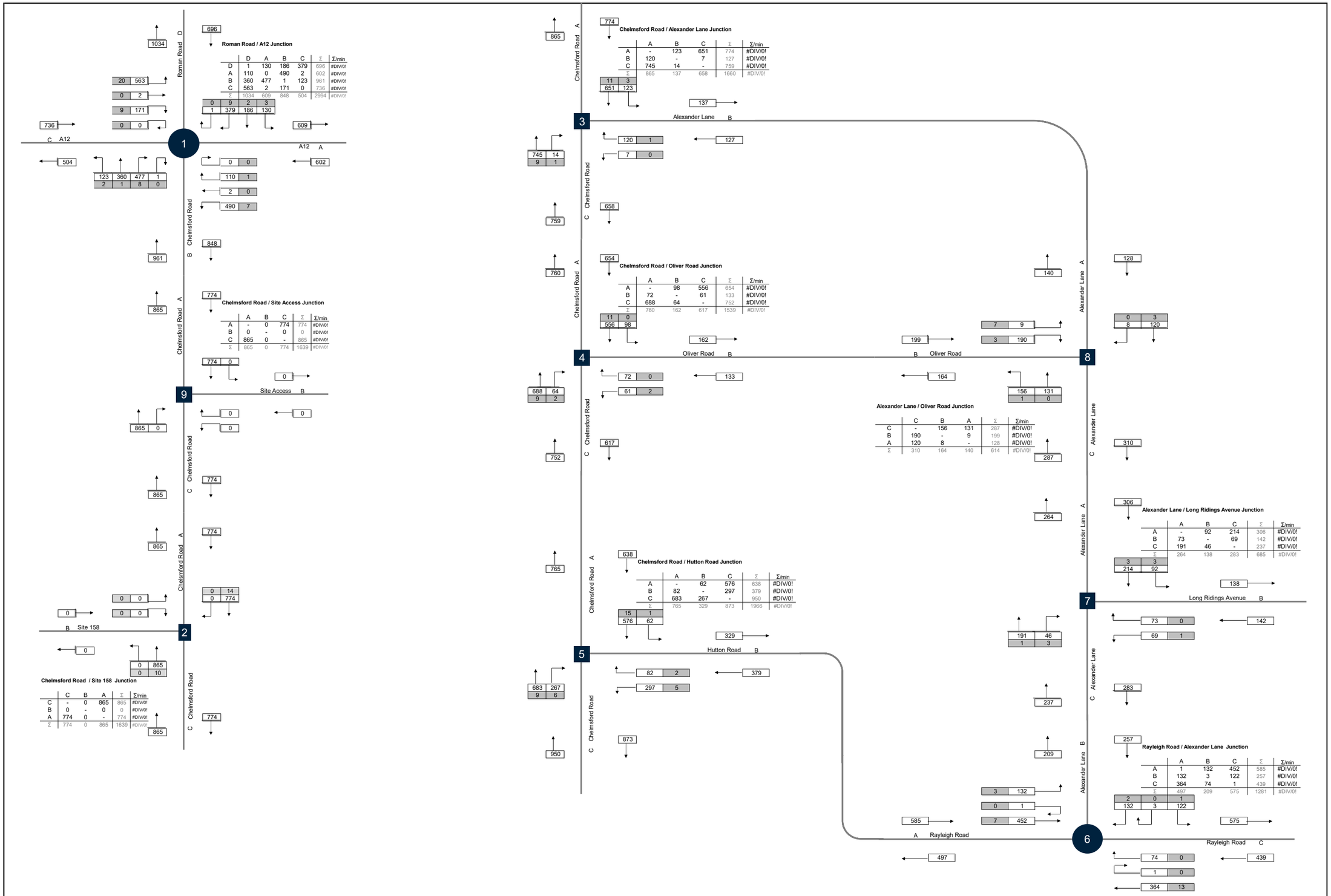
Notes

MAKING COMPLEX EASY

Transport and Engineering

Project Name: Shenfield
Job Number: JNY10935
Title: 2027 Base AM
AM Peak 07:30-08:30

Figure No. 3



Roman Road / A12 Junction

	D	A	B	C	Σ	Σ/min
D	1	130	186	379	696	#DIV/0!
A	110	0	490	2	602	#DIV/0!
B	360	477	1	123	961	#DIV/0!
C	563	2	171	0	736	#DIV/0!
Σ	1034	609	848	504	2994	#DIV/0!

Chelmsford Road / Site Access Junction

	A	B	C	Σ	Σ/min
A	-	0	774	774	#DIV/0!
B	0	-	0	0	#DIV/0!
C	865	0	-	865	#DIV/0!
Σ	865	0	774	1639	#DIV/0!

Chelmsford Road / Site 158 Junction

	C	B	A	Σ	Σ/min
C	-	0	865	865	#DIV/0!
B	0	-	0	0	#DIV/0!
A	774	0	-	774	#DIV/0!
Σ	774	0	865	1639	#DIV/0!

Chelmsford Road / Alexander Lane Junction

	A	B	C	Σ	Σ/min
A	-	123	651	774	#DIV/0!
B	120	-	7	127	#DIV/0!
C	745	14	-	759	#DIV/0!
Σ	865	137	658	1660	#DIV/0!

Chelmsford Road / Oliver Road Junction

	A	B	C	Σ	Σ/min
A	-	98	556	654	#DIV/0!
B	72	-	61	133	#DIV/0!
C	688	64	-	752	#DIV/0!
Σ	760	162	617	1539	#DIV/0!

Alexander Lane / Oliver Road Junction

	C	B	A	Σ	Σ/min
C	-	156	131	287	#DIV/0!
B	190	-	9	199	#DIV/0!
A	120	8	-	128	#DIV/0!
Σ	310	164	140	614	#DIV/0!

Chelmsford Road / Hutton Road Junction

	A	B	C	Σ	Σ/min
A	-	62	576	638	#DIV/0!
B	82	-	297	379	#DIV/0!
C	683	267	-	950	#DIV/0!
Σ	765	329	873	1966	#DIV/0!

Alexander Lane / Long Ridings Avenue Junction

	A	B	C	Σ	Σ/min
A	-	92	214	306	#DIV/0!
B	73	-	69	142	#DIV/0!
C	191	46	-	237	#DIV/0!
Σ	264	138	283	685	#DIV/0!

Rayleigh Road / Alexander Lane Junction

	A	B	C	Σ	Σ/min
A	1	132	452	585	#DIV/0!
B	132	3	122	257	#DIV/0!
C	364	74	1	439	#DIV/0!
Σ	497	209	575	1281	#DIV/0!

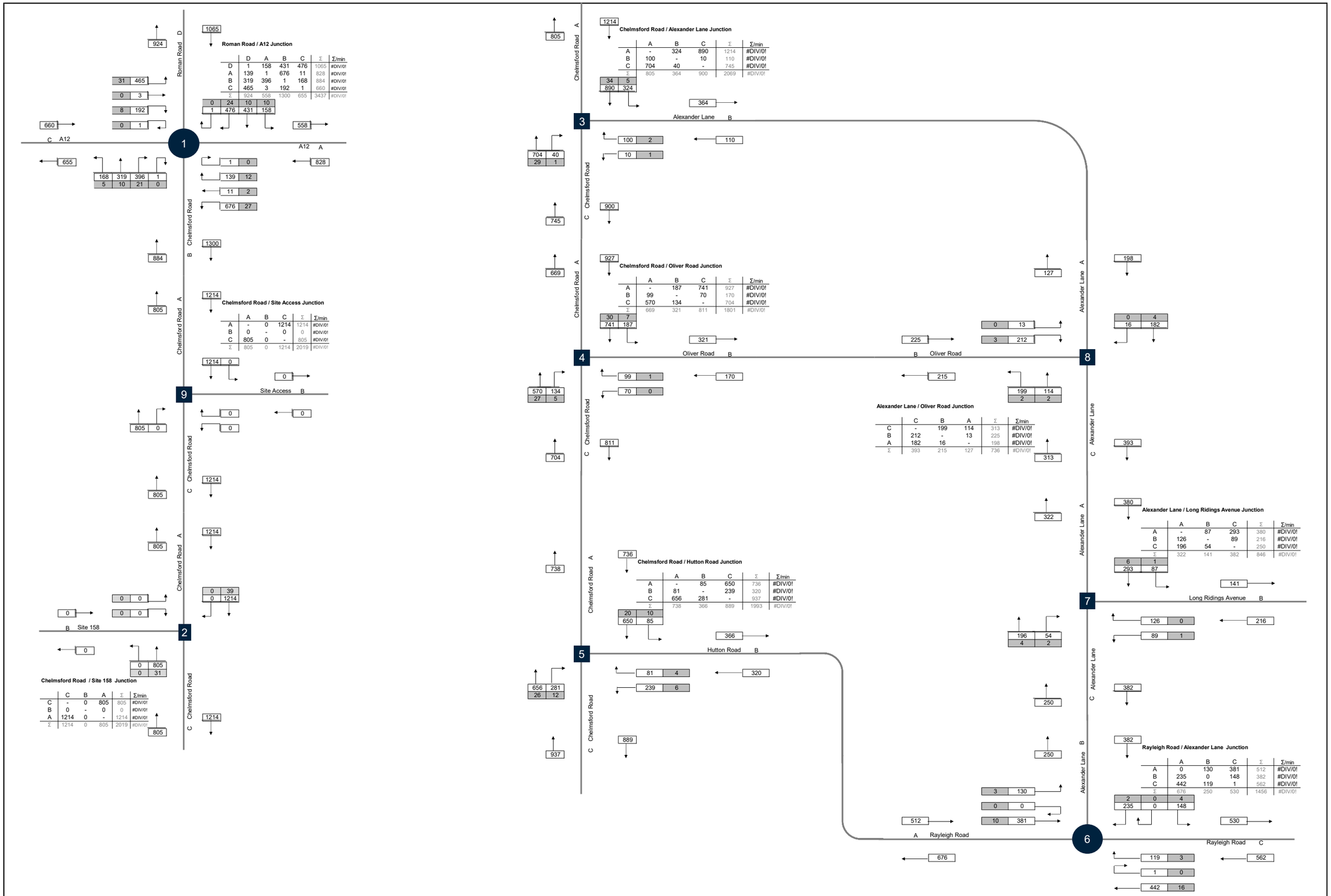
Notes

MAKING COMPLEX EASY

Transport and Engineering

Project Name: Shenfield
Job Number: JNY10935
Title: 2027 Base PM
PM Peak 17:00-18:00

Figure No. 4



Roman Road / A12 Junction

	D	A	B	C	Σ	Σ/min
D	1	158	431	476	1065	#DIV/0!
A	139	1	676	11	828	#DIV/0!
B	319	396	1	168	884	#DIV/0!
C	465	3	192	1	660	#DIV/0!
Σ	924	558	1300	655	3437	#DIV/0!

Chelmsford Road / Site Access Junction

	A	B	C	Σ	Σ/min
A	-	0	1214	1214	#DIV/0!
B	0	-	0	0	#DIV/0!
C	805	0	-	805	#DIV/0!
Σ	805	0	1214	2019	#DIV/0!

Chelmsford Road / Site 158 Junction

	C	B	A	Σ	Σ/min
C	-	0	805	805	#DIV/0!
B	0	-	0	0	#DIV/0!
A	1214	0	-	1214	#DIV/0!
Σ	1214	0	805	2019	#DIV/0!

Chelmsford Road / Alexander Lane Junction

	A	B	C	Σ	Σ/min
A	-	324	890	1214	#DIV/0!
B	100	-	10	110	#DIV/0!
C	704	40	-	745	#DIV/0!
Σ	805	364	900	2069	#DIV/0!

Chelmsford Road / Oliver Road Junction

	A	B	C	Σ	Σ/min
A	-	187	741	927	#DIV/0!
B	99	-	70	170	#DIV/0!
C	570	134	-	704	#DIV/0!
Σ	669	321	811	1801	#DIV/0!

Chelmsford Road / Hutton Road Junction

	A	B	C	Σ	Σ/min
A	-	85	650	736	#DIV/0!
B	81	-	239	320	#DIV/0!
C	656	281	-	937	#DIV/0!
Σ	738	366	889	1993	#DIV/0!

Alexander Lane / Oliver Road Junction

	C	B	A	Σ	Σ/min
C	-	199	114	313	#DIV/0!
B	212	-	13	225	#DIV/0!
A	182	16	-	198	#DIV/0!
Σ	393	215	127	736	#DIV/0!

Alexander Lane / Long Ridings Avenue Junction

	A	B	C	Σ	Σ/min
A	-	87	293	380	#DIV/0!
B	126	-	89	216	#DIV/0!
C	196	54	-	250	#DIV/0!
Σ	322	141	382	846	#DIV/0!

Rayleigh Road / Alexander Lane Junction

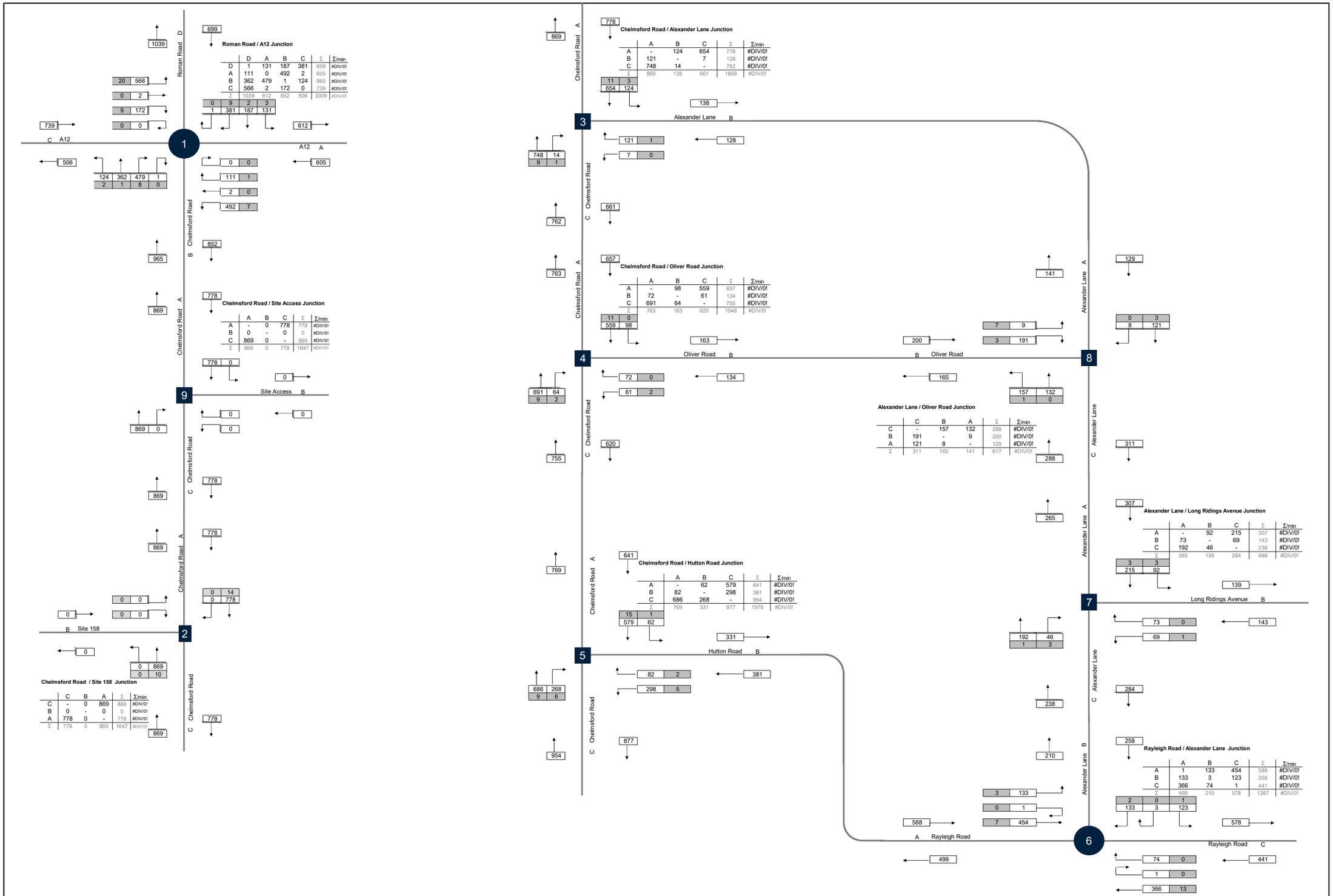
	A	B	C	Σ	Σ/min
A	0	130	381	512	#DIV/0!
B	235	0	148	382	#DIV/0!
C	442	119	1	562	#DIV/0!
Σ	676	250	530	1456	#DIV/0!

Notes

Project Name: Shenfield
Job Number: JNY10935
Title: 2032 Base AM
AM Peak 07:30-08:30

Figure No. 5

Transport and Engineering



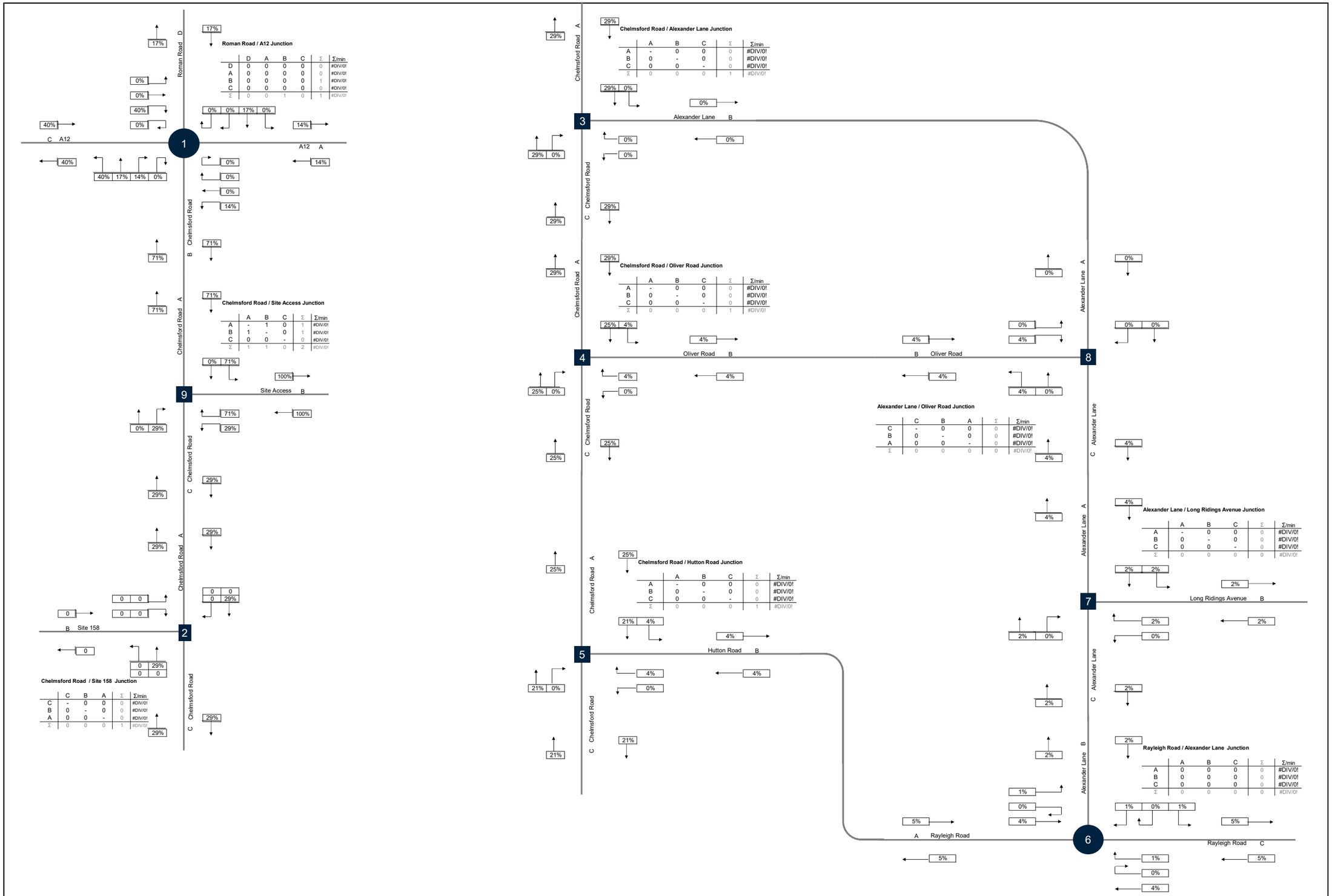
Notes

Project Name: Shenfield
Job Number: JNY10935
Title: 2032 Base PM
PM Peak 17:00-18:00

Figure No. 6

MAKING COMPLEX EASY

Transport and Engineering

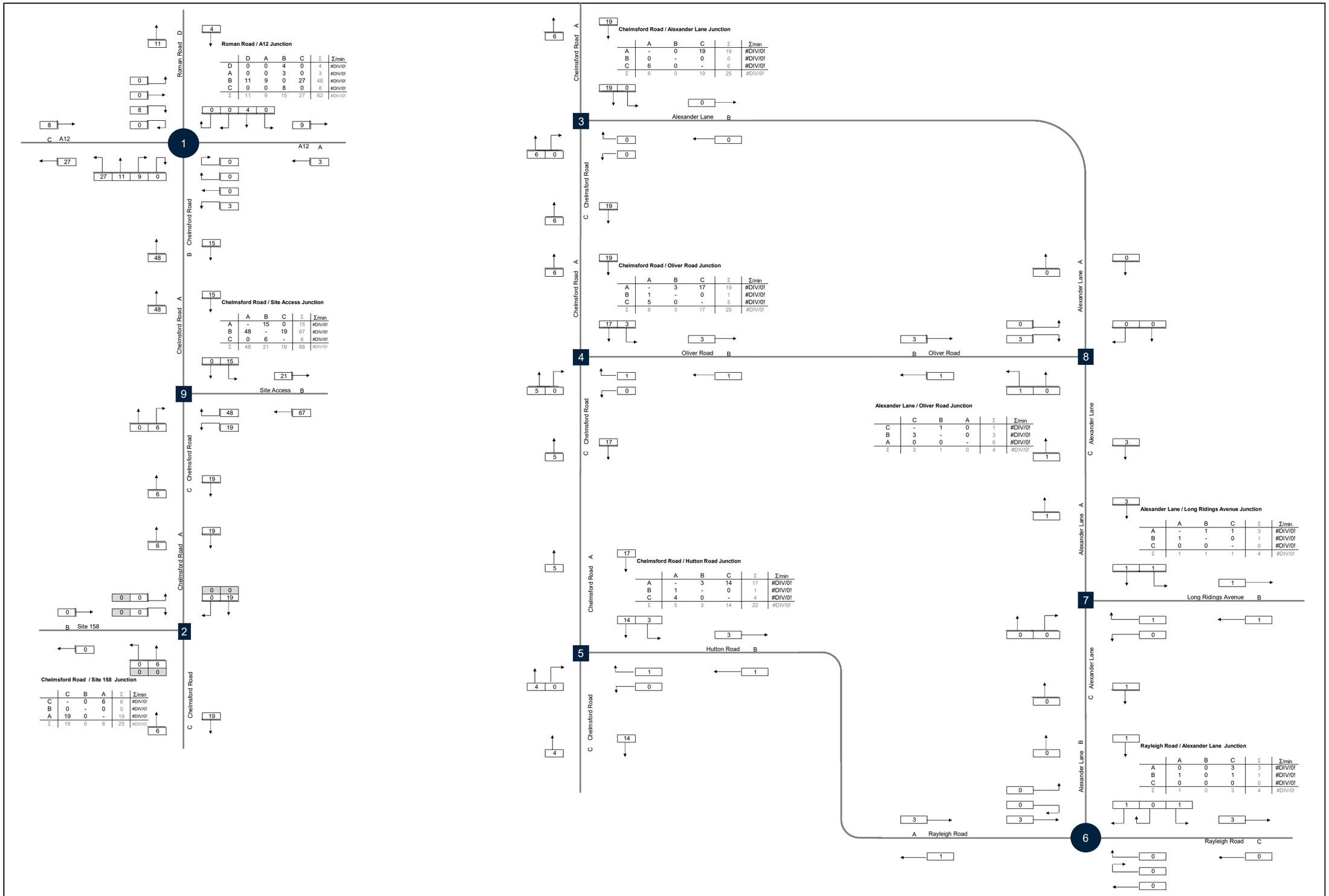


Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Proposed Distribution Site 263 - Proposed Development

Figure No. 7

Transport and Engineering



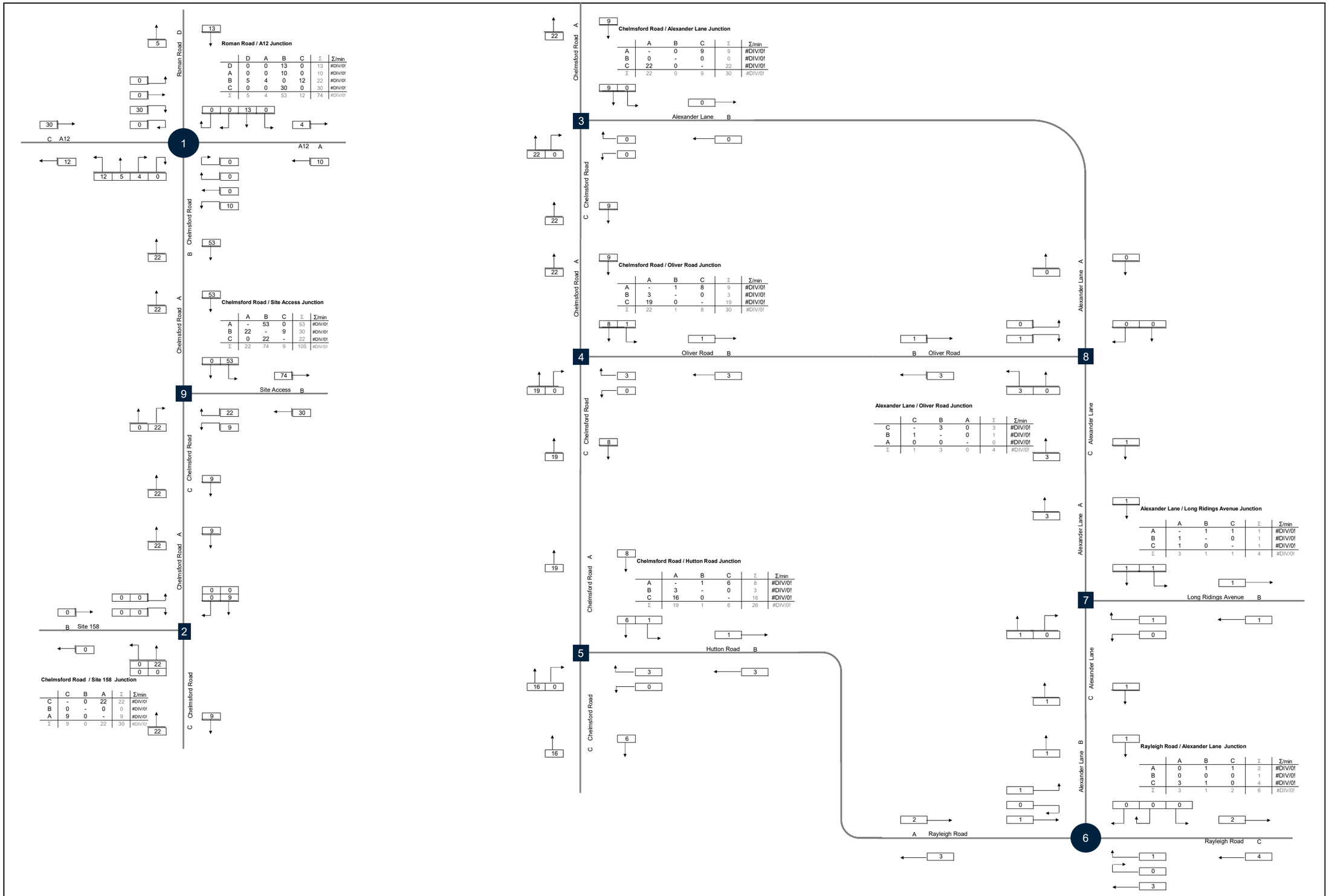
Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Proposed Development (Redrow Site 263) AM
AM Peak

Figure No. 8

MAKING COMPLEX EASY

Transport and Engineering

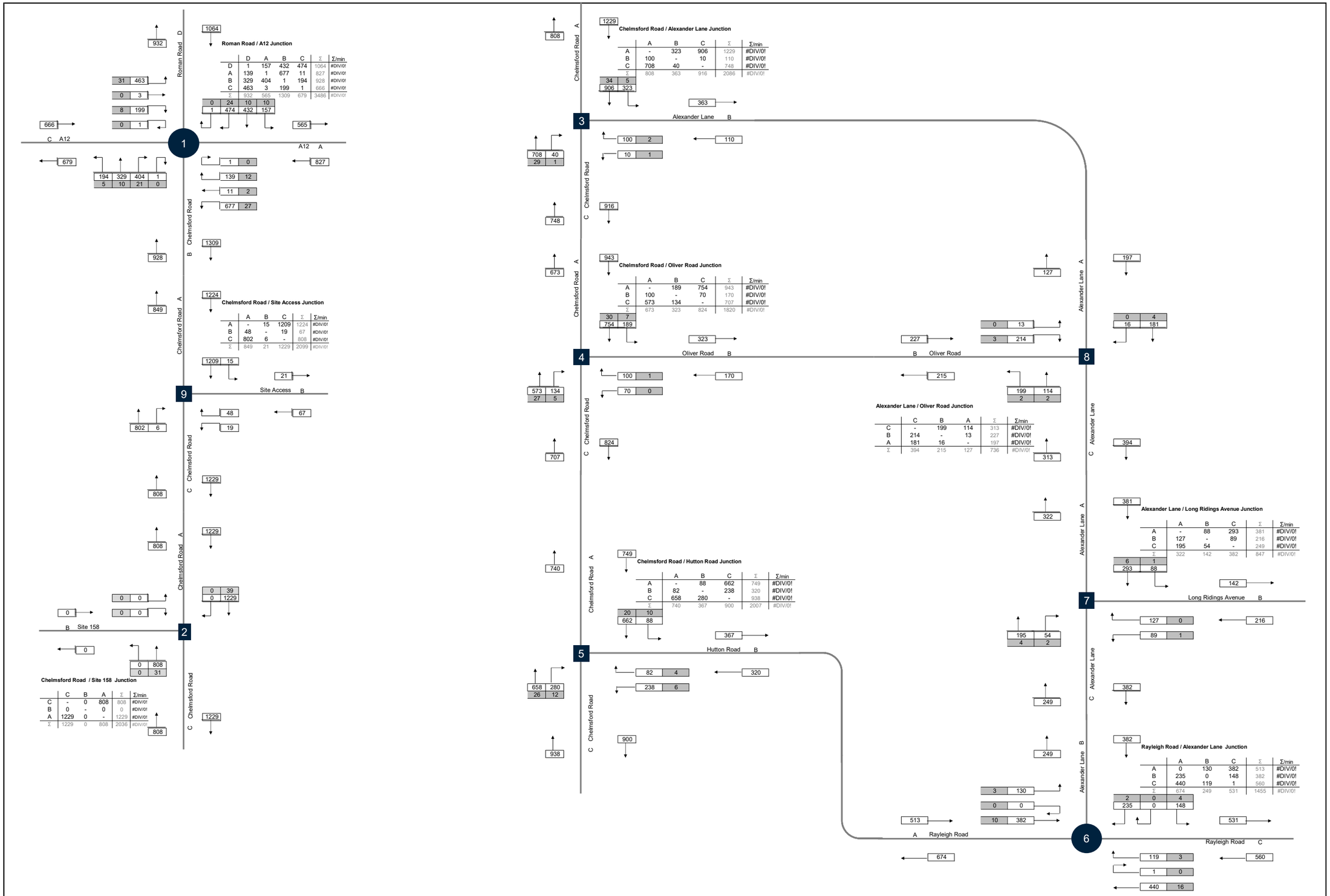


Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Proposed Development (Redrow Site 263)
PM Peak

Figure No. 9

Transport and Engineering

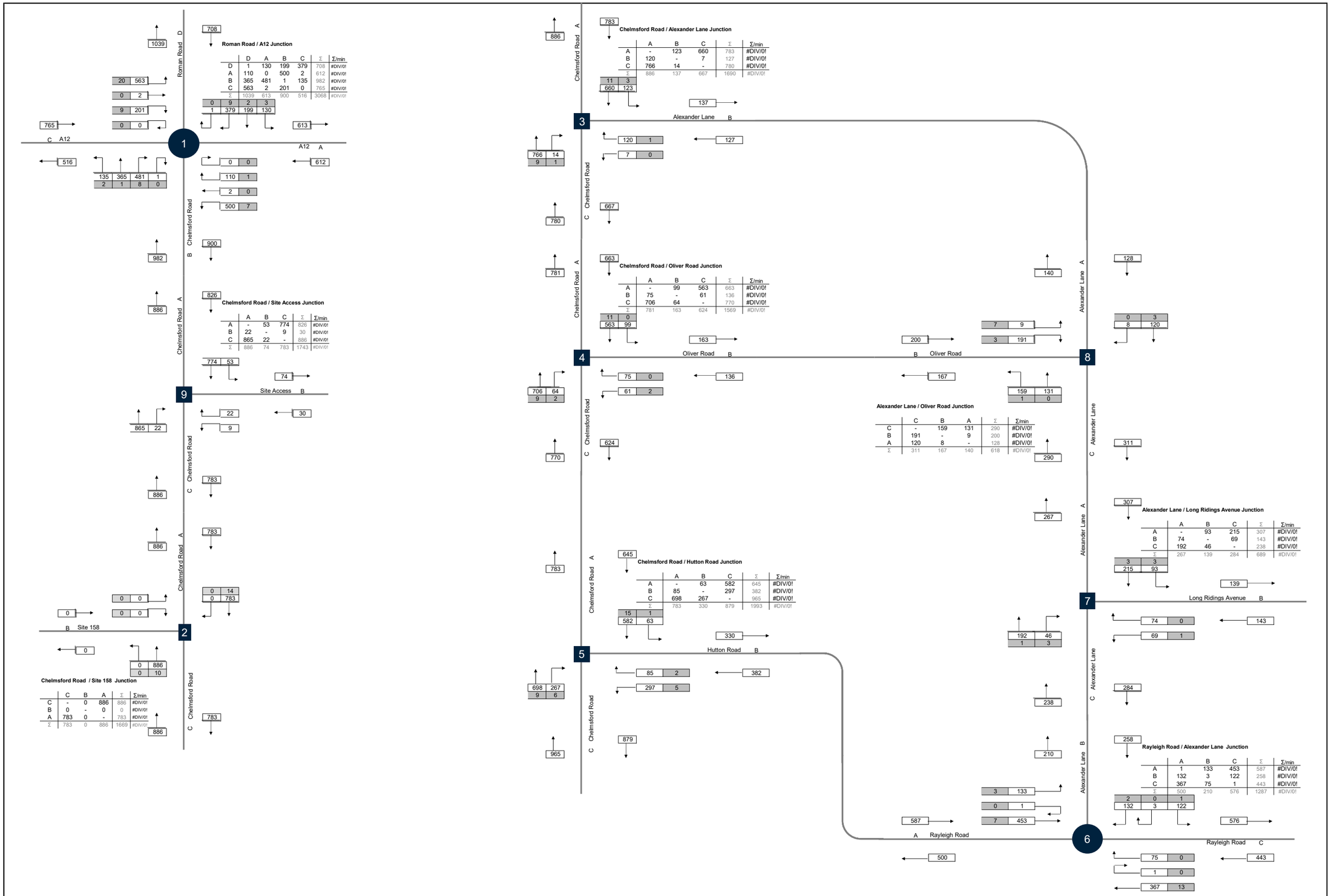


Notes

Transport and Engineering

Project Name: Shenfield
Job Number: JNY10935
Title: 2027 Base + Development Site 263 AM
AM Peak 07:30-08:30

Figure No. 10



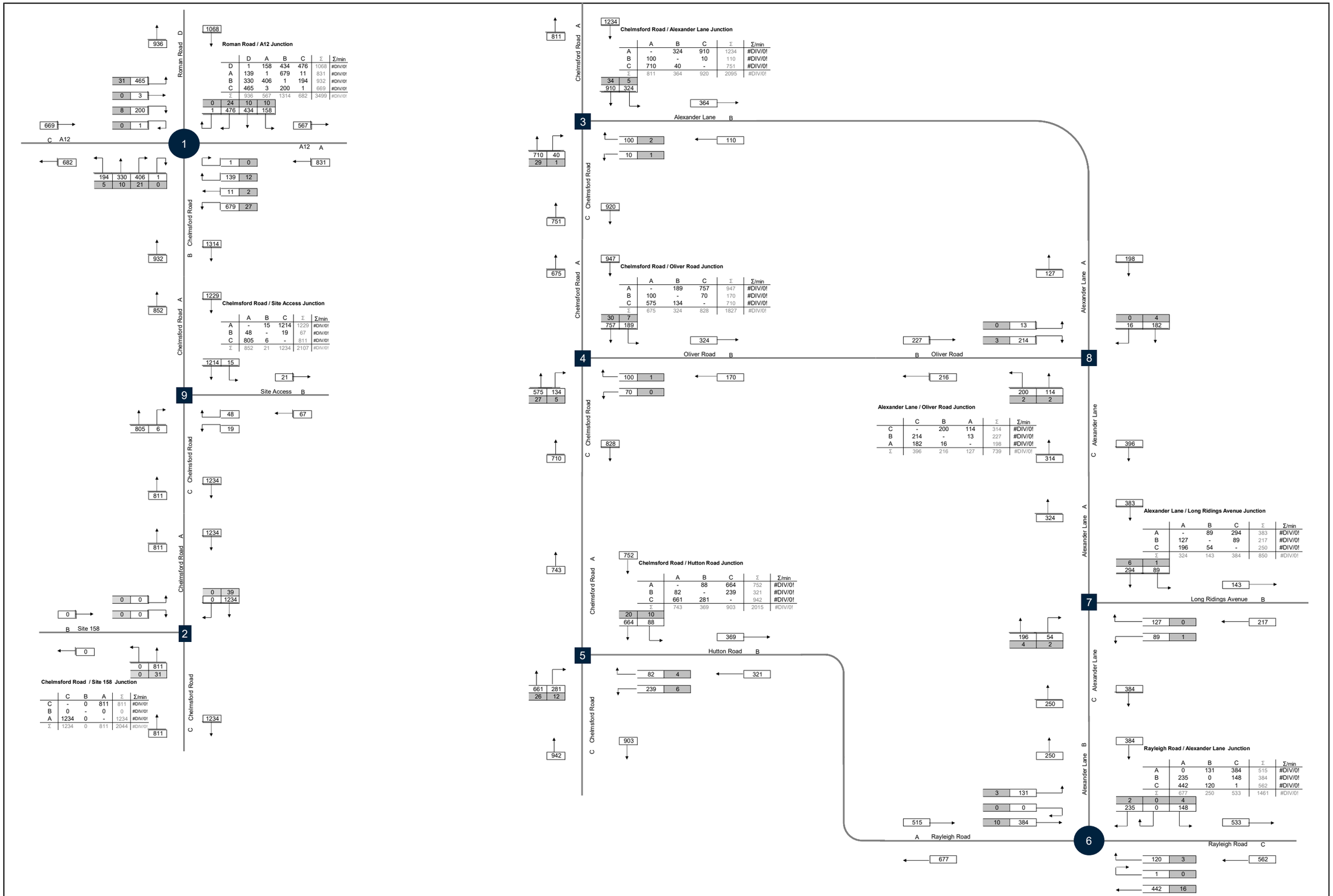
Notes

Project Name: Shenfield
Job Number: JNY10935
Title: 2027 Base + Development Site 263 PM
PM Peak 17:00-18:00

Figure No. 11

MAKING COMPLEX EASY

Transport and Engineering

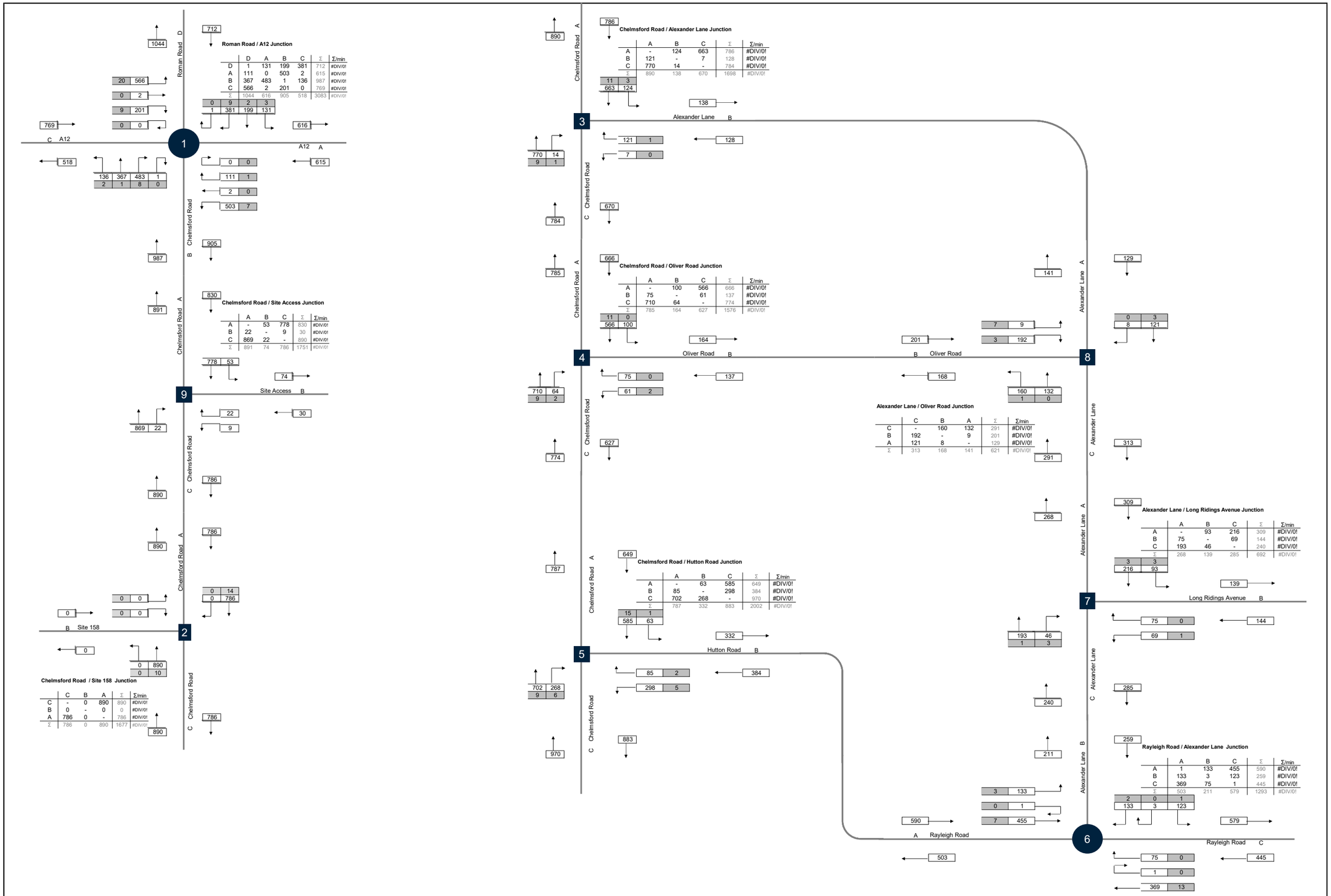


Notes

Transport and Engineering

Project Name: Shenfield
Job Number: JNY10935
Title: 2032 Base + Development Site 263 AM
AM Peak 08:00-09:00

Figure No. 12

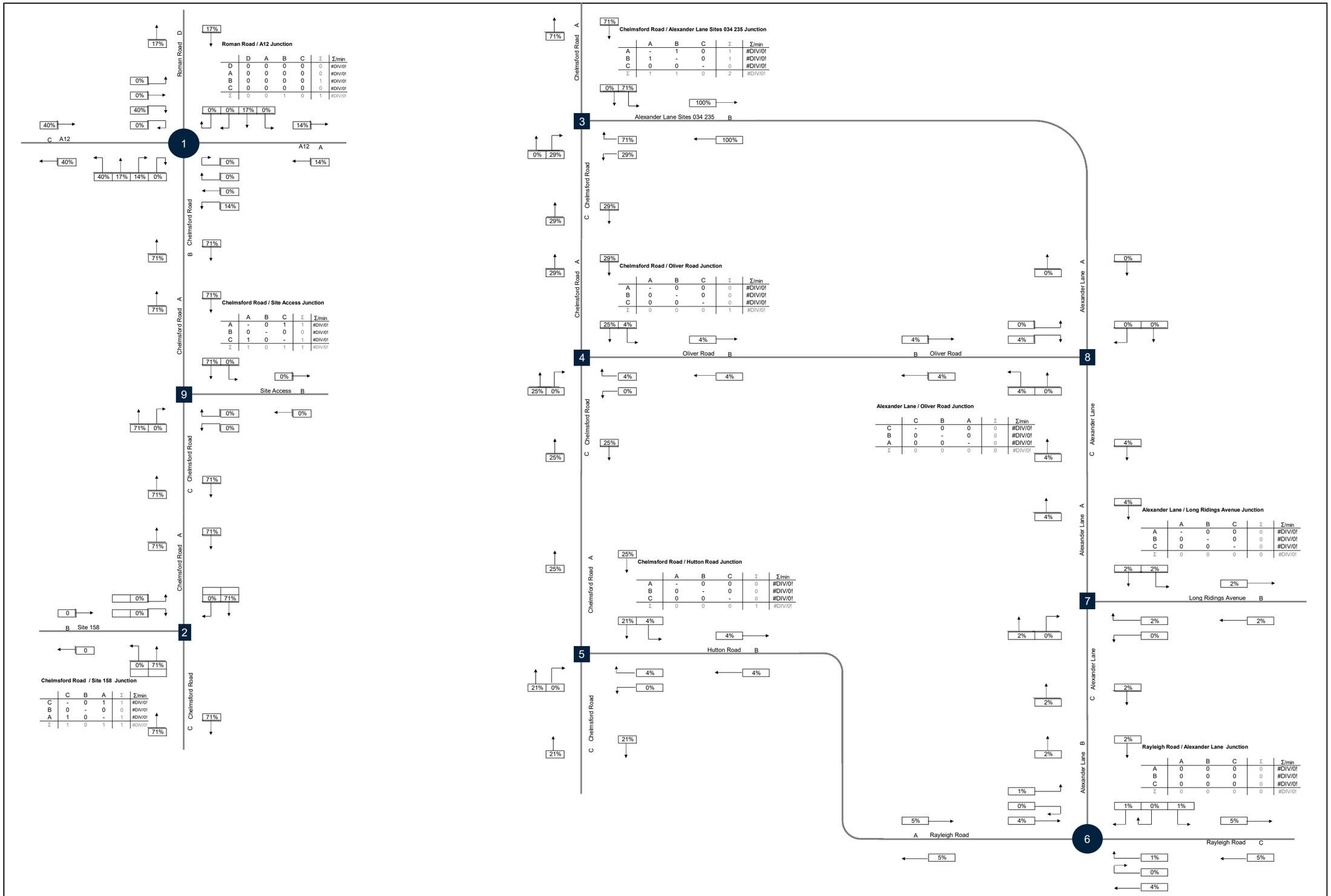


Notes

Project Name: Shenfield
Job Number: JNY10935
Title: 2032 Base PM
PM Peak 17:00-18:00

Figure No. 13

Transport and Engineering



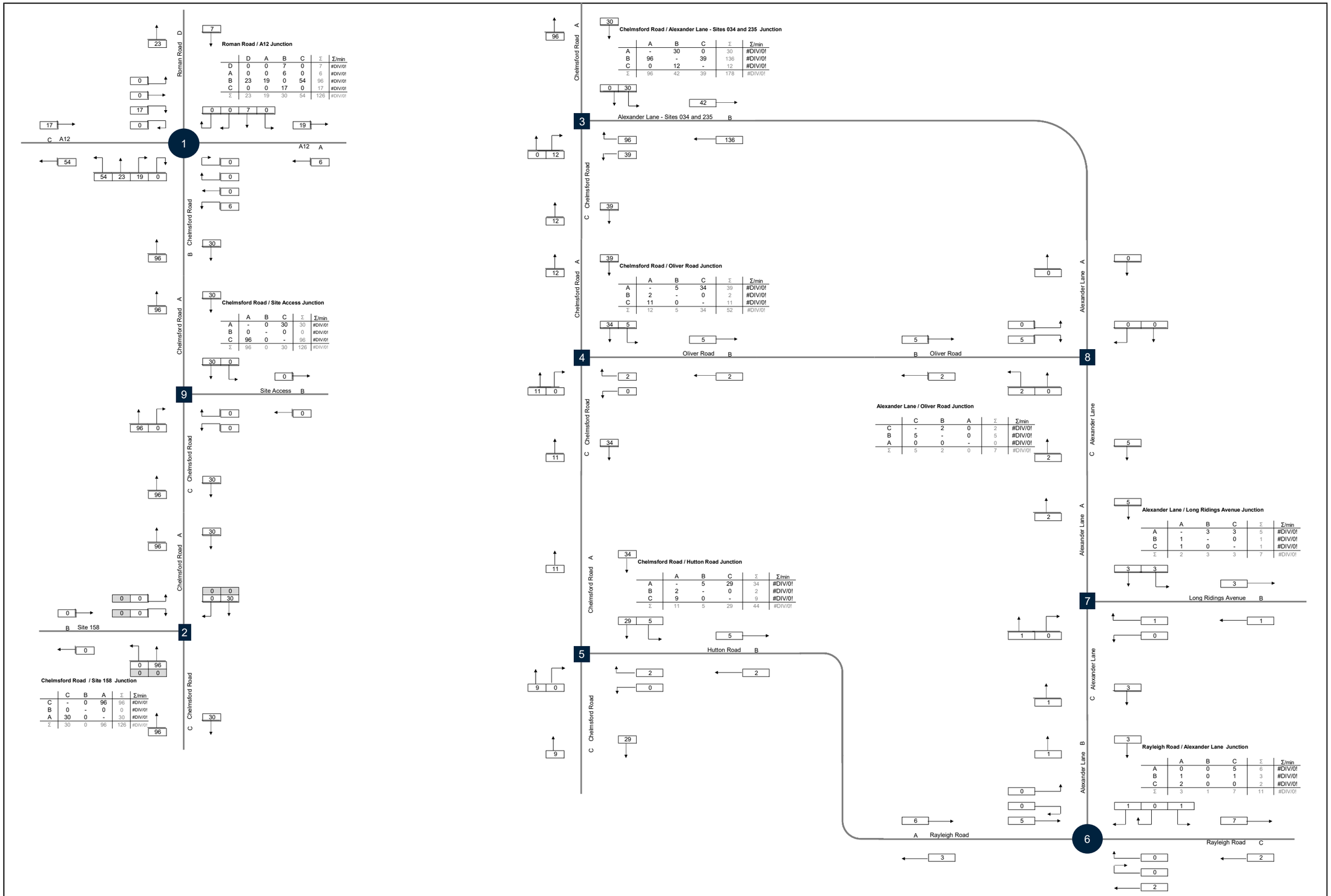
Notes

MAKING COMPLEX EASY

Transport and Engineering

Project Name: Shenfield
Job Number: JNY10935
Title: Proposed Distribution - (Croudace Site 034 and Stonebond 235)

Figure No. i



Chelmsford Road / Site 158 Junction

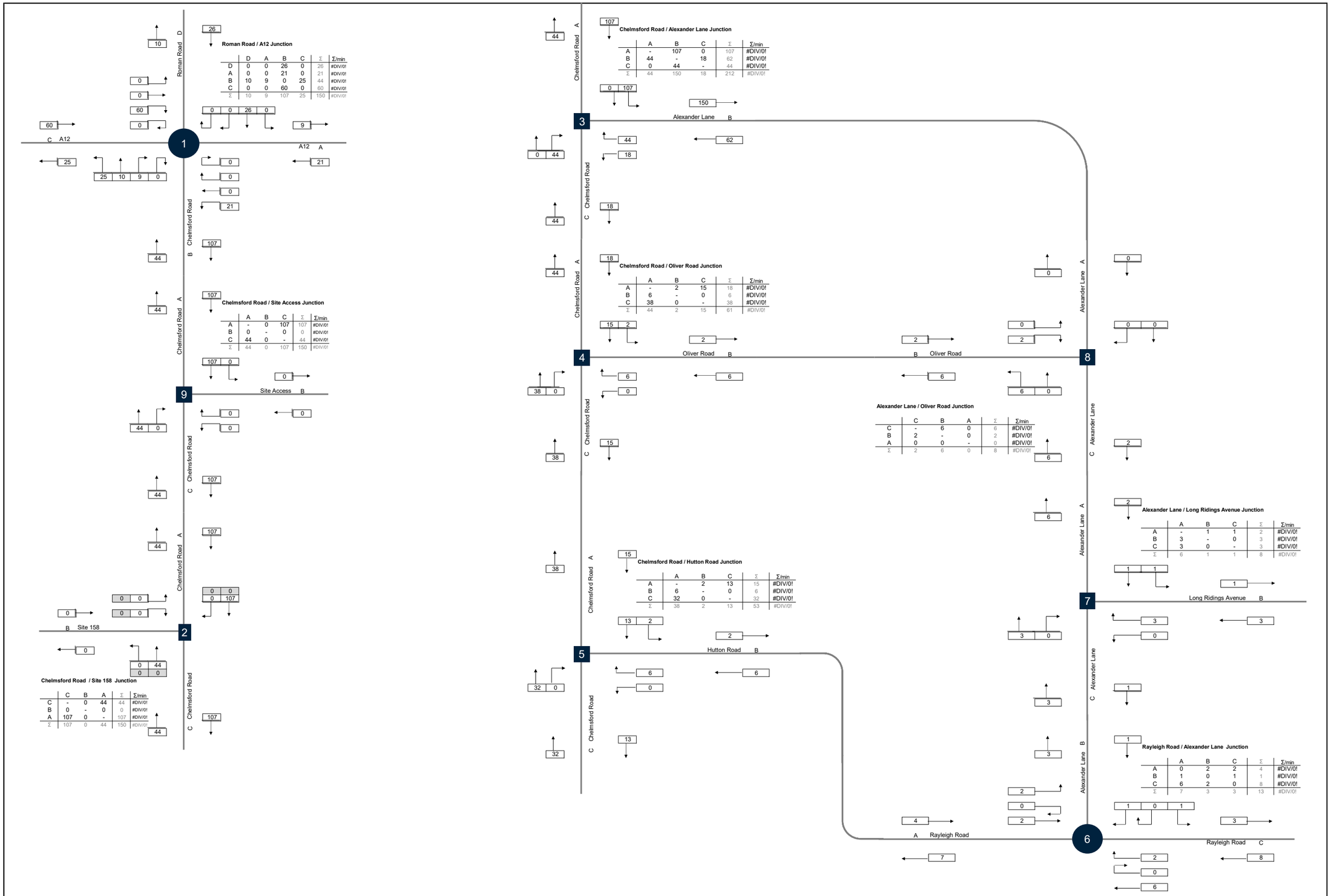
	C	B	A	Σ	Σ/min
C	-	0	96	96	#DIV/0!
B	0	-	0	0	#DIV/0!
A	30	0	-	30	#DIV/0!
Σ	30	0	96	126	#DIV/0!

Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Committed Development - (Croudace Site 034 and Stonebond Site 235)

Figure No. ii AM Peak

Transport and Engineering

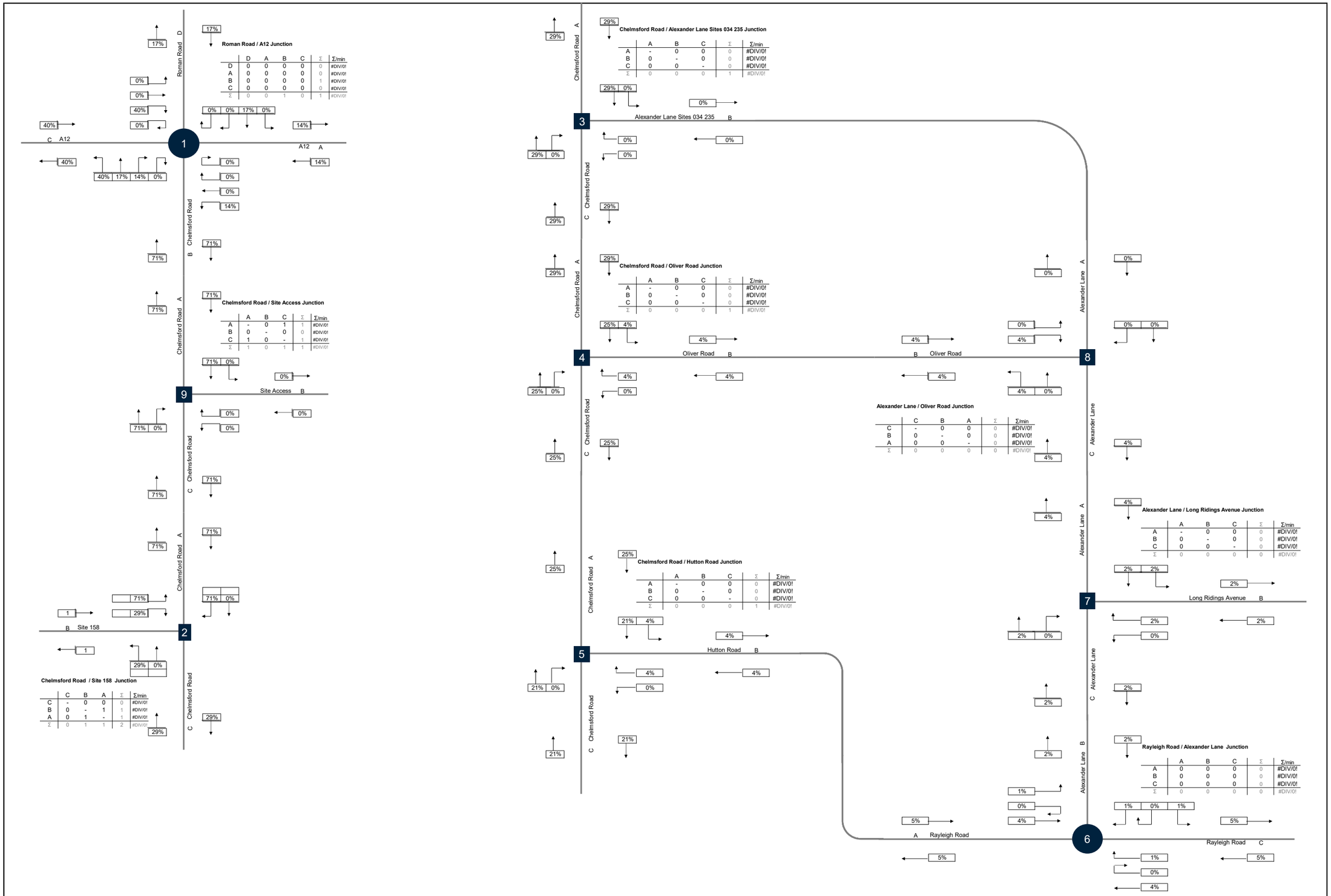


Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Committed Development - (Croudace Site 034 and Stonebond Site 235)

Figure No. iii PM Peak

Transport and Engineering

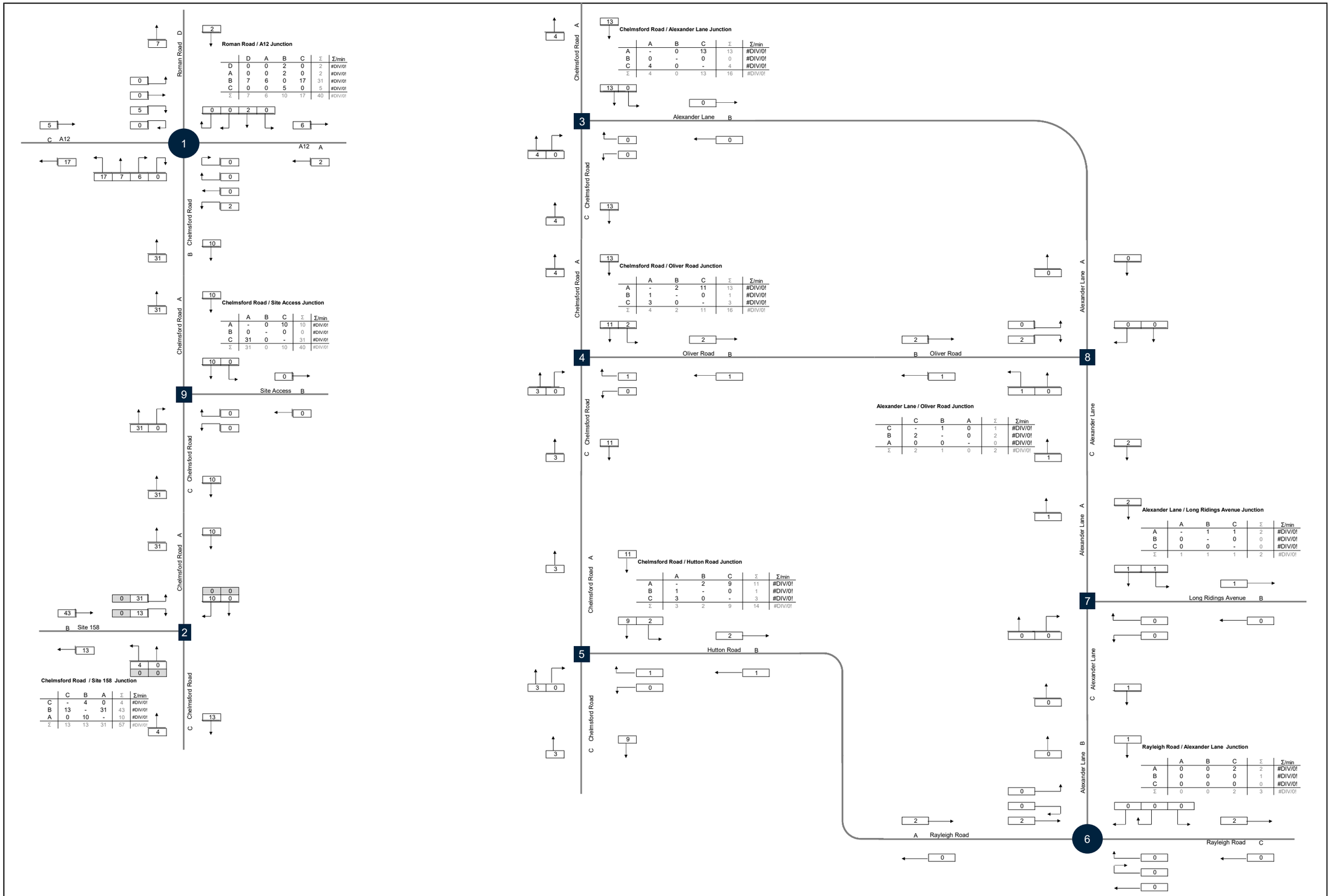


Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Proposed Distribution (Countryside Site 158)

Figure No. iv

Transport and Engineering

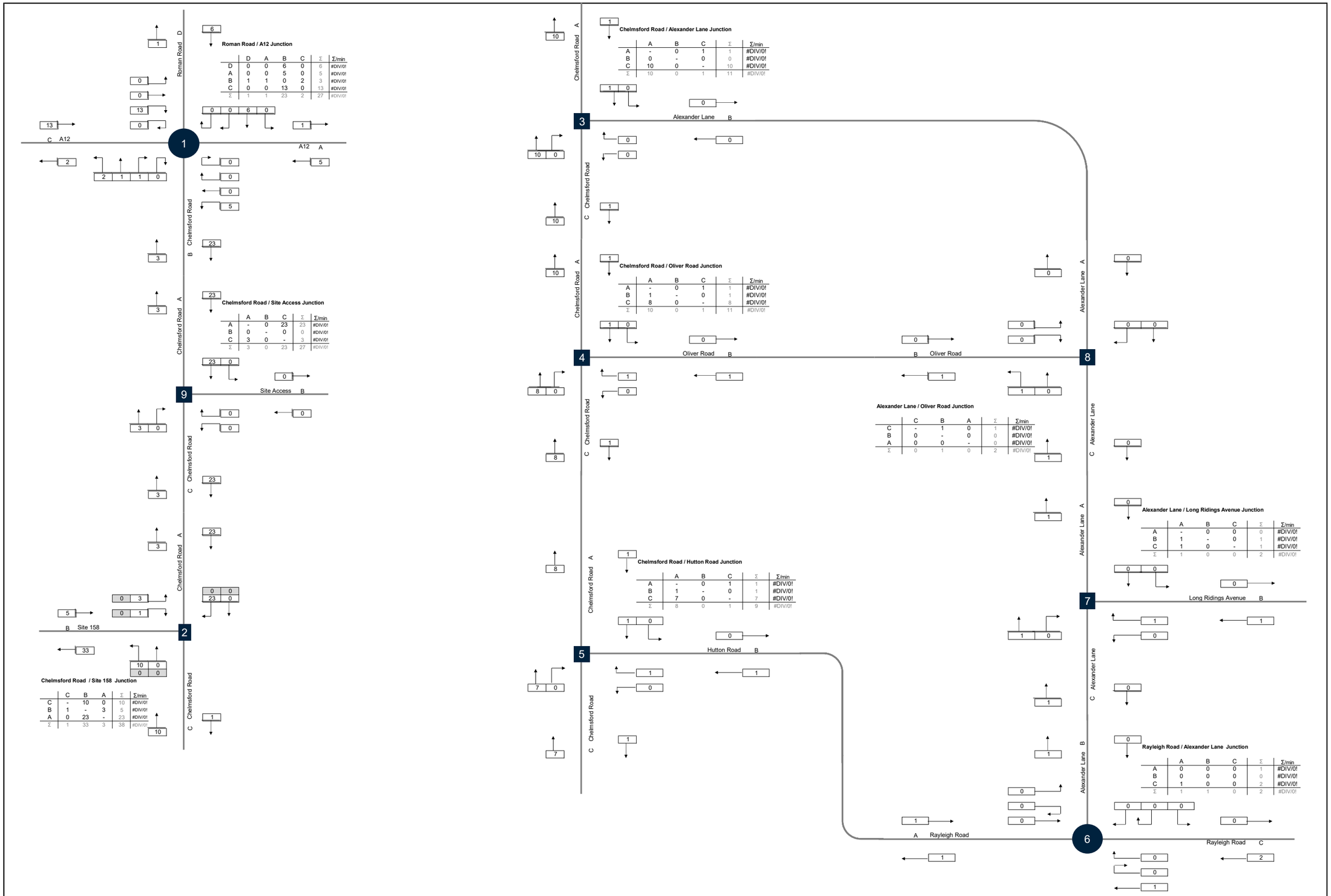


Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Committed Development - (Countryside Site 158 Residential)

Figure No. v AM Peak 07:30-08:30

Transport and Engineering

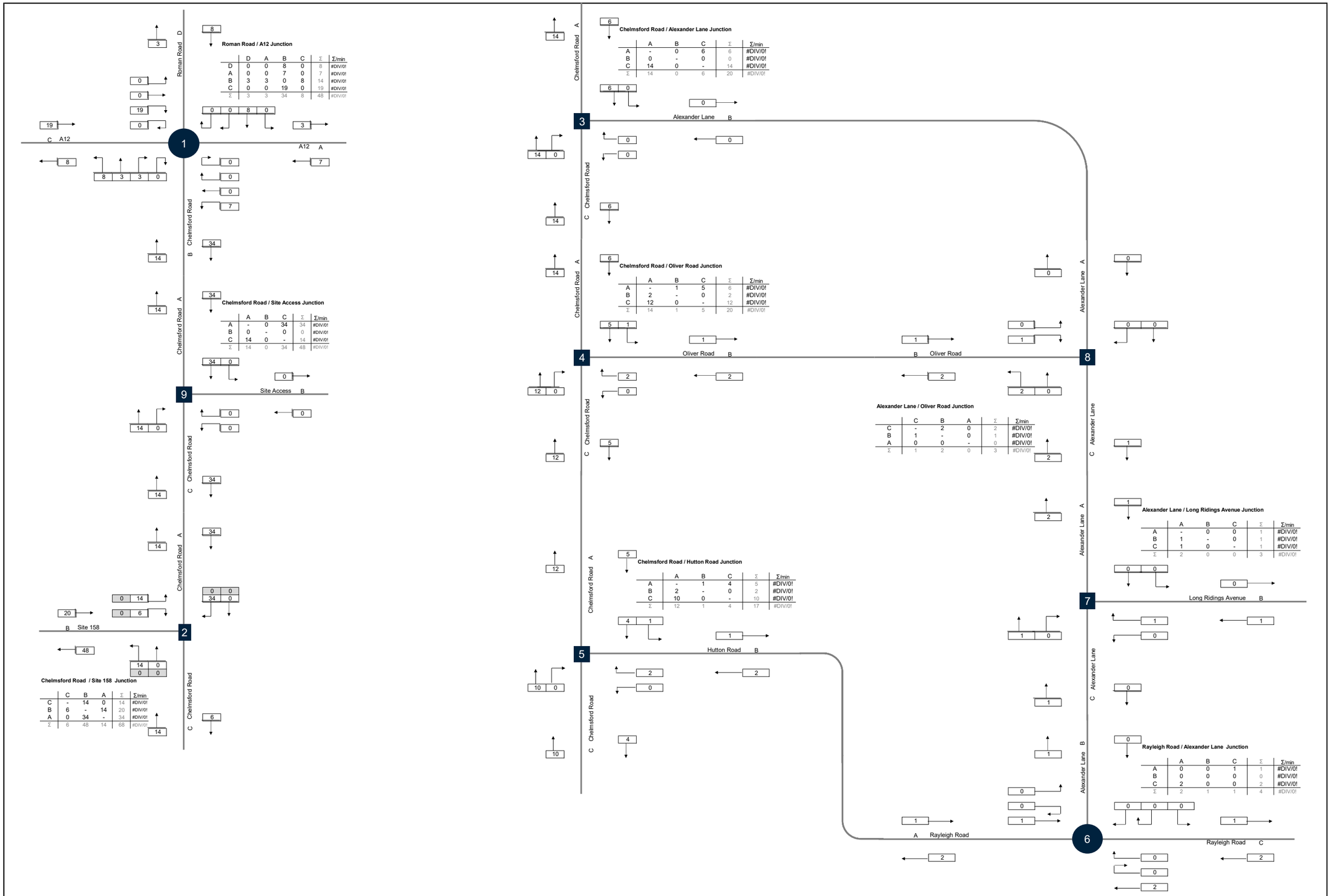


Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Committed Development - (Countryside Site 158 Employment)

Figure No. vi AM Peak

Transport and Engineering



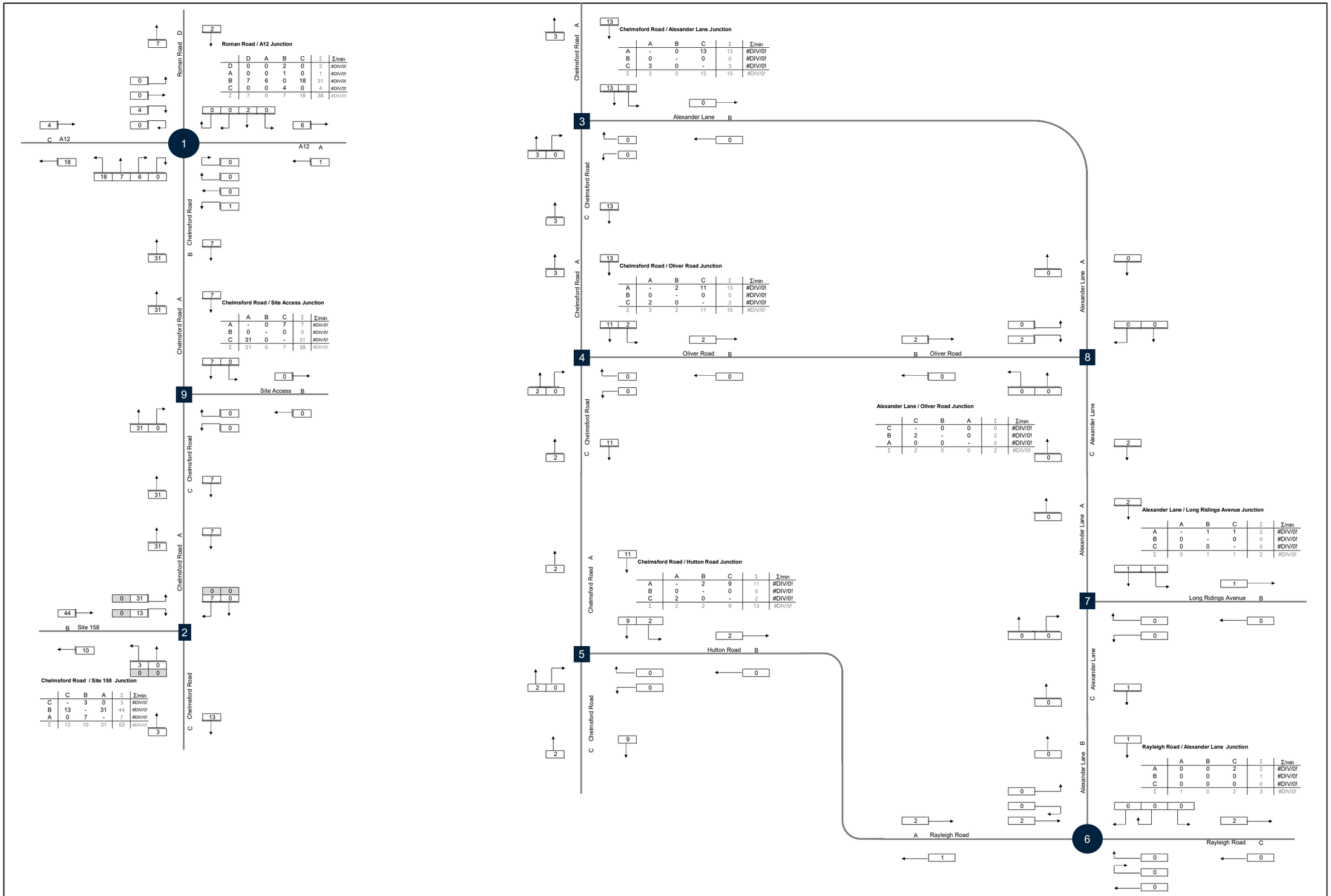
Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Committed Development - (Countryside Site 158 Residential)

Figure No. vii PM Peak

MAKING COMPLEX EASY

Transport and Engineering

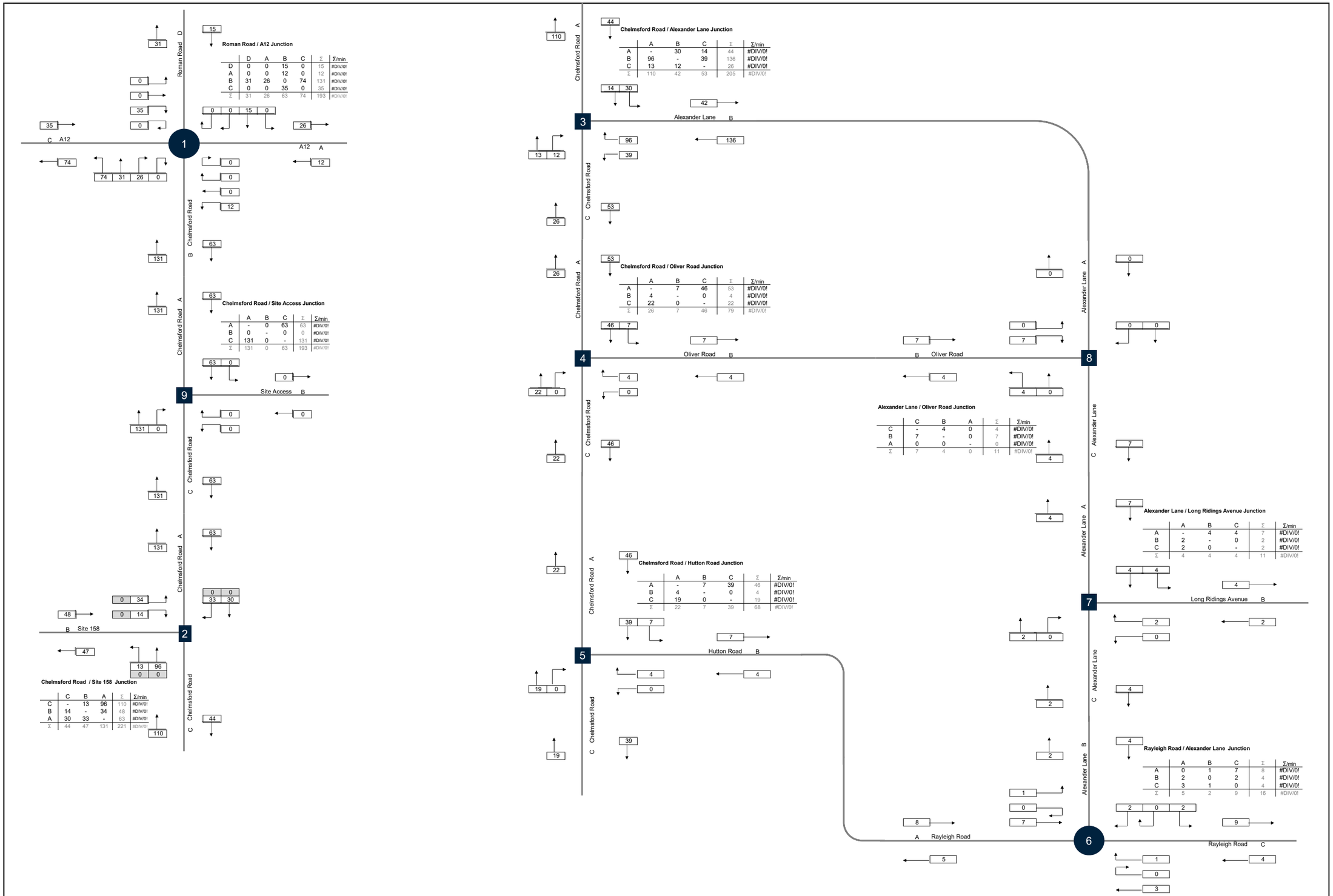


Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Committed Development - (Countryside Site 158 Employment)

Figure No. viii PM Peak

Transport and Engineering

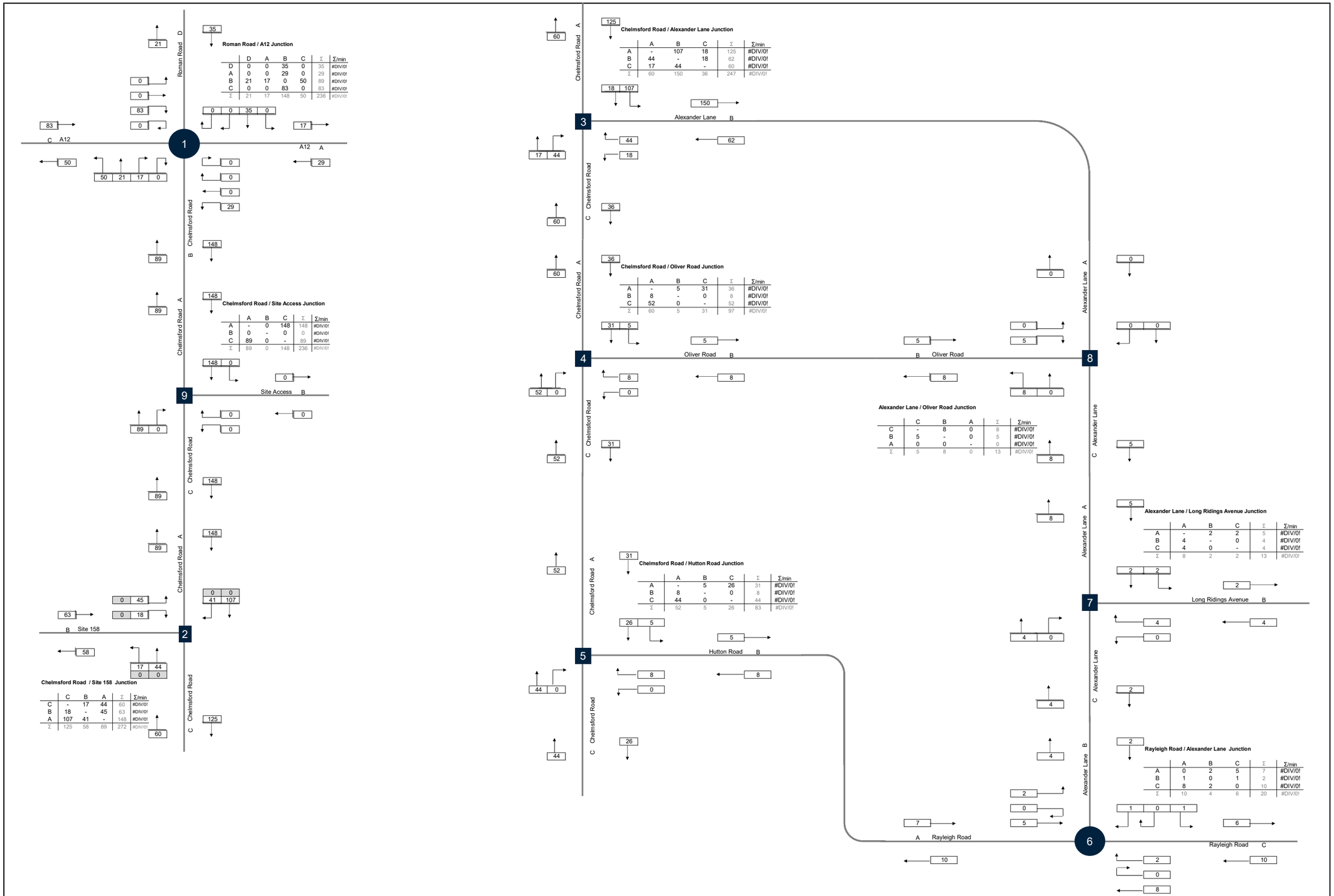


Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Total Committed Development AM
AM Peak

Figure No. 14

Transport and Engineering



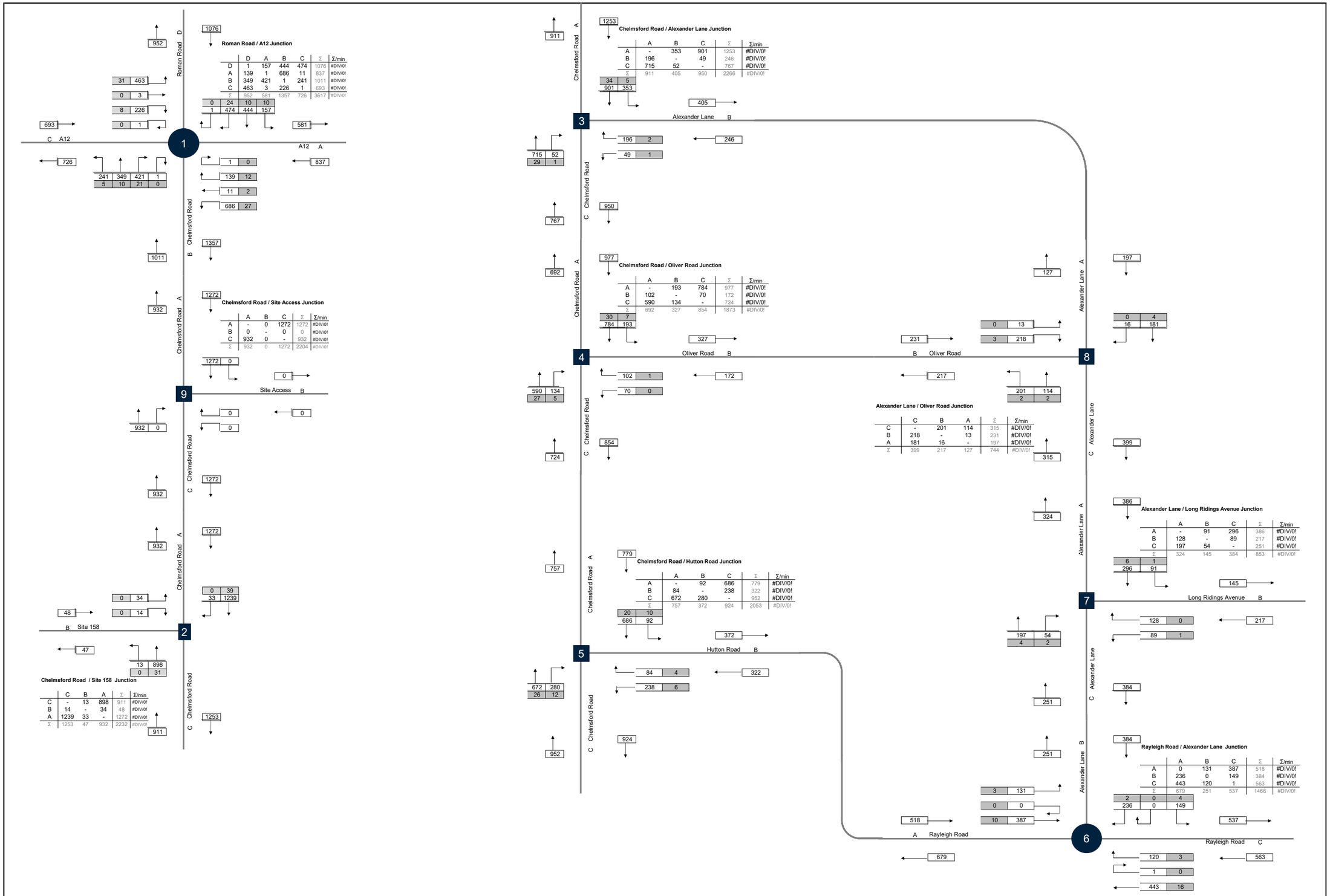
Notes

Project Name: Shenfield
Job Number: JNY10935
Title: Total Committed Development PM
PM Peak

Figure No. 15

MAKING COMPLEX EASY

Transport and Engineering



Chelmsford Road / Site 158 Junction

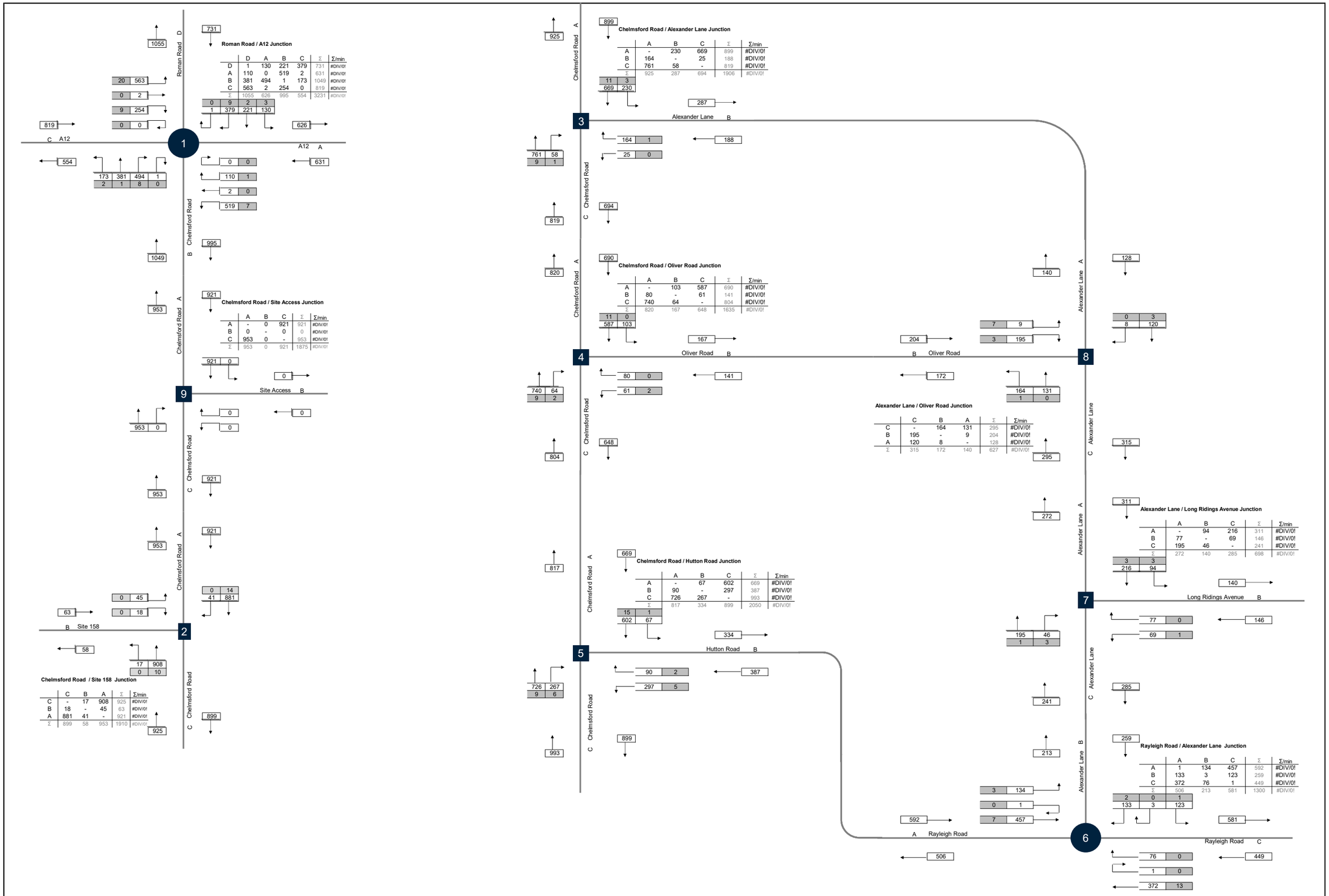
	C	B	A	Σ	Σ/min
C	-	13	898	911	#DIV/0!
B	14	-	34	48	#DIV/0!
A	1239	33	-	1272	#DIV/0!
Σ	1253	47	932	2232	#DIV/0!

Notes

Transport and Engineering

Project Name: Shenfield
Job Number: JNY10935
Title: 2027 Base + Committed Dev AM
AM Peak 07:30-08:30

Figure No. 16



Roman Road / A12 Junction

	D	A	B	C	Σ	Σ/min
D	1	130	221	379	731	#DIV/0!
A	110	0	519	2	631	#DIV/0!
B	381	494	1	173	1049	#DIV/0!
C	563	2	254	0	819	#DIV/0!
Σ	1055	626	995	554	3231	#DIV/0!

Chelmsford Road / Site Access Junction

	A	B	C	Σ	Σ/min
A	-	0	921	921	#DIV/0!
B	0	-	0	0	#DIV/0!
C	953	0	-	953	#DIV/0!
Σ	953	0	921	1875	#DIV/0!

Chelmsford Road / Site 158 Junction

	C	B	A	Σ	Σ/min
C	-	17	908	925	#DIV/0!
B	18	-	45	63	#DIV/0!
A	881	41	-	921	#DIV/0!
Σ	899	58	953	1910	#DIV/0!

Chelmsford Road / Alexander Lane Junction

	A	B	C	Σ	Σ/min
A	-	230	669	899	#DIV/0!
B	164	-	25	188	#DIV/0!
C	761	58	-	819	#DIV/0!
Σ	925	287	694	1906	#DIV/0!

Chelmsford Road / Oliver Road Junction

	A	B	C	Σ	Σ/min
A	-	103	587	690	#DIV/0!
B	80	-	61	141	#DIV/0!
C	740	64	-	804	#DIV/0!
Σ	820	167	648	1635	#DIV/0!

Alexander Lane / Oliver Road Junction

	C	B	A	Σ	Σ/min
C	-	164	131	295	#DIV/0!
B	195	-	9	204	#DIV/0!
A	120	8	-	128	#DIV/0!
Σ	315	172	140	627	#DIV/0!

Chelmsford Road / Hutton Road Junction

	A	B	C	Σ	Σ/min
A	-	67	602	669	#DIV/0!
B	90	-	297	387	#DIV/0!
C	726	267	-	993	#DIV/0!
Σ	817	334	899	2050	#DIV/0!

Alexander Lane / Long Ridings Avenue Junction

	A	B	C	Σ	Σ/min
A	-	94	216	311	#DIV/0!
B	77	-	69	146	#DIV/0!
C	195	46	-	241	#DIV/0!
Σ	272	140	285	698	#DIV/0!

Rayleigh Road / Alexander Lane Junction

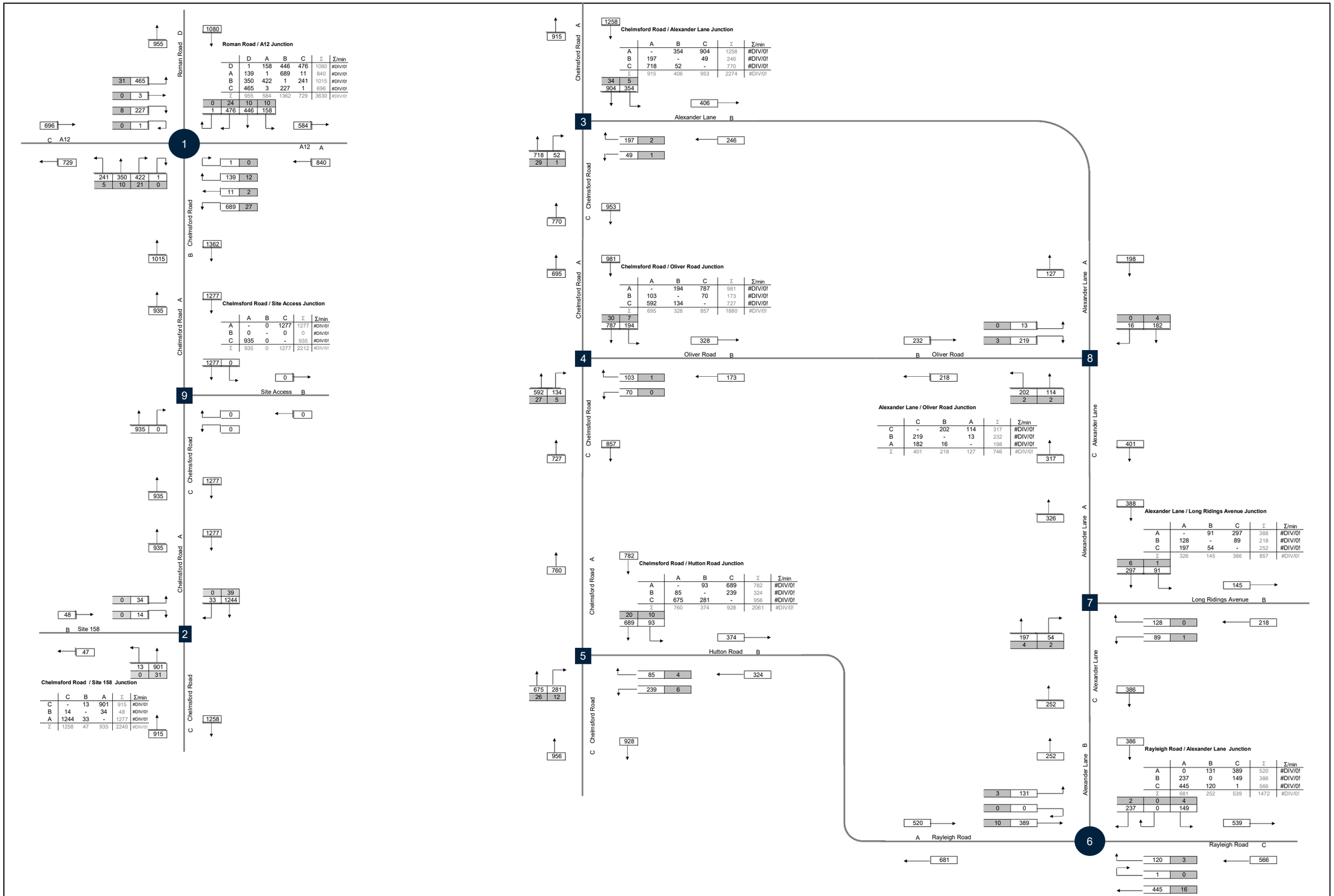
	A	B	C	Σ	Σ/min
A	1	134	457	592	#DIV/0!
B	133	3	123	259	#DIV/0!
C	372	76	1	449	#DIV/0!
Σ	506	213	581	1300	#DIV/0!

Notes

Project Name: Shenfield
Job Number: JNY10935
Title: 2027 Base + Total Committed Dev PM
PM Peak 17:00-18:00

Figure No. 17

Transport and Engineering



Roman Road / A12 Junction

	D	A	B	C	Σ	Σ/min
D	1	158	446	476	1080	#DIV/0!
A	139	1	689	11	840	#DIV/0!
B	350	422	1	241	1015	#DIV/0!
C	465	3	227	1	696	#DIV/0!
Σ	955	584	1362	729	3630	#DIV/0!

Chelmsford Road / Site Access Junction

	A	B	C	Σ	Σ/min
A	-	0	1277	1277	#DIV/0!
B	0	-	0	0	#DIV/0!
C	935	0	-	935	#DIV/0!
Σ	935	0	1277	2212	#DIV/0!

Chelmsford Road / Site 158 Junction

	C	B	A	Σ	Σ/min
C	-	13	901	915	#DIV/0!
B	14	-	34	48	#DIV/0!
A	1244	33	-	1277	#DIV/0!
Σ	1258	47	935	2240	#DIV/0!

Chelmsford Road / Alexander Lane Junction

	A	B	C	Σ	Σ/min
A	-	354	904	1258	#DIV/0!
B	197	-	49	246	#DIV/0!
C	718	52	-	770	#DIV/0!
Σ	915	406	953	2274	#DIV/0!

Chelmsford Road / Oliver Road Junction

	A	B	C	Σ	Σ/min
A	-	194	787	981	#DIV/0!
B	103	-	70	173	#DIV/0!
C	592	134	-	727	#DIV/0!
Σ	695	328	857	1880	#DIV/0!

Chelmsford Road / Hutton Road Junction

	A	B	C	Σ	Σ/min
A	-	93	689	782	#DIV/0!
B	85	-	239	324	#DIV/0!
C	675	281	-	956	#DIV/0!
Σ	760	374	928	2061	#DIV/0!

Alexander Lane / Oliver Road Junction

	C	B	A	Σ	Σ/min
C	-	202	114	317	#DIV/0!
B	219	-	13	232	#DIV/0!
A	182	16	-	198	#DIV/0!
Σ	401	218	127	746	#DIV/0!

Alexander Lane / Long Ridings Avenue Junction

	A	B	C	Σ	Σ/min
A	-	91	297	388	#DIV/0!
B	128	-	89	218	#DIV/0!
C	197	54	-	252	#DIV/0!
Σ	326	145	386	857	#DIV/0!

Rayleigh Road / Alexander Lane Junction

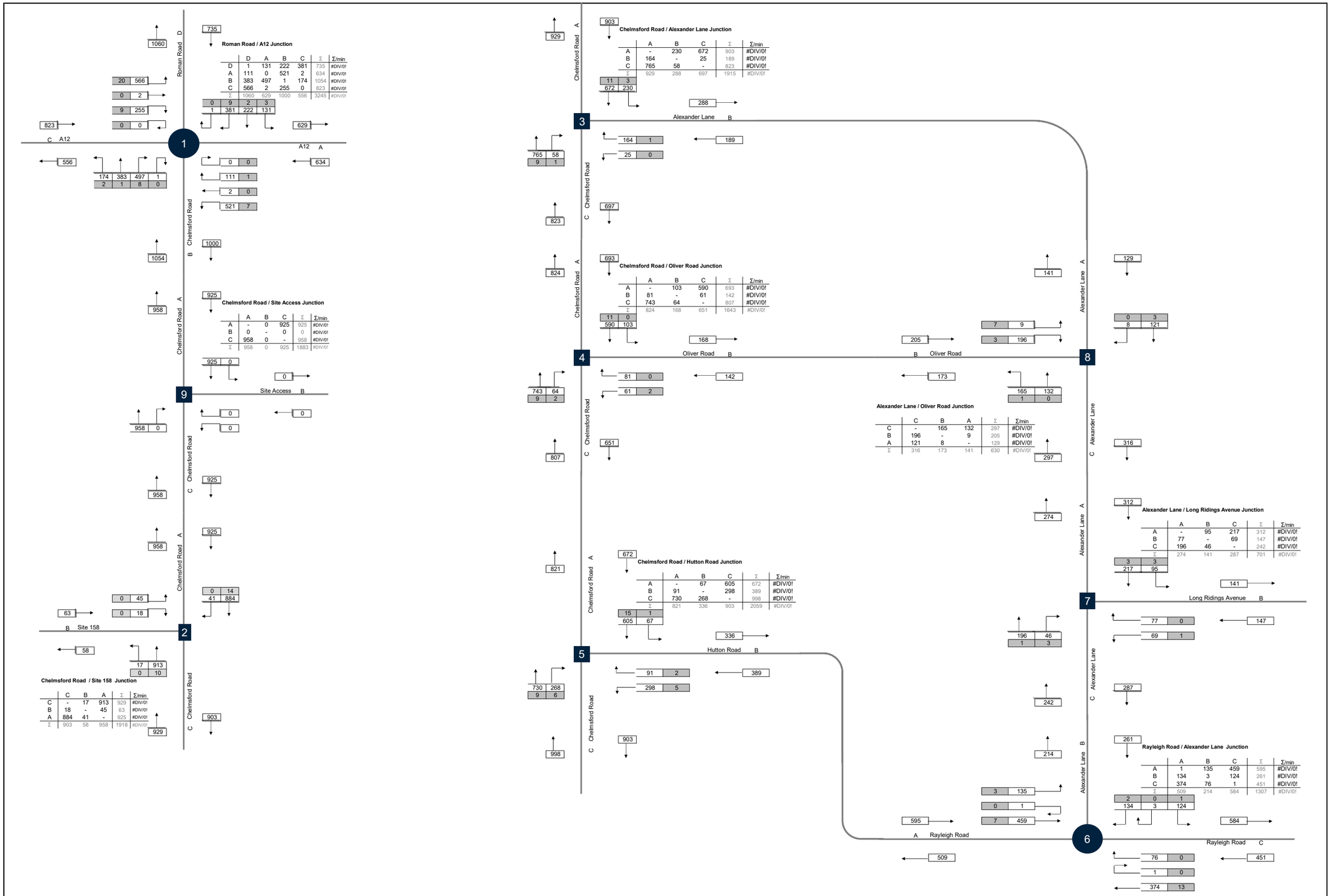
	A	B	C	Σ	Σ/min
A	0	131	389	520	#DIV/0!
B	237	0	149	386	#DIV/0!
C	445	120	1	566	#DIV/0!
Σ	681	252	539	1472	#DIV/0!

Notes

Transport and Engineering

Project Name: Shenfield
Job Number: JNY10935
Title: 2032 Base + Committed AM
AM Peak 07:30-08:30

Figure No. 18



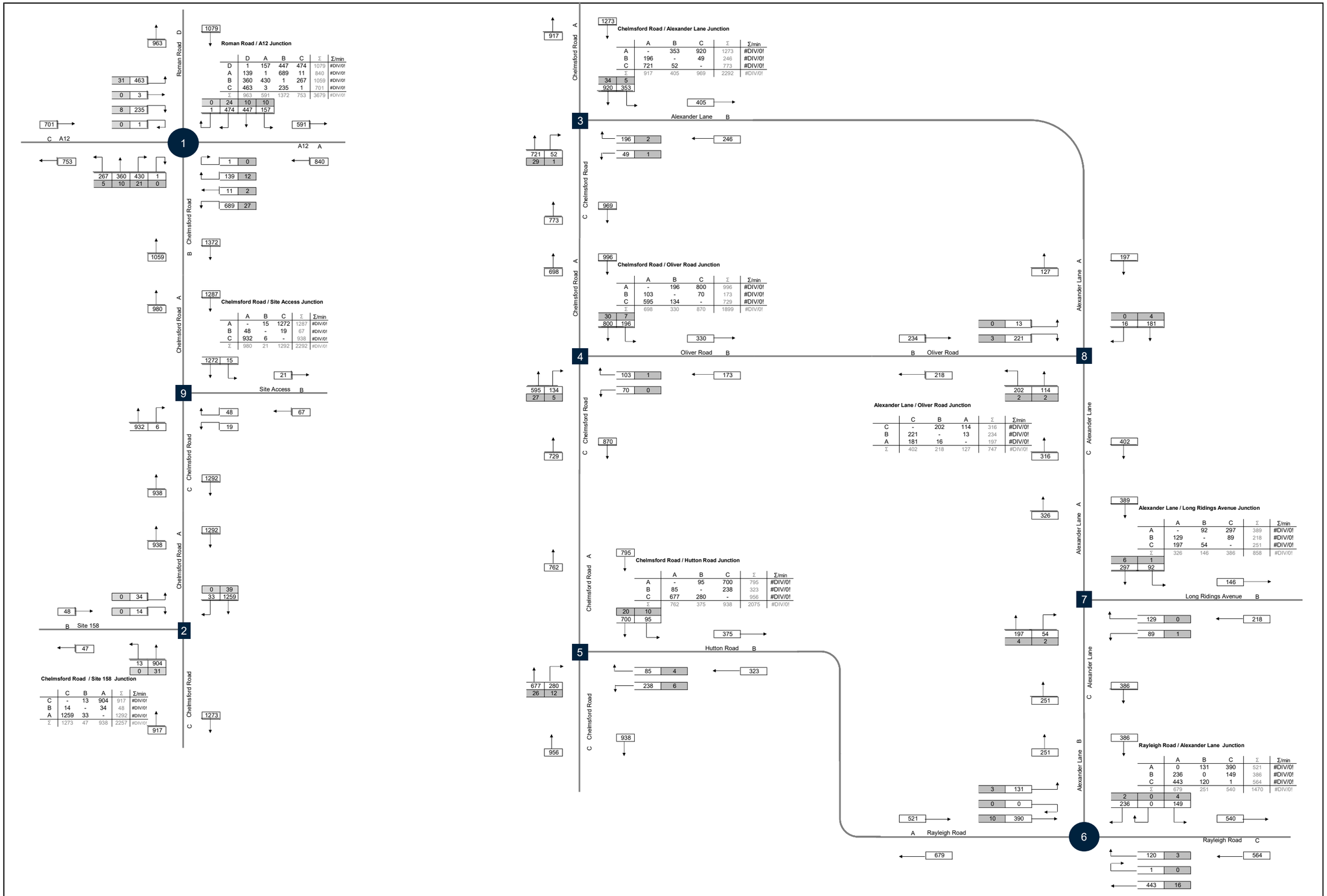
Notes

Project Name: Shenfield
Job Number: JNY10935
Title: 2032 Base + Committed PM
PM Peak 17:00-18:00

Figure No. 19

MAKING COMPLEX EASY

Transport and Engineering



Roman Road / A12 Junction

	D	A	B	C	Σ	Σ/min
D	1	157	447	474	1079	#DIV/0!
A	139	1	689	11	840	#DIV/0!
B	360	430	1	267	1059	#DIV/0!
C	463	3	235	1	701	#DIV/0!
Σ	963	591	1372	753	3679	#DIV/0!

Chelmsford Road / Site Access Junction

	A	B	C	Σ	Σ/min
A	-	15	1272	1287	#DIV/0!
B	48	-	19	67	#DIV/0!
C	932	6	-	938	#DIV/0!
Σ	980	21	1292	2292	#DIV/0!

Chelmsford Road / Site 158 Junction

	C	B	A	Σ	Σ/min
C	-	13	904	917	#DIV/0!
B	14	-	34	48	#DIV/0!
A	1259	33	-	1292	#DIV/0!
Σ	1273	47	938	2257	#DIV/0!

Chelmsford Road / Alexander Lane Junction

	A	B	C	Σ	Σ/min
A	-	353	920	1273	#DIV/0!
B	196	-	49	246	#DIV/0!
C	721	52	-	773	#DIV/0!
Σ	917	405	969	2292	#DIV/0!

Chelmsford Road / Oliver Road Junction

	A	B	C	Σ	Σ/min
A	-	196	800	996	#DIV/0!
B	103	-	70	173	#DIV/0!
C	595	134	-	729	#DIV/0!
Σ	698	330	870	1899	#DIV/0!

Alexander Lane / Oliver Road Junction

	C	B	A	Σ	Σ/min
C	-	202	114	316	#DIV/0!
B	221	-	13	234	#DIV/0!
A	181	16	-	197	#DIV/0!
Σ	402	218	127	747	#DIV/0!

Chelmsford Road / Hutton Road Junction

	A	B	C	Σ	Σ/min
A	-	95	700	795	#DIV/0!
B	85	-	238	323	#DIV/0!
C	677	280	-	956	#DIV/0!
Σ	762	375	938	2075	#DIV/0!

Alexander Lane / Long Ridings Avenue Junction

	A	B	C	Σ	Σ/min
A	-	92	297	389	#DIV/0!
B	129	-	89	218	#DIV/0!
C	197	54	-	251	#DIV/0!
Σ	326	146	386	858	#DIV/0!

Rayleigh Road / Alexander Lane Junction

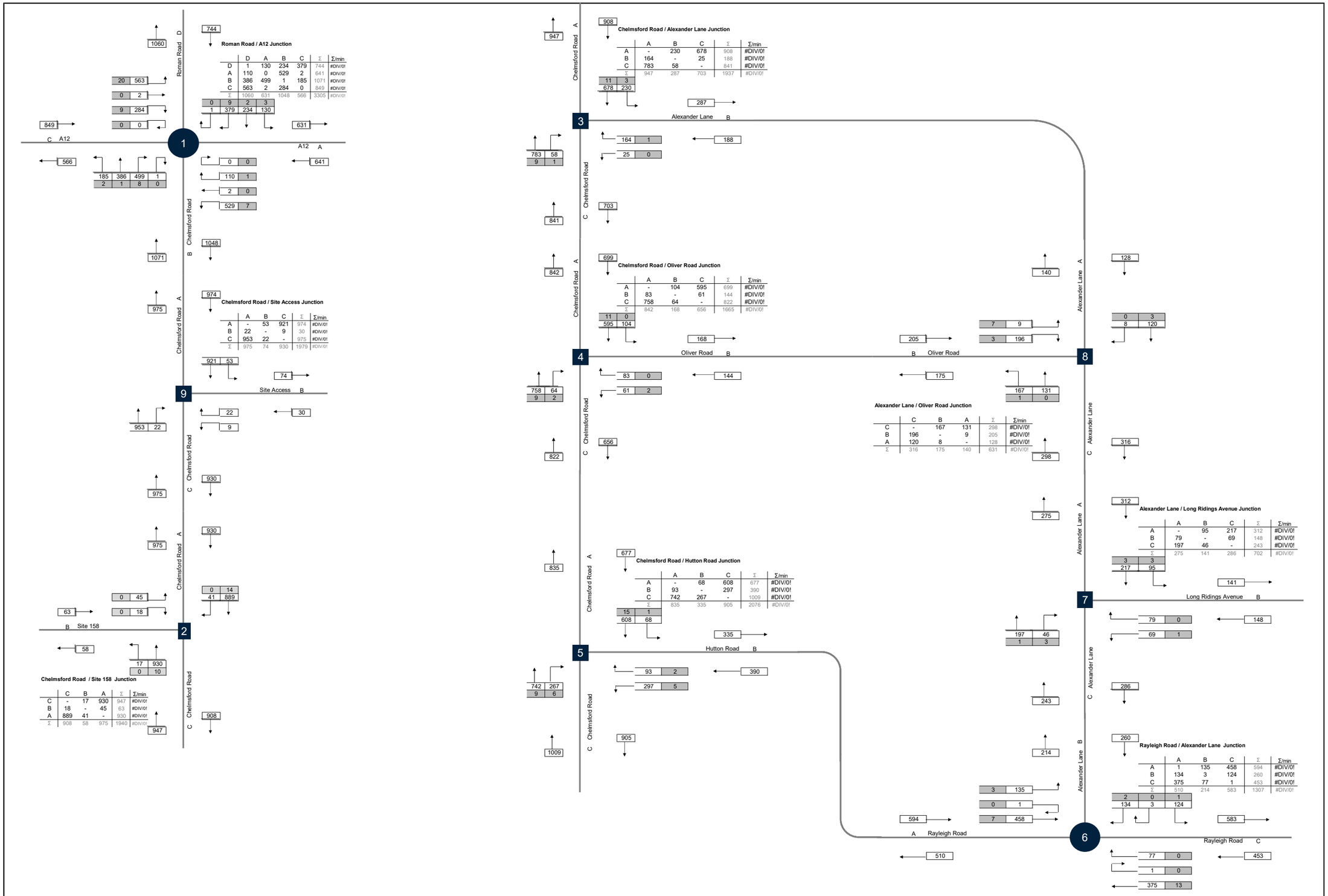
	A	B	C	Σ	Σ/min
A	0	131	390	521	#DIV/0!
B	236	0	149	386	#DIV/0!
C	443	120	1	564	#DIV/0!
Σ	679	251	540	1470	#DIV/0!

Notes

Transport and Engineering

Project Name: Shenfield
Job Number: JNY10935
Title: 2027 Base + Committed + Development AM
AM Peak 07:30-08:30

Figure No. 20



Roman Road / A12 Junction

	D	A	B	C	Σ	Σ/min
D	1	130	234	379	744	#DIV/0!
A	110	0	529	2	641	#DIV/0!
B	386	499	1	185	1071	#DIV/0!
C	563	2	284	0	849	#DIV/0!
Σ	1060	631	1048	566	3305	#DIV/0!

Chelmsford Road / Site Access Junction

	A	B	C	Σ	Σ/min
A	-	53	921	974	#DIV/0!
B	22	-	9	30	#DIV/0!
C	953	22	-	975	#DIV/0!
Σ	975	74	930	1979	#DIV/0!

Chelmsford Road / Site 158 Junction

	C	B	A	Σ	Σ/min
C	-	17	930	947	#DIV/0!
B	18	-	45	63	#DIV/0!
A	889	41	-	930	#DIV/0!
Σ	908	58	975	1940	#DIV/0!

Chelmsford Road / Alexander Lane Junction

	A	B	C	Σ	Σ/min
A	-	230	678	908	#DIV/0!
B	164	-	25	188	#DIV/0!
C	783	58	-	841	#DIV/0!
Σ	947	287	703	1937	#DIV/0!

Chelmsford Road / Oliver Road Junction

	A	B	C	Σ	Σ/min
A	-	104	595	699	#DIV/0!
B	83	-	61	144	#DIV/0!
C	758	64	-	822	#DIV/0!
Σ	842	168	656	1665	#DIV/0!

Alexander Lane / Oliver Road Junction

	C	B	A	Σ	Σ/min
C	-	167	131	298	#DIV/0!
B	196	-	9	205	#DIV/0!
A	120	8	-	128	#DIV/0!
Σ	316	175	140	631	#DIV/0!

Chelmsford Road / Hutton Road Junction

	A	B	C	Σ	Σ/min
A	-	68	608	677	#DIV/0!
B	93	-	297	390	#DIV/0!
C	742	267	-	1009	#DIV/0!
Σ	835	335	905	2076	#DIV/0!

Alexander Lane / Long Ridings Avenue Junction

	A	B	C	Σ	Σ/min
A	-	95	217	312	#DIV/0!
B	79	-	69	148	#DIV/0!
C	197	46	-	243	#DIV/0!
Σ	275	141	286	702	#DIV/0!

Rayleigh Road / Alexander Lane Junction

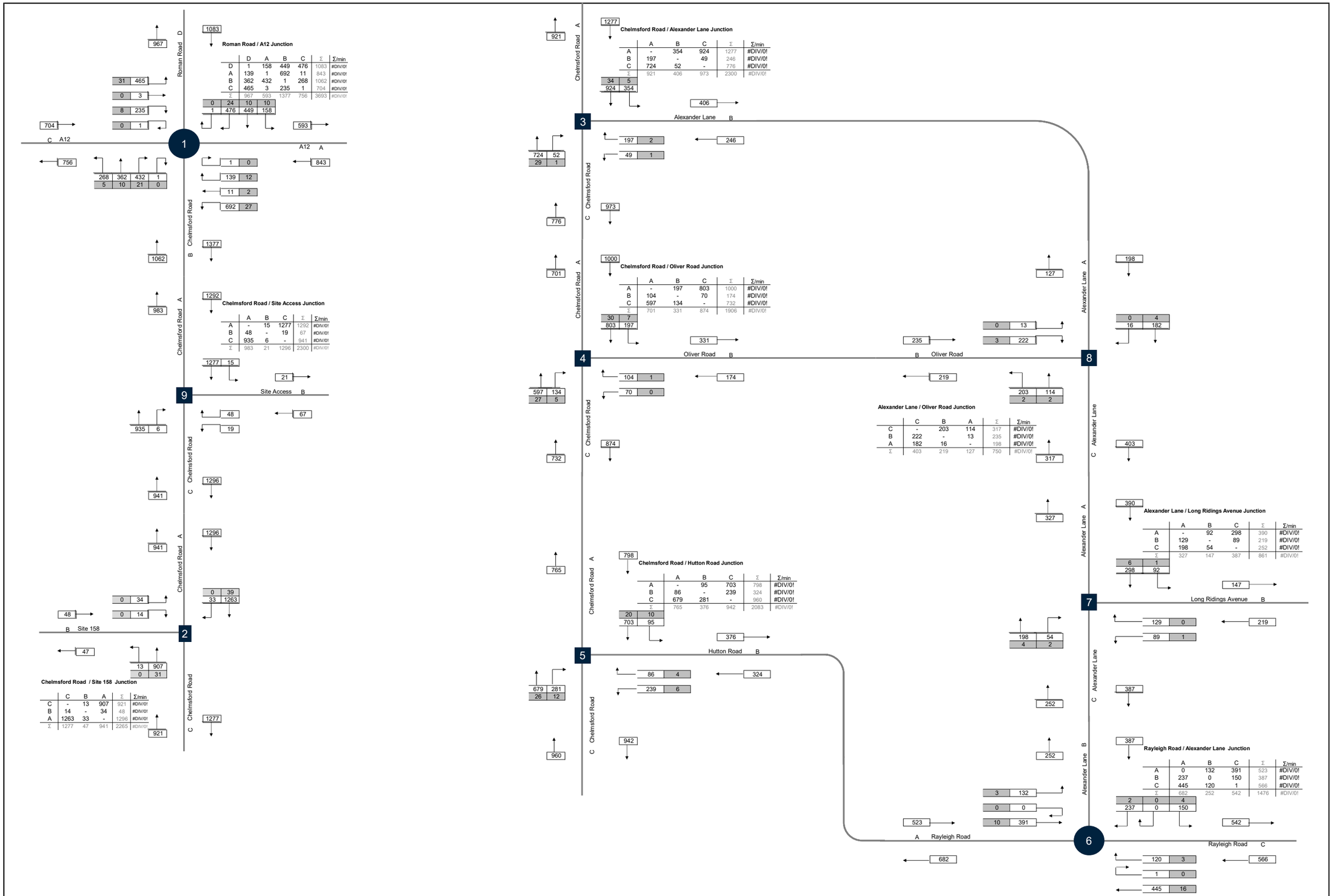
	A	B	C	Σ	Σ/min
A	1	135	458	594	#DIV/0!
B	134	3	124	260	#DIV/0!
C	375	77	1	453	#DIV/0!
Σ	510	214	583	1307	#DIV/0!

Notes

Project Name: Shenfield
Job Number: JNY10935
Title: 2027 Base + Committed + Development PM
PM Peak 17:00-18:00

Figure No. 21

Transport and Engineering



Roman Road / A12 Junction

	D	A	B	C	Σ	Σ/min
D	1	158	449	476	1083	#DIV/0!
A	139	1	692	11	843	#DIV/0!
B	362	432	1	268	1062	#DIV/0!
C	465	3	235	1	704	#DIV/0!
Σ	967	593	1377	756	3693	#DIV/0!

Chelmsford Road / Site Access Junction

	A	B	C	Σ	Σ/min
A	-	15	1277	1292	#DIV/0!
B	48	-	19	67	#DIV/0!
C	935	6	-	941	#DIV/0!
Σ	983	21	1296	2300	#DIV/0!

Chelmsford Road / Site 158 Junction

	C	B	A	Σ	Σ/min
C	-	13	907	921	#DIV/0!
B	14	-	34	48	#DIV/0!
A	1263	33	-	1296	#DIV/0!
Σ	1277	47	941	2265	#DIV/0!

Chelmsford Road / Alexander Lane Junction

	A	B	C	Σ	Σ/min
A	-	354	924	1277	#DIV/0!
B	197	-	49	246	#DIV/0!
C	724	52	-	776	#DIV/0!
Σ	921	406	973	2300	#DIV/0!

Chelmsford Road / Oliver Road Junction

	A	B	C	Σ	Σ/min
A	-	197	803	1000	#DIV/0!
B	104	-	70	174	#DIV/0!
C	597	134	-	732	#DIV/0!
Σ	701	331	874	1906	#DIV/0!

Alexander Lane / Oliver Road Junction

	C	B	A	Σ	Σ/min
C	-	203	114	317	#DIV/0!
B	222	-	13	235	#DIV/0!
A	182	16	-	198	#DIV/0!
Σ	403	219	127	750	#DIV/0!

Chelmsford Road / Hutton Road Junction

	A	B	C	Σ	Σ/min
A	-	95	703	798	#DIV/0!
B	86	-	239	324	#DIV/0!
C	679	281	-	960	#DIV/0!
Σ	765	376	942	2083	#DIV/0!

Alexander Lane / Long Ridings Avenue Junction

	A	B	C	Σ	Σ/min
A	-	92	298	390	#DIV/0!
B	129	-	89	219	#DIV/0!
C	198	54	-	252	#DIV/0!
Σ	327	147	387	861	#DIV/0!

Rayleigh Road / Alexander Lane Junction

	A	B	C	Σ	Σ/min
A	0	132	391	523	#DIV/0!
B	237	0	150	387	#DIV/0!
C	445	120	1	566	#DIV/0!
Σ	682	252	542	1476	#DIV/0!

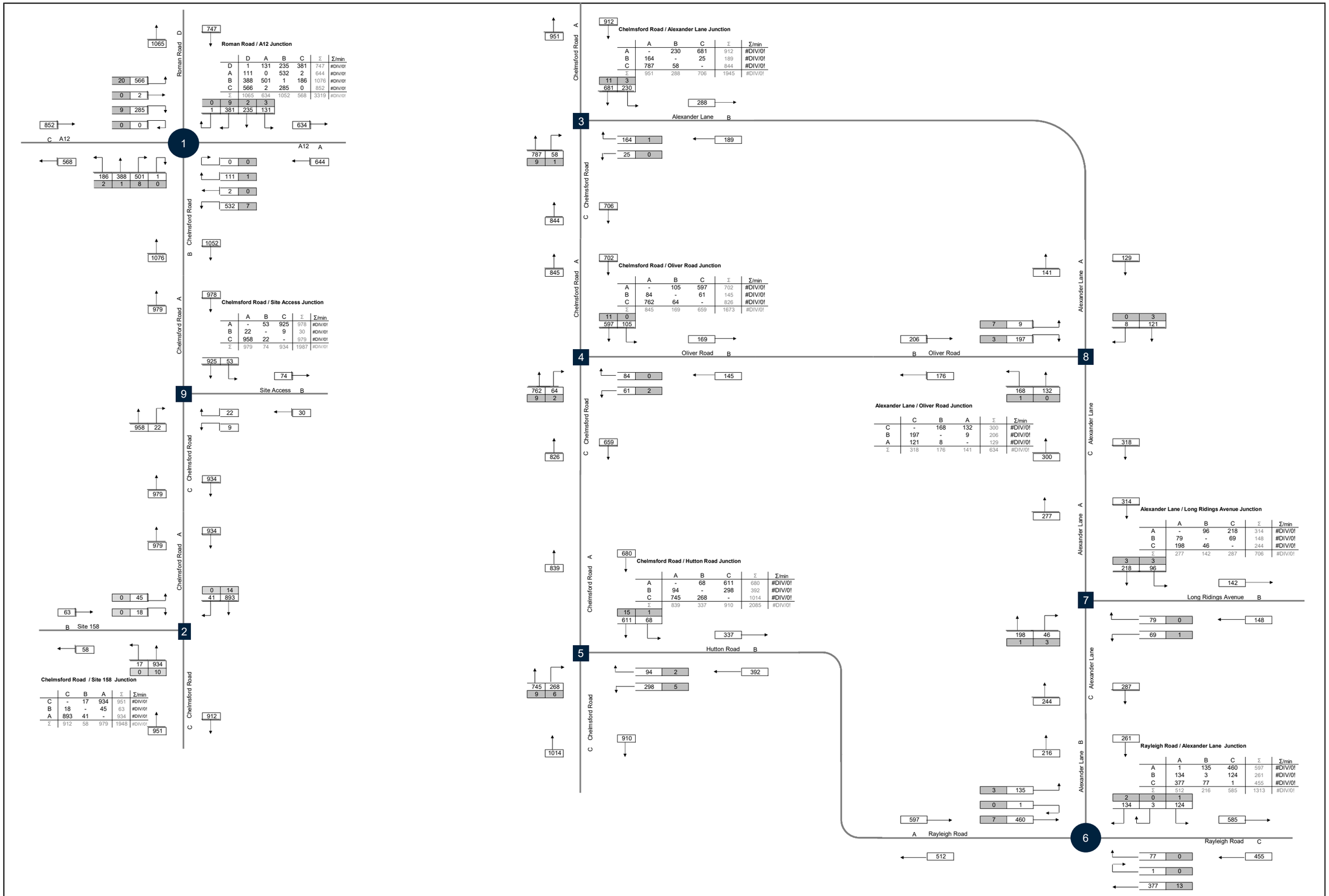
Notes

Project Name: Shenfield
Job Number: JNY10935
Title: 2032 Base + Committed + Dev AM
AM Peak 07:30-08:30

Figure No. 22

MAKING COMPLEX EASY

Transport and Engineering



Notes

Project Name: Shenfield
Job Number: JNY10935
Title: 2032 Base + Committed + Development PM
PM Peak 17:00-18:00

Figure No. 23

Transport and Engineering

Appendix 4 – Junctions 10 Output

Junctions 10

ARCADY 10 - Roundabout Module

Filename: Roman Rd.A12.Chelmsford Road Roundabout (J1) ST v2.j10
Path: P:\JNY10935 - Shenfield\Transport\Arcady
Report generation date: 17/02/2023 16:53:34

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	[Lane Simulation] - 2022 Base									
A - A12 (E)	D1	11.2	48.64		E	D2	1.9	7.82		A
B - Chelmsford Road		1.1	4.06		A		1.1	3.59		A
C - A12 (W)		1.3	5.95		A		1.6	7.24		A
D - Roman Road		1.5	5.24		A		0.8	3.44		A
	[Lane Simulation] - 2032 Base									
A - A12 (E)	D5	12.3	53.12		F	D6	1.5	7.46		A
B - Chelmsford Road		1.2	4.17		A		1.1	3.62		A
C - A12 (W)		1.2	5.99		A		1.9	7.52		A
D - Roman Road		1.7	5.23		A		1.0	3.48		A
	[Lane Simulation] - 2032 Base + R03									
A - A12 (E)	D11	24.8	97.50		F					
B - Chelmsford Road		1.7	5.12		A					
C - A12 (W)		1.4	6.38		A					
D - Roman Road		2.0	6.07		A					
	[Lane Simulation] - 2032 Base + R03									
A - A12 (E)						D12	2.0	9.94		A
B - Chelmsford Road							1.3	4.04		A
C - A12 (W)							2.4	7.60		A
D - Roman Road							1.0	4.10		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. Arm and junction delays are averages for all movements, including movements with zero delay.

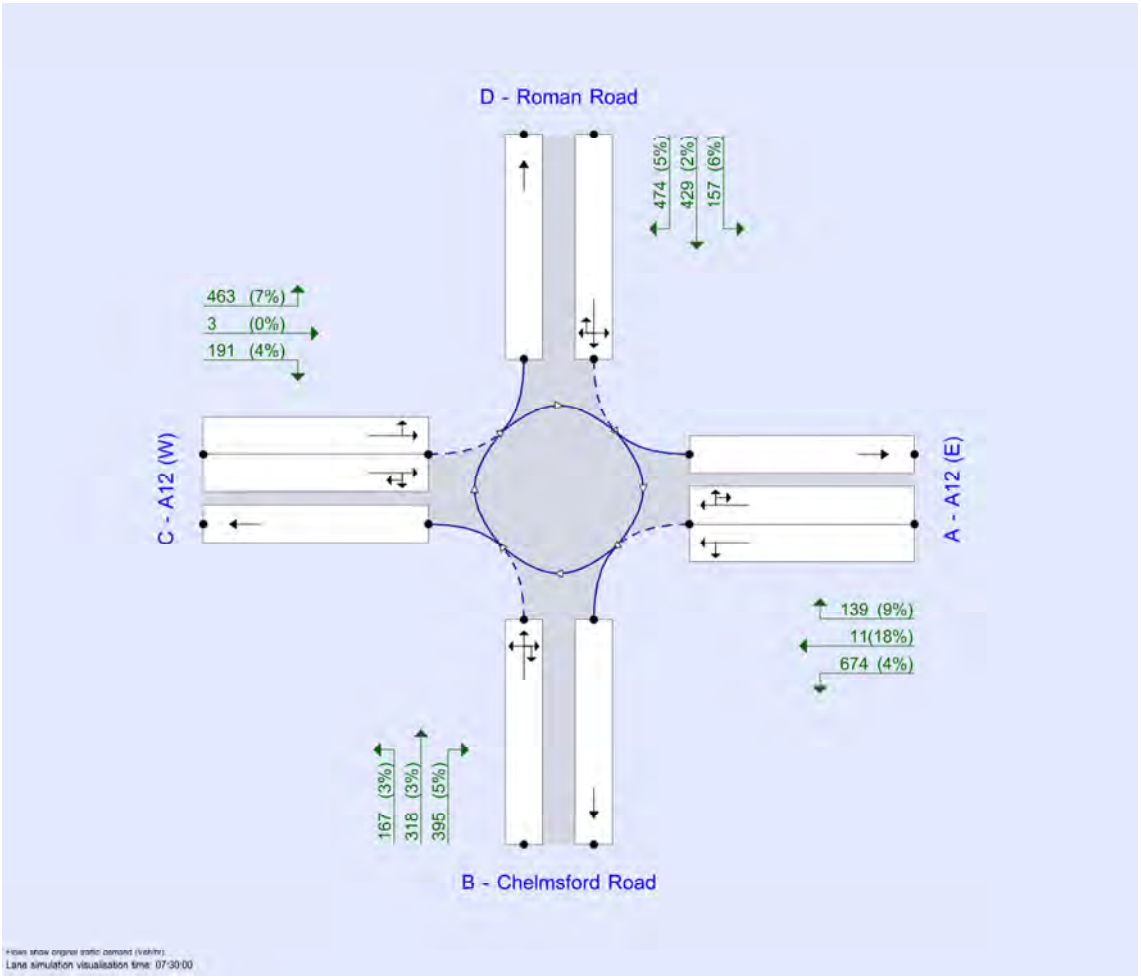
File summary

File Description

Title	
Location	
Site number	
Date	22/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EUR\George.Magnisalis
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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			1406635749	190	33.90

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2022 Base	AM	DIRECT	07:30	09:00	90	15	✓
D2	2022 Base	PM	DIRECT	17:00	18:30	90	15	✓
D3	2022 Base + Dev	AM	DIRECT	07:30	09:00	90	15	
D4	2022 Base + Dev	PM	DIRECT	17:00	18:30	90	15	
D5	2032 Base	AM	DIRECT	07:30	09:00	90	15	✓
D6	2032 Base	PM	DIRECT	17:00	18:30	90	15	✓
D7	2032 Base + Dev	AM	DIRECT	07:30	09:00	90	15	
D8	2032 Base + Dev	PM	DIRECT	17:00	18:30	90	15	
D9	2032 Base + Comm	AM	DIRECT	07:30	09:00	90	15	
D10	2032 Base + Comm	PM	DIRECT	17:00	18:30	90	15	
D11	2032 Base + R03	AM	DIRECT	07:30	09:00	90	15	✓
D12	2032 Base + R03	PM	DIRECT	17:00	18:30	90	15	✓

Analysis Set Details

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

2022 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Lane Simulation	A - A12 (E) - Lane Simulation	Arm A: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	B - Chelmsford Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Geometry	D - Roman Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Profile Type	D1 - 2022 Base, AM	The DIRECT profile type is intended to be used for demand that varies over time. You are using it with the 'Use O-D data' option, but your O-D data does not vary over time. Are you sure this is correct?
Info	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Mountnessing Roundabout	Large Roundabout		A, B, C, D	15.55	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	15.55	C

Arms

Arms

Arm	Name	Description	No give-way line
A	A12 (E)		
B	Chelmsford Road		
C	A12 (W)		
D	Roman Road		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A12 (E)	6.10	6.60	2.1	47.0	112.0	23.0		
B - Chelmsford Road	3.20	7.20	20.5	17.1	112.0	27.0		
C - A12 (W)	6.70	8.50	16.4	95.9	112.0	7.5		
D - Roman Road	3.40	9.40	11.4	17.8	112.0	37.0		

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Has entry-to-exit separation	Entry-to-exit separation (m)
A - A12 (E)	1137	✓	88.10
B - Chelmsford Road	665	✓	0.00
C - A12 (W)	897	✓	86.00
D - Roman Road	619	✓	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 (E)	0.860	2451
B - Chelmsford Road	0.848	2433
C - A12 (W)	1.101	3196
D - Roman Road	0.826	2380

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A12 (E)	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A - A12 (E)	Evenly split	10.00
B - Chelmsford Road	Evenly split	10.00
C - A12 (W)	Evenly split	10.00
D - Roman Road	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
A - A12 (E)	Entry	1	1	B, C		Infinity			0	99999	
			2	A, C, D		Infinity			0	99999	
	Exit	1	1			Infinity					
B - Chelmsford Road	Entry	1	1	A, B, C, D		Infinity			0	99999	
	Exit	1	1			Infinity					
C - A12 (W)	Entry	1	1	A, D		Infinity			0	99999	
			2	A, B, C		Infinity			0	99999	
	Exit	1	1			Infinity					
D - Roman Road	Entry	1	1	A, B, C, D		Infinity			0	99999	
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A12 (E)	Entry	1	1	0.430	1225
			2	0.430	1225
B - Chelmsford Road	Entry	1	1	0.848	2433
C - A12 (W)	Entry	1	1	0.550	1598
			2	0.550	1598
D - Roman Road	Entry	1	1	0.826	2380

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			A12 (E)	Chelmsford Road	A12 (W)	Roman Road
A - A12 (E)	1	1		✓	✓	
		2	✓		✓	✓
B - Chelmsford Road	1	1	✓	✓	✓	✓
C - A12 (W)	1	1	✓			✓
		2	✓	✓	✓	
D - Roman Road	1	1	✓	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2022 Base	AM	DIRECT	07:30	09:00	90	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	Scaling Factor (%)
A - A12 (E)		DIRECT	✓	100.000
B - Chelmsford Road		DIRECT	✓	100.000
C - A12 (W)		DIRECT	✓	100.000
D - Roman Road		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	1	674	11	139
	B - Chelmsford Road	395	1	167	318
	C - A12 (W)	3	191	1	463
	D - Roman Road	157	429	474	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	0	4	18	9
	B - Chelmsford Road	5	0	3	3
	C - A12 (W)	0	4	0	7

	D - Roman Road	6	2	5	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 (E)	48.64	11.2	E	822	1233
B - Chelmsford Road	4.06	1.1	A	886	1329
C - A12 (W)	5.95	1.3	A	657	985
D - Roman Road	5.24	1.5	A	1059	1588

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	826	206	1099	815	834	551	0.0	8.2	29.050	D
B - Chelmsford Road	872	218	627	873	909	1287	0.0	1.0	4.039	A
C - A12 (W)	657	164	844	656	689	655	0.0	1.0	5.822	A
D - Roman Road	1065	266	582	1068	1098	919	0.0	1.3	5.241	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	816	204	1101	817	858	553	8.2	8.9	38.838	E
B - Chelmsford Road	889	222	627	889	915	1291	1.0	0.9	4.057	A
C - A12 (W)	665	166	862	664	701	654	1.0	1.3	5.954	A
D - Roman Road	1065	266	591	1063	1106	935	1.3	1.4	4.988	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	812	203	1081	819	861	549	8.9	9.0	42.412	E
B - Chelmsford Road	889	222	618	889	919	1282	0.9	1.0	3.935	A
C - A12 (W)	652	163	861	651	691	646	1.3	1.1	5.771	A
D - Roman Road	1039	260	589	1041	1088	922	1.4	1.4	4.911	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	825	206	1098	822	855	560	9.0	10.4	44.491	E
B - Chelmsford Road	895	224	628	892	922	1292	1.0	1.0	4.062	A
C - A12 (W)	652	163	863	652	696	657	1.1	1.1	5.871	A
D - Roman Road	1062	265	596	1062	1104	920	1.4	1.5	5.139	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	827	207	1104	818	869	547	10.4	11.3	46.061	E
B - Chelmsford Road	886	221	631	885	914	1290	1.0	0.9	3.952	A
C - A12 (W)	654	163	857	653	693	659	1.1	1.1	5.869	A
D - Roman Road	1061	265	587	1064	1106	923	1.5	1.2	5.013	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	826	207	1104	832	865	560	11.3	11.1	48.641	E
B - Chelmsford Road	885	221	629	885	910	1308	0.9	1.0	3.953	A
C - A12 (W)	661	165	857	659	692	657	1.1	1.2	5.730	A
D - Roman Road	1061	265	601	1063	1099	914	1.2	1.5	5.089	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	677	743	0.911	665	670	0.0	8.0	34.035	D
			2	A, C, D	149	703	0.212	150	164	0.0	0.2	6.650	A
	Exit	1	1		551			551	580	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	872	1800	0.484	873	909	0.0	1.0	4.039	A
	Exit	1	1		1287			1287	1302	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	466	1045	0.446	465	489	0.0	0.8	6.480	A
			2	A, B, C	191	1066	0.179	191	200	0.0	0.2	4.249	A
	Exit	1	1		655			655	686	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1065	1809	0.589	1068	1098	0.0	1.3	5.241	A
	Exit	1	1		919			919	962	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	665	741	0.899	665	694	8.0	8.6	45.962	E
			2	A, C, D	151	705	0.214	152	164	0.2	0.3	7.011	A
	Exit	1	1		553			553	583	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	889	1798	0.495	889	915	1.0	0.9	4.057	A
	Exit	1	1		1291			1291	1332	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	470	1023	0.459	470	500	0.8	1.0	6.648	A
			2	A, B, C	195	1060	0.184	194	201	0.2	0.3	4.278	A
	Exit	1	1		654			654	684	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1065	1797	0.593	1063	1106	1.3	1.4	4.988	A
	Exit	1	1		935			935	981	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	664	751	0.885	669	695	8.6	8.8	50.523	F
			2	A, C, D	149	715	0.208	149	166	0.3	0.2	6.574	A
	Exit	1	1		549			549	587	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	889	1814	0.490	889	919	0.9	1.0	3.935	A
	Exit	1	1		1282			1282	1322	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	460	1034	0.445	460	491	1.0	0.8	6.437	A
			2	A, B, C	192	1064	0.180	191	200	0.3	0.2	4.184	A
	Exit	1	1		646			646	678	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1039	1803	0.576	1041	1088	1.4	1.4	4.911	A
	Exit	1	1		922			922	972	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	680	742	0.916	675	693	8.8	10.2	52.857	F
			2	A, C, D	146	716	0.204	147	162	0.2	0.2	6.579	A
	Exit	1	1		560			560	586	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	895	1798	0.498	892	922	1.0	1.0	4.062	A
	Exit	1	1		1292			1292	1333	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	460	1026	0.448	460	490	0.8	0.8	6.588	A
			2	A, B, C	192	1060	0.181	192	206	0.2	0.3	4.212	A
	Exit	1	1		657			657	686	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1062	1795	0.592	1062	1104	1.4	1.5	5.139	A
	Exit	1	1		920			920	970	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	674	737	0.912	665	702	10.2	11.0	54.923	F
			2	A, C, D	153	703	0.218	152	167	0.2	0.3	6.720	A
	Exit	1	1		547			547	579	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	886	1792	0.494	885	914	1.0	0.9	3.952	A
	Exit	1	1		1290			1290	1340	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	459	1033	0.445	459	495	0.8	0.9	6.569	A
			2	A, B, C	195	1055	0.185	194	198	0.3	0.3	4.165	A
	Exit	1	1		659			659	688	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1061	1793	0.591	1064	1106	1.5	1.2	5.013	A
	Exit	1	1		923			923	975	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	674	740	0.912	682	702	11.0	10.8	58.231	F
			2	A, C, D	152	704	0.216	150	163	0.3	0.3	6.602	A

	Exit	1	1		560			560	584	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	885	1797	0.492	885	910	0.9	1.0	3.953	A
	Exit	1	1		1308			1308	1340	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	464	1029	0.451	461	488	0.9	1.0	6.357	A
			2	A, B, C	197	1066	0.185	198	204	0.3	0.2	4.276	A
	Exit	1	1		657			657	681	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1061	1791	0.592	1063	1099	1.2	1.5	5.089	A
	Exit	1	1		914			914	962	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	675	169	1225	743	0.909	663	669	0.0	8.0	34.086	D
				C	1	0.35	316	184	0.008	1	1	0.0	0.0	6.751	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0.38	0.09	181	119	0.003	0.38	0.61	0.0	0.0	4.839	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	1116	599	0.018	11	12	0.0	0.0	6.384	A
				D	138	35	1225	709	0.195	139	152	0.0	0.2	6.677	A
B - Chelmsford Road	Entry	1	1	A	389	97	2433	1785	0.218	389	413	0.0	0.5	4.081	A
				B	0.76	0.19	435	340	0.002	0.69	0.76	0.0	0.0	4.056	A
				C	168	42	2433	1810	0.093	169	174	0.0	0.2	3.983	A
				D	313	78	2433	1814	0.173	314	322	0.0	0.4	4.016	A
C - A12 (W)	Entry	1	1	A	0.95	0.24	421	290	0.003	0.95	1	0.0	0.0	3.687	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	465	116	1598	1046	0.444	464	488	0.0	0.8	6.488	A
			2	A	2	0.44	572	401	0.004	2	2	0.0	0.0	2.977	A
				B	188	47	1598	1064	0.176	188	197	0.0	0.2	4.266	A
				C	1	0.36	421	289	0.005	1	1	0.0	0.0	3.490	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	159	40	2380	1775	0.090	159	164	0.0	0.2	5.292	A
				B	434	108	2380	1840	0.236	436	435	0.0	0.5	5.229	A
				C	471	118	2380	1789	0.264	473	498	0.0	0.6	5.237	A
				D	0.95	0.24	501	390	0.002	0.88	1	0.0	0.0	4.908	A

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	664	166	1225	741	0.898	665	693	8.0	8.6	46.019	E
				C	1	0.25	277	156	0.006	1	1	0.0	0.0	6.826	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0.63	0.16	258	161	0.004	0.63	0.93	0.0	0.0	6.894	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	1142	633	0.018	11	12	0.2	0.0	7.467	A
				D	139	35	1225	710	0.196	140	151	0.2	0.2	6.977	A
B - Chelmsford Road	Entry	1	1	A	395	99	2433	1780	0.222	394	412	1.0	0.4	4.077	A
				B	1	0.35	743	574	0.002	1	1	1.0	0.0	4.310	A
				C	169	42	2433	1816	0.093	169	171	1.0	0.2	3.973	A
				D	324	81	2433	1812	0.179	324	330	1.0	0.3	4.076	A
C - A12 (W)	Entry	1	1	A	0.82	0.21	353	244	0.003	0.82	1	0.8	0.0	3.357	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	469	117	1598	1023	0.458	469	499	0.8	1.0	6.655	A
			2	A	2	0.41	614	424	0.004	2	2	0.0	0.0	3.892	A
				B	193	48	1598	1061	0.181	191	198	0.2	0.3	4.282	A
				C	0.82	0.21	370	254	0.003	0.82	1	0.2	0.0	4.297	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	156	39	2380	1763	0.089	156	167	1.3	0.2	4.896	A
				B	435	109	2380	1834	0.237	434	440	1.3	0.6	4.972	A
				C	473	118	2380	1776	0.266	472	498	1.3	0.6	5.032	A
				D	1	0.28	539	415	0.003	1	1	1.3	0.0	5.789	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	663	166	1225	751	0.883	668	694	8.6	8.8	50.586	F
				C	1	0.30	245	125	0.010	1	1	8.6	0.0	7.573	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

			2	A	1	0.36	297	189	0.008	1	1	0.0	0.0	7.383	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	10	3	1129	608	0.017	10	12	0.3	0.0	6.445	A
				D	137	34	1225	717	0.190	137	153	0.3	0.2	6.577	A
B - Chelmsford Road	Entry	1	1	A	394	99	2433	1793	0.220	394	419	0.9	0.5	3.954	A
				B	2	0.43	640	489	0.003	2	1	0.9	0.0	3.658	A
				C	168	42	2433	1824	0.092	168	170	0.9	0.2	3.914	A
				D	325	81	2433	1829	0.178	325	328	0.9	0.3	3.923	A
C - A12 (W)	Entry	1	1	A	1	0.35	412	285	0.005	1	1	0.0	0.0	3.420	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	459	115	1598	1033	0.444	459	490	1.0	0.8	6.444	A
			2	A	2	0.41	631	431	0.004	2	2	0.3	0.0	3.217	A
				B	189	47	1598	1063	0.178	188	196	0.3	0.2	4.191	A
				C	1	0.30	437	301	0.004	1	1	0.0	0.0	4.702	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	151	38	2380	1769	0.085	151	163	1.4	0.2	4.900	A
				B	423	106	2380	1833	0.231	424	430	1.4	0.6	4.888	A
				C	463	116	2380	1785	0.260	465	493	1.4	0.7	4.937	A
				D	1	0.27	626	489	0.002	1	1	0.0	0.0	4.300	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	678	170	1225	742	0.914	674	692	8.8	10.2	52.917	F
				C	1	0.27	226	115	0.009	1	1	0.0	0.0	7.277	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	1	0.32	271	170	0.007	1	1	0.0	0.0	7.741	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	1116	626	0.017	11	11	0.2	0.0	6.765	A
				D	134	33	1225	718	0.186	135	150	0.2	0.2	6.557	A
B - Chelmsford Road	Entry	1	1	A	402	101	2433	1771	0.227	400	417	1.0	0.5	4.071	A
				B	0.95	0.24	474	364	0.003	0.95	1	0.0	0.0	3.824	A
				C	167	42	2433	1820	0.092	166	173	1.0	0.2	4.075	A
				D	325	81	2433	1822	0.179	325	330	1.0	0.3	4.044	A
C - A12 (W)	Entry	1	1	A	1	0.25	311	216	0.005	1	0.93	0.0	0.0	4.031	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	459	115	1598	1025	0.447	459	489	0.8	0.8	6.594	A
			2	A	2	0.54	606	413	0.005	2	2	0.0	0.0	3.328	A
				B	189	47	1598	1058	0.179	189	203	0.2	0.3	4.222	A
				C	1	0.28	404	276	0.004	1	1	0.0	0.0	4.059	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	155	39	2380	1763	0.088	155	165	1.4	0.2	5.170	A
				B	429	107	2380	1828	0.235	428	438	1.4	0.7	5.086	A
				C	478	119	2380	1776	0.269	478	500	1.4	0.6	5.176	A
				D	0.95	0.24	488	386	0.002	0.88	0.91	0.0	0.0	5.020	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	673	168	1225	737	0.911	665	701	10.2	11.0	54.975	F
				C	0.76	0.19	206	111	0.007	0.69	0.82	10.1	0.0	6.376	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	1	0.32	290	184	0.007	1	1	0.0	0.0	8.305	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	10	3	1135	598	0.017	10	13	0.2	0.0	6.843	A
				D	142	35	1225	708	0.200	141	153	0.2	0.3	6.699	A
B - Chelmsford Road	Entry	1	1	A	391	98	2433	1773	0.221	391	410	1.0	0.4	3.951	A
				B	0.76	0.19	563	433	0.002	0.76	0.97	0.0	0.0	3.216	A
				C	171	43	2433	1812	0.094	170	176	1.0	0.2	3.935	A
				D	323	81	2433	1812	0.178	323	327	1.0	0.3	3.963	A
C - A12 (W)	Entry	1	1	A	0.69	0.17	395	276	0.003	0.76	1	0.0	0.0	3.780	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	459	115	1598	1034	0.445	458	494	0.8	0.9	6.575	A
			2	A	2	0.41	614	424	0.004	2	2	0.0	0.0	3.399	A
				B	192	48	1598	1056	0.182	191	195	0.3	0.3	4.172	A
				C	1	0.25	320	220	0.005	1	0.97	0.3	0.0	4.291	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	153	38	2380	1747	0.088	153	165	1.5	0.2	5.102	A
				B	431	108	2380	1834	0.235	434	443	1.5	0.5	4.925	A
				C	475	119	2380	1776	0.268	476	497	1.5	0.5	5.064	A
				D	0.95	0.24	614	479	0.002	0.95	1	1.5	0.0	4.948	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	673	168	1225	741	0.910	681	702	11.0	10.8	58.283	F
				C	1	0.21	187	91	0.009	1	0.82	11.0	0.0	5.904	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	1	0.25	258	165	0.006	1	0.86	0.0	0.0	5.685	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	12	3	1122	597	0.020	12	12	0.3	0.0	6.517	A
				D	139	35	1225	708	0.196	138	150	0.3	0.3	6.615	A
B - Chelmsford Road	Entry	1	1	A	400	100	2433	1777	0.225	401	415	0.9	0.4	3.973	A
				B	1	0.25	512	393	0.003	1	0.97	0.0	0.0	3.282	A
				C	168	42	2433	1825	0.092	167	170	0.9	0.2	3.908	A
				D	315	79	2433	1814	0.174	316	324	0.9	0.4	3.955	A
C - A12 (W)	Entry	1	1	A	1	0.25	353	248	0.004	1	0.97	0.9	0.0	3.079	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	463	116	1598	1029	0.449	460	487	0.9	1.0	6.364	A
			2	A	2	0.55	614	422	0.005	2	2	0.0	0.0	3.205	A
				B	194	48	1598	1067	0.181	194	201	0.3	0.2	4.294	A
				C	1	0.30	421	292	0.004	1	1	0.0	0.0	3.132	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	155	39	2380	1747	0.089	154	165	1.2	0.2	5.080	A
				B	431	108	2380	1824	0.236	432	436	1.2	0.6	5.018	A
				C	474	119	2380	1779	0.267	476	497	1.2	0.7	5.154	A
				D	0.69	0.17	551	430	0.002	0.69	1	0.0	0.0	6.475	A

2022 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	B - Chelmsford Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Geometry	D - Roman Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Profile Type	D2 - 2022 Base, PM	The DIRECT profile type is intended to be used for demand that varies over time. You are using it with the 'Use O-D data' option, but your O-D data does not vary over time. Are you sure this is correct?
Info	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Mountnessing Roundabout	Large Roundabout		A, B, C, D	5.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.31	A

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Has entry-to-exit separation	Entry-to-exit separation (m)
A - A12 (E)	756	✓	88.10
B - Chelmsford Road	501	✓	0.00
C - A12 (W)	960	✓	86.00
D - Roman Road	669	✓	0.00

Slope / Intercept / Capacity

[same as above]

Lane Simulation: Arm options

[same as above]

Lanes

[same as above]

Entry Lane slope and intercept

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2022 Base	PM	DIRECT	17:00	18:30	90	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	Scaling Factor (%)
A - A12 (E)		DIRECT	✓	100.000
B - Chelmsford Road		DIRECT	✓	100.000
C - A12 (W)		DIRECT	✓	100.000
D - Roman Road		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	0	490	2	110
	B - Chelmsford Road	477	1	123	360
	C - A12 (W)	2	171	0	563
	D - Roman Road	130	186	379	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	0	1	0	1
	B - Chelmsford Road	2	0	2	0
	C - A12 (W)	0	5	0	4
	D - Roman Road	2	1	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 (E)	7.82	1.9	A	602	904
B - Chelmsford Road	3.59	1.1	A	961	1442
C - A12 (W)	7.24	1.6	A	733	1099
D - Roman Road	3.44	0.8	A	699	1049

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	601	150	730	602	605	599	0.0	1.2	7.820	A
B - Chelmsford Road	941	235	503	940	965	829	0.0	0.8	3.372	A
C - A12 (W)	726	182	940	728	763	502	0.0	1.1	6.639	A
D - Roman Road	683	171	643	686	713	1025	0.0	0.6	3.353	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	598	150	745	600	599	622	1.2	1.3	7.057	A
B - Chelmsford Road	987	247	502	989	978	844	0.8	0.9	3.466	A
C - A12 (W)	726	182	983	728	764	508	1.1	1.2	6.578	A
D - Roman Road	710	177	657	710	708	1053	0.6	0.4	3.437	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	609	152	733	603	610	601	1.3	1.9	7.501	A
B - Chelmsford Road	957	239	501	962	970	835	0.9	0.7	3.371	A
C - A12 (W)	725	181	948	727	763	514	1.2	1.6	7.236	A
D - Roman Road	696	174	639	694	711	1036	0.4	0.8	3.272	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	596	149	746	599	611	619	1.9	1.1	7.363	A
B - Chelmsford Road	968	242	502	967	966	843	0.7	1.1	3.519	A
C - A12 (W)	749	187	954	752	768	516	1.6	1.3	6.723	A
D - Roman Road	704	176	660	705	711	1046	0.8	0.8	3.317	A

18:00 - 18:15

	Total	Junction	Circulating	Throughput	Average	Throughput	Start	End queue		Unsignalised

Arm	Demand (Veh/hr)	Arrivals (Veh)	flow (Veh/hr)	(Veh/hr)	throughput (PCU/hr)	(exit side) (Veh/hr)	queue (Veh)	(Veh)	Delay (s)	level of service
A - A12 (E)	616	154	740	616	618	616	1.1	1.2	7.491	A
B - Chelmsford Road	958	240	481	959	974	875	1.1	0.8	3.589	A
C - A12 (W)	739	185	942	739	770	498	1.3	1.5	6.931	A
D - Roman Road	701	175	656	700	705	1024	0.8	0.7	3.293	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	594	149	741	589	607	609	1.2	1.5	6.894	A
B - Chelmsford Road	955	239	496	955	978	835	0.8	1.0	3.394	A
C - A12 (W)	728	182	951	732	760	500	1.5	1.5	6.857	A
D - Roman Road	701	175	650	700	712	1032	0.7	0.8	3.389	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	484	954	0.508	483	490	0.0	1.1	8.591	A
			2	A, C, D	117	955	0.123	118	114	0.0	0.1	4.488	A
	Exit	1	1		599			599	613	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	941	2001	0.470	940	965	0.0	0.8	3.372	A
	Exit	1	1		829			829	859	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	555	1033	0.537	556	579	0.0	0.9	7.383	A
			2	A, B, C	171	1030	0.167	171	184	0.0	0.2	4.256	A
	Exit	1	1		502			502	523	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	683	1805	0.378	686	713	0.0	0.6	3.353	A
	Exit	1	1		1025			1025	1050	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	484	951	0.509	486	486	1.1	1.2	7.676	A
			2	A, C, D	114	958	0.119	115	113	0.1	0.1	4.398	A
	Exit	1	1		622			622	627	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	987	2001	0.493	989	978	0.8	0.9	3.466	A
	Exit	1	1		844			844	856	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	559	1009	0.554	561	582	0.9	1.0	7.321	A
			2	A, B, C	168	1006	0.166	167	182	0.2	0.2	4.171	A
	Exit	1	1		508			508	511	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	710	1790	0.396	710	708	0.6	0.4	3.437	A
	Exit	1	1		1053			1053	1054	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	496	953	0.520	489	497	1.2	1.8	8.209	A
			2	A, C, D	113	956	0.119	114	113	0.1	0.1	4.358	A
	Exit	1	1		601			601	619	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	957	1996	0.479	962	970	0.9	0.7	3.371	A
	Exit	1	1		835			835	856	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	560	1033	0.543	562	587	1.0	1.4	8.088	A
			2	A, B, C	164	1012	0.162	165	176	0.2	0.2	4.352	A
	Exit	1	1		514			514	522	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	696	1794	0.388	694	711	0.4	0.8	3.272	A
	Exit	1	1		1036			1036	1056	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	482	951	0.507	485	498	1.8	1.0	8.063	A
			2	A, C, D	114	939	0.121	114	113	0.1	0.1	4.275	A
	Exit	1	1		619			619	627	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	968	1997	0.485	967	966	0.7	1.1	3.519	A
	Exit	1	1		843			843	868	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	572	1025	0.558	574	582	1.4	1.1	7.495	A
			2	A, B, C	178	1019	0.174	178	187	0.2	0.2	4.301	A
	Exit	1	1		516			516	515	0.0	0.0	0.000	A

D - Roman Road	Entry	1	1	A, B, C, D	704	1781	0.395	705	711	0.8	0.8	3.317	A
	Exit	1	1		1046			1046	1045	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	507	953	0.532	507	501	1.0	1.1	8.225	A
			2	A, C, D	108	954	0.113	108	117	0.1	0.1	4.335	A
	Exit	1	1		616			616	622	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	958	2016	0.476	959	974	1.1	0.8	3.589	A
	Exit	1	1		875			875	871	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	567	1032	0.550	565	587	1.1	1.3	7.683	A
			2	A, B, C	172	1013	0.170	173	183	0.2	0.2	4.487	A
	Exit	1	1		498			498	512	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	701	1785	0.393	700	705	0.8	0.7	3.293	A
	Exit	1	1		1024			1024	1061	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	484	954	0.507	479	494	1.1	1.3	7.505	A
			2	A, C, D	110	947	0.116	110	113	0.1	0.2	4.218	A
	Exit	1	1		609			609	628	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	955	2002	0.477	955	978	0.8	1.0	3.394	A
	Exit	1	1		835			835	860	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	556	1030	0.540	561	579	1.3	1.3	7.708	A
			2	A, B, C	172	1021	0.169	171	181	0.2	0.3	4.113	A
	Exit	1	1		500			500	521	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	701	1796	0.390	700	712	0.7	0.8	3.389	A
	Exit	1	1		1032			1032	1049	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	483	121	1270	953	0.507	482	489	0.0	1.1	8.598	A
				C	0.80	0.20	237	178	0.004	0.80	0.80	0.0	0.0	4.218	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	1	0.36	355	272	0.005	2	1	0.0	0.0	5.080	A
				D	116	29	1270	953	0.121	117	113	0.0	0.1	4.482	A
B - Chelmsford Road	Entry	1	1	A	469	117	2471	1986	0.236	469	479	0.0	0.4	3.419	A
				B	1	0.36	494	404	0.004	1	0.91	0.0	0.0	2.022	A
				C	118	29	2471	1981	0.060	117	127	0.0	0.1	3.327	A
				D	352	88	2471	2021	0.174	352	358	0.0	0.3	3.329	A
C - A12 (W)	Entry	1	1	A	0.96	0.24	255	173	0.006	0.96	0.80	0.0	0.0	3.469	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	554	138	1591	1033	0.536	556	578	0.0	0.9	7.388	A
			2	A	2	0.52	530	358	0.006	2	2	0.0	0.0	4.128	A
				B	169	42	1591	1027	0.165	169	182	0.0	0.2	4.257	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	126	31	2368	1806	0.070	126	131	0.0	0.1	3.370	A
				B	176	44	2368	1816	0.097	176	187	0.0	0.2	3.370	A
				C	380	95	2368	1803	0.211	383	395	0.0	0.3	3.340	A
				D	1	0.28	410	319	0.004	0.96	0.69	0.0	0.0	3.051	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	484	121	1270	951	0.509	485	486	1.1	1.2	7.679	A
				C	0.32	0.08	135	106	0.003	0.32	0.43	0.0	0.0	4.630	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	1	0.32	474	364	0.004	1	2	0.0	0.0	4.122	A
				D	113	28	1270	958	0.118	113	111	0.1	0.1	4.403	A
				A	489	122	2471	1988	0.246	489	491	0.8	0.5	3.473	A
				B	0.96	0.24	494	412	0.002	1	0.85	0.0	0.0	4.152	A

B - Chelmsford Road	Entry	1	1	C	121	30	2471	1988	0.061	120	124	0.8	0.1	3.438	A
				D	376	94	2471	2026	0.186	379	362	0.8	0.3	3.464	A
C - A12 (W)	Entry	1	1	A	0.80	0.20	318	215	0.004	0.80	1	0.0	0.0	3.861	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	558	139	1591	1011	0.552	560	581	0.9	1.0	7.327	A
			2	A	2	0.48	594	393	0.005	2	2	0.0	0.0	3.842	A
				B	166	41	1591	1008	0.164	165	180	0.2	0.2	4.175	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	130	32	2368	1774	0.073	131	133	0.6	0.1	3.424	A
				B	193	48	2368	1817	0.106	193	189	0.6	0.1	3.404	A
				C	386	96	2368	1786	0.216	386	385	0.6	0.2	3.458	A
				D	1	0.28	537	416	0.003	1	0.96	0.6	0.0	3.771	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	495	124	1270	953	0.519	488	497	1.2	1.8	8.216	A
				C	1	0.28	220	170	0.007	1	0.69	0.0	0.0	3.342	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	1	0.36	372	282	0.005	2	1	0.0	0.0	3.716	A
				D	112	28	1270	956	0.117	112	111	0.1	0.1	4.364	A
B - Chelmsford Road	Entry	1	1	A	470	117	2471	1979	0.237	473	483	0.9	0.4	3.388	A
				B	0.80	0.20	461	380	0.002	0.80	0.80	0.0	0.0	2.460	A
				C	126	31	2471	1971	0.064	126	128	0.9	0.1	3.396	A
				D	361	90	2471	2026	0.178	362	358	0.9	0.3	3.340	A
C - A12 (W)	Entry	1	1	A	0.64	0.16	148	102	0.006	0.64	0.37	0.0	0.0	2.105	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	560	140	1591	1032	0.543	561	586	1.0	1.4	8.092	A
			2	A	0.64	0.16	318	211	0.003	0.64	1	0.0	0.0	4.057	A
				B	164	41	1591	1011	0.162	164	175	0.2	0.2	4.354	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	127	32	2368	1779	0.071	127	135	0.4	0.1	3.354	A
				B	182	46	2368	1815	0.100	182	184	0.4	0.2	3.240	A
				C	387	97	2368	1786	0.217	386	392	0.4	0.5	3.261	A
				D	0.32	0.08	442	340	0.001	0.32	0.80	0.0	0.0	2.751	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	482	121	1270	949	0.508	485	498	1.8	1.0	8.063	A
				C	0.16	0.04	68	50	0.003	0.16	0.21	0.0	0.0	7.037	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	1	0.32	288	217	0.006	1	0.96	0.0	0.0	3.663	A
				D	113	28	1270	943	0.120	113	112	0.1	0.1	4.280	A
B - Chelmsford Road	Entry	1	1	A	480	120	2471	1982	0.242	481	489	0.7	0.5	3.589	A
				B	1	0.28	527	436	0.003	0.96	0.96	0.0	0.0	4.447	A
				C	128	32	2471	1985	0.065	127	125	0.7	0.2	3.471	A
				D	359	90	2471	2023	0.178	359	351	0.7	0.4	3.438	A
C - A12 (W)	Entry	1	1	A	0.32	0.08	233	158	0.002	0.32	0.59	0.0	0.0	4.384	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	571	143	1591	1025	0.558	574	581	1.4	1.1	7.498	A
			2	A	0.80	0.20	297	202	0.004	0.80	0.75	0.0	0.0	2.829	A
				B	177	44	1591	1018	0.174	177	186	0.2	0.2	4.307	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	137	34	2368	1761	0.078	137	137	0.8	0.2	3.254	A
				B	180	45	2368	1797	0.100	180	184	0.8	0.2	3.332	A
				C	386	97	2368	1778	0.217	387	389	0.8	0.4	3.334	A
				D	0.80	0.20	600	457	0.002	0.80	1	0.0	0.0	2.660	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	507	127	1270	952	0.532	507	501	1.0	1.1	8.228	A

A - A12 (E)	Entry	1	1	C	0.16	0.04	102	76	0.002	0.16	0.32	0.0	0.0	4.114	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	2	0.52	491	368	0.006	2	2	0.0	0.0	4.282	A
				D	106	27	1270	949	0.112	106	115	0.1	0.1	4.336	A
B - Chelmsford Road	Entry	1	1	A	483	121	2471	2000	0.242	482	490	1.1	0.4	3.630	A
				B	0.80	0.20	428	354	0.002	0.80	0.91	1.1	0.0	4.500	A
				C	123	31	2471	1999	0.062	124	124	1.1	0.1	3.594	A
				D	352	88	2471	2042	0.172	353	360	1.1	0.3	3.530	A
C - A12 (W)	Entry	1	1	A	0.80	0.20	255	171	0.005	0.80	0.69	0.0	0.0	3.064	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	566	142	1591	1032	0.549	565	586	1.1	1.3	7.689	A
			2	A	1	0.32	467	310	0.004	1	1	0.0	0.0	6.409	A
				B	171	43	1591	1013	0.168	172	182	0.2	0.2	4.471	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	132	33	2368	1768	0.074	133	131	0.8	0.1	3.400	A
				B	195	49	2368	1798	0.109	195	188	0.8	0.2	3.348	A
				C	373	93	2368	1790	0.209	372	386	0.8	0.5	3.230	A
				D	0.96	0.24	505	387	0.002	0.96	0.85	0.0	0.0	3.329	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	484	121	1270	953	0.508	479	494	1.1	1.3	7.508	A
				C	0.48	0.12	135	103	0.005	0.48	0.43	0.0	0.0	3.884	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0.48	0.12	271	207	0.002	0.48	0.96	0.0	0.0	3.112	A
				D	110	27	1270	944	0.116	110	112	0.1	0.2	4.227	A
B - Chelmsford Road	Entry	1	1	A	481	120	2471	1984	0.242	478	493	0.8	0.6	3.405	A
				B	0.64	0.16	494	398	0.002	0.64	0.91	0.0	0.0	2.452	A
				C	115	29	2471	1983	0.058	115	127	0.8	0.1	3.396	A
				D	359	90	2471	2028	0.177	361	357	0.8	0.3	3.381	A
C - A12 (W)	Entry	1	1	A	0.48	0.12	170	113	0.004	0.48	0.43	0.0	0.0	5.652	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	555	139	1591	1030	0.539	560	578	1.3	1.3	7.709	A
			2	A	1	0.36	488	331	0.004	1	2	0.0	0.0	3.738	A
				B	171	43	1591	1016	0.168	169	179	0.2	0.3	4.117	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	129	32	2368	1795	0.072	129	132	0.7	0.1	3.388	A
				B	186	46	2368	1806	0.103	186	187	0.7	0.2	3.322	A
				C	385	96	2368	1788	0.215	384	392	0.7	0.4	3.425	A
				D	2	0.40	663	515	0.003	2	1	0.0	0.0	2.393	A

2032 Base , AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Lane Simulation	A - A12 (E) - Lane Simulation	Arm A: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	B - Chelmsford Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Geometry	D - Roman Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Profile Type	D5 - 2032 Base , AM	The DIRECT profile type is intended to be used for demand that varies over time. You are using it with the 'Use O-D data' option, but your O-D data does not vary over time. Are you sure this is correct?
Info	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Mountnessing Roundabout	Large Roundabout		A, B, C, D	16.64	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	16.64	C

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Has entry-to-exit separation	Entry-to-exit separation (m)
A - A12 (E)	1142	✓	88.10
B - Chelmsford Road	667	✓	0.00
C - A12 (W)	899	✓	86.00
D - Roman Road	621	✓	0.00

Slope / Intercept / Capacity

[same as above]

Lane Simulation: Arm options

[same as above]

Lanes

[same as above]

Entry Lane slope and intercept

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2032 Base	AM	DIRECT	07:30	09:00	90	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	Scaling Factor (%)
A - A12 (E)		DIRECT	✓	100.000
B - Chelmsford Road		DIRECT	✓	100.000
C - A12 (W)		DIRECT	✓	100.000

D - Roman Road		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	1	676	11	139
	B - Chelmsford Road	396	1	168	319
	C - A12 (W)	3	192	1	465
	D - Roman Road	158	431	476	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	0	4	18	9
	B - Chelmsford Road	5	0	3	3
	C - A12 (W)	0	4	0	7
	D - Roman Road	6	2	5	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 (E)	53.12	12.3	F	825	1237
B - Chelmsford Road	4.17	1.2	A	885	1327
C - A12 (W)	5.99	1.2	A	661	991
D - Roman Road	5.23	1.7	A	1070	1605

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	822	205	1104	814	829	552	0.0	8.6	30.529	D
B - Chelmsford Road	886	222	634	885	912	1283	0.0	1.1	3.988	A
C - A12 (W)	652	163	854	654	695	665	0.0	1.0	5.875	A
D - Roman Road	1073	268	587	1069	1102	921	0.0	1.7	4.974	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	822	206	1106	819	860	558	8.6	10.0	43.887	E
B - Chelmsford Road	884	221	630	883	920	1296	1.1	1.0	3.974	A
C - A12 (W)	670	167	857	670	705	656	1.0	1.1	5.826	A
D - Roman Road	1066	267	597	1067	1112	930	1.7	1.6	5.115	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	824	206	1109	820	864	560	10.0	11.6	48.854	E
B - Chelmsford Road	890	222	635	889	920	1294	1.0	1.1	4.008	A
C - A12 (W)	661	165	862	663	701	661	1.1	1.0	5.822	A
D - Roman Road	1074	268	598	1072	1113	928	1.6	1.6	5.231	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	832	208	1099	824	870	559	11.6	12.4	52.775	F
B - Chelmsford Road	885	221	629	885	923	1294	1.1	1.1	4.172	A
C - A12 (W)	653	163	861	651	700	653	1.0	1.1	5.988	A
D - Roman Road	1063	266	593	1065	1109	919	1.6	1.4	5.062	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	827	207	1100	832	874	556	12.4	12.2	53.125	F
B - Chelmsford Road	878	219	643	876	917	1289	1.1	1.1	4.096	A
C - A12 (W)	663	166	861	663	702	659	1.1	1.1	5.806	A
D - Roman Road	1072	268	585	1072	1110	938	1.4	1.7	5.131	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	822	205	1106	831	873	558	12.2	12.2	52.573	F
B - Chelmsford Road	886	221	623	886	921	1314	1.1	1.0	4.066	A
C - A12 (W)	667	167	854	666	702	656	1.1	1.1	5.694	A
D - Roman Road	1070	267	597	1067	1106	923	1.7	1.7	5.000	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	672	740	0.907	663	668	0.0	8.4	35.789	E
			2	A, C, D	150	706	0.212	150	161	0.0	0.2	6.532	A
	Exit	1	1		552			552	581	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	886	1797	0.493	885	912	0.0	1.1	3.988	A
	Exit	1	1		1283			1283	1305	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	459	1033	0.444	461	492	0.0	0.7	6.602	A
			2	A, B, C	193	1065	0.181	193	203	0.0	0.2	4.156	A
	Exit	1	1		665			665	682	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1073	1804	0.595	1069	1102	0.0	1.7	4.974	A
	Exit	1	1		921			921	970	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	673	739	0.912	670	696	8.4	9.8	52.133	F
			2	A, C, D	149	701	0.212	149	164	0.2	0.2	6.587	A
	Exit	1	1		558			558	587	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	884	1796	0.492	883	920	1.1	1.0	3.974	A
	Exit	1	1		1296			1296	1335	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	470	1032	0.456	472	501	0.7	0.8	6.521	A
			2	A, B, C	199	1061	0.188	198	204	0.2	0.3	4.161	A
	Exit	1	1		656			656	693	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1066	1792	0.595	1067	1112	1.7	1.6	5.115	A
	Exit	1	1		930			930	981	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	673	736	0.914	668	698	9.8	11.3	58.335	F
			2	A, C, D	151	700	0.216	151	166	0.2	0.3	6.598	A
	Exit	1	1		560			560	588	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	890	1791	0.497	889	920	1.0	1.1	4.008	A
	Exit	1	1		1294			1294	1340	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	464	1029	0.451	466	498	0.8	0.8	6.531	A
			2	A, B, C	197	1055	0.186	197	203	0.3	0.2	4.124	A
	Exit	1	1		661			661	690	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1074	1792	0.599	1072	1113	1.6	1.6	5.231	A
	Exit	1	1		928			928	980	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	681	742	0.917	673	704	11.3	12.1	62.982	F
			2	A, C, D	151	707	0.214	152	166	0.3	0.3	6.821	A
	Exit	1	1		559			559	588	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	885	1797	0.493	885	923	1.1	1.1	4.172	A
	Exit	1	1		1294			1294	1345	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	460	1027	0.448	458	498	0.8	0.9	6.752	A
			2	A, B, C	193	1060	0.182	193	203	0.2	0.2	4.162	A
	Exit	1	1		653			653	688	0.0	0.0	0.000	A

D - Roman Road	Entry	1	1	A, B, C, D	1063	1792	0.593	1065	1109	1.6	1.4	5.062	A
	Exit	1	1		919			919	980	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	670	742	0.903	675	706	12.1	11.9	63.661	F
			2	A, C, D	158	707	0.223	157	168	0.3	0.3	6.626	A
	Exit	1	1		556			556	588	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	878	1789	0.491	876	917	1.1	1.1	4.096	A
	Exit	1	1		1289			1289	1344	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	474	1031	0.460	473	500	0.9	0.9	6.445	A
			2	A, B, C	190	1057	0.179	190	202	0.2	0.2	4.269	A
	Exit	1	1		659			659	687	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1072	1807	0.593	1072	1110	1.4	1.7	5.131	A
	Exit	1	1		938			938	984	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	673	741	0.908	684	708	11.9	11.9	63.052	F
			2	A, C, D	149	705	0.211	147	164	0.3	0.3	6.554	A
	Exit	1	1		558			558	588	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	886	1804	0.491	886	921	1.1	1.0	4.066	A
	Exit	1	1		1314			1314	1348	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	468	1036	0.452	467	499	0.9	0.9	6.345	A
			2	A, B, C	199	1067	0.186	199	203	0.2	0.2	4.140	A
	Exit	1	1		656			656	687	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1070	1795	0.596	1067	1106	1.7	1.7	5.000	A
	Exit	1	1		923			923	978	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	671	168	1225	740	0.906	662	667	0.0	8.4	35.837	E
				C	1	0.25	305	167	0.006	1	1	0.0	0.0	6.426	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	1	0.32	314	200	0.006	1	1	0.0	0.0	5.819	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	10	2	1105	612	0.016	10	11	0.0	0.0	7.016	A
				D	139	35	1225	708	0.196	139	148	0.0	0.2	6.503	A
B - Chelmsford Road	Entry	1	1	A	391	98	2432	1780	0.219	391	410	0.0	0.4	4.021	A
				B	1	0.26	560	433	0.002	1	1	0.0	0.0	3.332	A
				C	172	43	2432	1816	0.095	172	171	0.0	0.2	4.010	A
				D	322	81	2432	1806	0.178	321	329	0.0	0.4	3.937	A
C - A12 (W)	Entry	1	1	A	1	0.26	404	281	0.004	0.95	1	0.0	0.0	4.128	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	458	114	1598	1034	0.443	460	491	0.0	0.7	6.608	A
			2	A	2	0.46	663	464	0.004	2	2	0.0	0.0	3.770	A
				B	190	47	1598	1067	0.178	190	200	0.0	0.2	4.166	A
				C	1	0.34	368	258	0.005	1	1	0.0	0.0	3.143	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	158	39	2379	1759	0.090	157	167	0.0	0.2	4.988	A
				B	432	108	2379	1838	0.235	430	437	0.0	0.7	4.924	A
				C	482	121	2379	1790	0.269	481	497	0.0	0.7	5.014	A
				D	0.86	0.22	422	329	0.003	0.86	0.83	0.0	0.0	4.416	A

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	672	168	1225	740	0.910	669	695	8.4	9.8	52.184	F
				C	1	0.20	213	103	0.008	1	0.92	0.0	0.0	6.293	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	1	0.31	310	195	0.006	1	1	0.0	0.0	5.991	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	10	3	1118	594	0.017	10	12	0.2	0.0	6.869	A
				D	137	34	1225	703	0.195	138	151	0.2	0.2	6.571	A
				A	396	99	2432	1775	0.223	396	415	1.1	0.5	3.983	A
				B	0.91	0.23	450	343	0.003	0.91	0.85	0.0	0.0	4.128	A

B - Chelmsford Road	Entry	1	1	C	166	41	2432	1807	0.092	166	175	1.1	0.2	3.980	A
				D	321	80	2432	1815	0.177	320	329	1.1	0.4	3.957	A
C - A12 (W)	Entry	1	1	A	0.82	0.20	374	259	0.003	0.82	1	0.7	0.0	2.752	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	469	117	1598	1032	0.455	471	500	0.7	0.8	6.529	A
			2	A	2	0.38	543	374	0.004	1	2	0.0	0.0	3.560	A
				B	197	49	1598	1061	0.186	196	201	0.2	0.2	4.165	A
				C	1	0.28	380	262	0.004	1	1	0.2	0.0	4.386	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	159	40	2379	1754	0.090	158	169	1.7	0.2	5.225	A
				B	429	107	2379	1830	0.234	430	438	1.7	0.7	5.053	A
				C	478	120	2379	1772	0.270	478	504	1.7	0.7	5.136	A
				D	0.95	0.24	530	416	0.002	1.00	1	1.7	0.0	4.450	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	672	168	1225	737	0.912	667	697	9.8	11.3	58.404	F
				C	1	0.29	203	95	0.012	1	1	0.0	0.0	6.313	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0.86	0.22	277	177	0.005	0.91	1.00	0.2	0.0	7.285	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	1081	575	0.019	11	12	0.2	0.0	6.229	A
				D	139	35	1225	703	0.199	139	153	0.2	0.3	6.620	A
B - Chelmsford Road	Entry	1	1	A	399	100	2432	1772	0.225	398	417	1.0	0.5	4.037	A
				B	1.00	0.25	532	406	0.002	0.95	1.00	0.0	0.0	3.920	A
				C	168	42	2432	1803	0.093	167	173	1.0	0.2	3.967	A
				D	322	81	2432	1807	0.178	322	329	1.0	0.4	3.996	A
C - A12 (W)	Entry	1	1	A	0.77	0.19	356	246	0.003	0.77	1	0.0	0.0	3.756	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	463	116	1598	1028	0.450	465	497	0.8	0.8	6.537	A
			2	A	2	0.45	633	440	0.004	2	2	0.3	0.0	3.999	A
				B	194	49	1598	1054	0.184	194	200	0.3	0.2	4.129	A
				C	0.95	0.24	338	232	0.004	0.95	1	0.3	0.0	3.445	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	159	40	2379	1760	0.090	158	167	1.6	0.2	5.388	A
				B	433	108	2379	1825	0.238	432	442	1.6	0.7	5.159	A
				C	481	120	2379	1772	0.271	480	503	1.6	0.7	5.244	A
				D	1.00	0.25	422	331	0.003	1.00	0.82	0.0	0.0	4.956	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	680	170	1225	742	0.916	672	704	11.3	12.1	63.038	F
				C	0.86	0.22	171	102	0.008	0.86	0.77	0.0	0.0	6.406	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0.82	0.20	287	176	0.005	0.86	1	0.0	0.0	6.325	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	1118	601	0.018	11	12	0.3	0.0	6.960	A
				D	140	35	1225	709	0.197	140	152	0.3	0.3	6.814	A
B - Chelmsford Road	Entry	1	1	A	397	99	2432	1777	0.223	396	418	1.1	0.5	4.171	A
				B	1	0.28	496	378	0.003	1	0.97	1.1	0.0	3.537	A
				C	166	41	2432	1820	0.091	166	173	1.1	0.2	4.113	A
				D	322	80	2432	1809	0.178	322	330	1.1	0.4	4.206	A
C - A12 (W)	Entry	1	1	A	1	0.27	392	272	0.004	1	1	0.0	0.0	3.779	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	459	115	1598	1027	0.447	457	497	0.8	0.9	6.759	A
			2	A	2	0.44	531	364	0.005	2	2	0.2	0.0	5.285	A
				B	190	48	1598	1060	0.179	191	200	0.2	0.2	4.153	A
				C	0.95	0.24	320	219	0.004	0.95	0.94	0.0	0.0	4.093	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	158	40	2379	1762	0.090	159	166	1.6	0.2	5.132	A
				B	431	108	2379	1827	0.236	431	441	1.6	0.6	5.007	A
				C	473	118	2379	1770	0.267	474	501	1.6	0.6	5.087	A
				D	1	0.32	637	497	0.003	1	1	1.6	0.0	5.962	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	669	167	1225	742	0.902	675	705	12.1	11.9	63.712	F

A - A12 (E)	Entry	1	1	C	0.59	0.15	180	100	0.006	0.54	0.71	0.0	0.0	6.126	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	1	0.29	296	184	0.006	1	1	0.3	0.0	6.279	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	1160	624	0.017	11	13	0.3	0.0	7.384	A
				D	145	36	1225	710	0.205	145	154	0.3	0.2	6.570	A
B - Chelmsford Road	Entry	1	1	A	392	98	2432	1768	0.222	392	416	1.1	0.5	4.124	A
				B	0.72	0.18	496	380	0.002	0.68	0.89	0.0	0.0	4.132	A
				C	163	41	2432	1809	0.090	163	170	1.1	0.2	4.080	A
				D	322	80	2432	1806	0.178	321	330	1.1	0.4	4.070	A
C - A12 (W)	Entry	1	1	A	1	0.26	434	301	0.003	1	1	0.0	0.0	3.428	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	473	118	1598	1031	0.459	472	499	0.9	0.9	6.452	A
			2	A	2	0.43	669	460	0.004	2	2	0.2	0.0	3.782	A
				B	187	47	1598	1057	0.177	187	199	0.2	0.2	4.277	A
				C	0.86	0.22	434	299	0.003	0.82	1	0.2	0.0	3.869	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	160	40	2379	1779	0.090	160	167	1.4	0.3	5.142	A
				B	426	107	2379	1836	0.232	426	440	1.4	0.6	5.099	A
				C	485	121	2379	1793	0.270	484	503	1.4	0.8	5.152	A
				D	0.77	0.19	494	389	0.002	0.82	0.98	0.0	0.0	6.604	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	672	168	1225	741	0.906	683	707	11.9	11.9	63.122	F
				C	1	0.25	217	123	0.008	1	0.98	12.0	0.0	6.871	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0.91	0.23	226	143	0.006	0.95	0.82	0.0	0.0	6.625	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	10	3	1142	600	0.017	10	13	0.3	0.0	7.058	A
				D	138	34	1225	711	0.194	136	151	0.3	0.3	6.515	A
B - Chelmsford Road	Entry	1	1	A	395	99	2432	1783	0.221	395	416	1.1	0.5	4.068	A
				B	1	0.29	496	381	0.003	1	0.94	1.1	0.0	3.440	A
				C	170	43	2432	1814	0.094	170	176	1.1	0.2	4.075	A
				D	319	80	2432	1829	0.175	319	328	1.1	0.3	4.061	A
C - A12 (W)	Entry	1	1	A	0.91	0.23	277	191	0.005	0.95	0.88	0.0	0.0	3.784	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	467	117	1598	1036	0.451	466	498	0.9	0.9	6.350	A
			2	A	2	0.53	675	470	0.005	2	2	0.2	0.0	3.613	A
				B	196	49	1598	1066	0.183	196	200	0.2	0.2	4.148	A
				C	0.91	0.23	295	205	0.004	0.86	0.78	0.2	0.0	3.687	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	160	40	2379	1761	0.091	159	168	1.7	0.3	4.996	A
				B	434	109	2379	1830	0.237	434	440	1.7	0.6	4.970	A
				C	475	119	2379	1774	0.268	473	497	1.7	0.7	5.029	A
				D	0.86	0.22	566	443	0.002	0.82	1	0.0	0.0	4.863	A

2032 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	B - Chelmsford Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Geometry	D - Roman Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Profile Type	D6 - 2032 Base, PM	The DIRECT profile type is intended to be used for demand that varies over time. You are using it with the 'Use O-D data' option, but your O-D data does not vary over time. Are you sure this is correct?
Info	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Mountnessing Roundabout	Large Roundabout		A, B, C, D	5.32	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.32	A

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Has entry-to-exit separation	Entry-to-exit separation (m)
A - A12 (E)	760	✓	88.10
B - Chelmsford Road	504	✓	0.00
C - A12 (W)	965	✓	86.00
D - Roman Road	672	✓	0.00

Slope / Intercept / Capacity

[same as above]

Lane Simulation: Arm options

[same as above]

Lanes

[same as above]

Entry Lane slope and intercept

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2032 Base	PM	DIRECT	17:00	18:30	90	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	Scaling Factor (%)
A - A12 (E)		DIRECT	✓	100.000
B - Chelmsford Road		DIRECT	✓	100.000
C - A12 (W)		DIRECT	✓	100.000
D - Roman Road		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	0	492	2	111
	B - Chelmsford Road	479	1	124	362
	C - A12 (W)	2	172	0	566
	D - Roman Road	131	187	381	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	0	1	0	1
	B - Chelmsford Road	2	0	2	0
	C - A12 (W)	0	5	0	4
	D - Roman Road	2	1	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 (E)	7.46	1.5	A	603	905
B - Chelmsford Road	3.62	1.1	A	979	1468
C - A12 (W)	7.52	1.9	A	740	1110
D - Roman Road	3.48	1.0	A	704	1056

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	611	153	729	613	612	619	0.0	1.0	7.122	A
B - Chelmsford Road	985	246	491	984	983	852	0.0	1.1	3.595	A
C - A12 (W)	729	182	975	728	770	500	0.0	1.8	7.091	A
D - Roman Road	692	173	660	688	713	1043	0.0	0.9	3.484	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	599	150	739	595	601	612	1.0	1.4	7.289	A
B - Chelmsford Road	957	239	481	957	979	853	1.1	0.9	3.547	A
C - A12 (W)	747	187	949	741	771	489	1.8	1.7	7.036	A
D - Roman Road	704	176	649	701	721	1040	0.9	0.6	3.416	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	606	151	733	607	609	615	1.4	1.5	7.464	A
B - Chelmsford Road	980	245	487	980	985	853	0.9	0.9	3.467	A
C - A12 (W)	742	185	959	737	772	509	1.7	1.8	7.517	A
D - Roman Road	692	173	660	688	709	1036	0.6	0.7	3.205	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	606	151	758	610	619	627	1.5	1.0	6.993	A
B - Chelmsford Road	993	248	513	991	986	855	0.9	0.9	3.492	A
C - A12 (W)	740	185	990	739	764	514	1.8	1.5	6.892	A
D - Roman Road	716	179	667	717	713	1061	0.7	0.6	3.344	A

18:00 - 18:15

	Total	Junction	Circulating	Throughput	Average	Throughput	Start	End queue		Unsignalised

Arm	Demand (Veh/hr)	Arrivals (Veh)	flow (Veh/hr)	(Veh/hr)	throughput (PCU/hr)	(exit side) (Veh/hr)	queue (Veh)	(Veh)	Delay (s)	level of service
A - A12 (E)	598	149	747	599	614	633	1.0	1.3	7.356	A
B - Chelmsford Road	995	249	485	996	989	861	0.9	0.8	3.516	A
C - A12 (W)	745	186	970	744	773	511	1.5	1.4	7.043	A
D - Roman Road	704	176	678	702	711	1037	0.6	0.7	3.410	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	600	150	763	604	611	595	1.3	1.0	7.127	A
B - Chelmsford Road	961	240	507	964	982	860	0.8	0.9	3.620	A
C - A12 (W)	734	184	957	725	773	514	1.4	1.8	6.954	A
D - Roman Road	717	179	643	715	704	1040	0.7	0.6	3.352	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	495	958	0.517	496	498	0.0	0.9	7.765	A
			2	A, C, D	116	958	0.121	117	115	0.0	0.0	4.316	A
	Exit	1	1		619			619	626	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	985	2005	0.491	984	983	0.0	1.1	3.595	A
	Exit	1	1		852			852	867	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	560	1008	0.555	558	589	0.0	1.5	7.922	A
			2	A, B, C	170	1016	0.167	170	180	0.0	0.3	4.346	A
	Exit	1	1		500			500	520	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	692	1784	0.388	688	713	0.0	0.9	3.484	A
	Exit	1	1		1043			1043	1065	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	492	951	0.518	489	490	0.9	1.3	7.915	A
			2	A, C, D	106	953	0.111	106	111	0.0	0.1	4.522	A
	Exit	1	1		612			612	630	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	957	2016	0.475	957	979	1.1	0.9	3.547	A
	Exit	1	1		853			853	865	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	574	1024	0.560	568	588	1.5	1.5	7.910	A
			2	A, B, C	173	1024	0.169	173	183	0.3	0.2	4.218	A
	Exit	1	1		489			489	514	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	704	1790	0.393	701	721	0.9	0.6	3.416	A
	Exit	1	1		1040			1040	1063	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	494	959	0.516	496	496	1.3	1.3	8.176	A
			2	A, C, D	112	956	0.117	112	113	0.1	0.1	4.332	A
	Exit	1	1		615			615	621	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	980	2017	0.486	980	985	0.9	0.9	3.467	A
	Exit	1	1		853			853	864	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	566	1022	0.553	561	588	1.5	1.6	8.472	A
			2	A, B, C	176	1017	0.173	177	184	0.2	0.2	4.424	A
	Exit	1	1		509			509	526	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	692	1787	0.387	688	709	0.6	0.7	3.205	A
	Exit	1	1		1036			1036	1063	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	486	940	0.517	491	502	1.3	0.8	7.598	A
			2	A, C, D	120	943	0.127	119	117	0.1	0.2	4.415	A
	Exit	1	1		627			627	635	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	993	1987	0.500	991	986	0.9	0.9	3.492	A
	Exit	1	1		855			855	867	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	563	1008	0.559	561	581	1.6	1.2	7.680	A
			2	A, B, C	178	992	0.179	178	183	0.2	0.3	4.351	A
	Exit	1	1		514			514	523	0.0	0.0	0.000	A

D - Roman Road	Entry	1	1	A, B, C, D	716	1775	0.403	717	713	0.7	0.6	3.344	A
	Exit	1	1		1061			1061	1057	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	495	948	0.523	497	501	0.8	1.2	8.023	A
			2	A, C, D	103	947	0.108	103	113	0.2	0.2	4.381	A
	Exit	1	1		633			633	627	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	995	2011	0.495	996	989	0.9	0.8	3.516	A
	Exit	1	1		861			861	879	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	564	1014	0.557	564	588	1.2	1.1	7.879	A
			2	A, B, C	181	1003	0.180	180	185	0.3	0.3	4.348	A
	Exit	1	1		511			511	512	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	704	1771	0.398	702	711	0.6	0.7	3.410	A
	Exit	1	1		1037			1037	1071	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	487	944	0.516	490	497	1.2	0.8	7.781	A
			2	A, C, D	113	939	0.121	114	115	0.2	0.2	4.293	A
	Exit	1	1		595			595	615	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	961	1991	0.483	964	982	0.8	0.9	3.620	A
	Exit	1	1		860			860	870	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	557	1022	0.545	548	588	1.1	1.6	7.800	A
			2	A, B, C	178	1021	0.174	177	185	0.3	0.2	4.251	A
	Exit	1	1		514			514	517	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	717	1800	0.398	715	704	0.7	0.6	3.352	A
	Exit	1	1		1040			1040	1069	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	494	124	1269	958	0.516	495	497	0.0	0.9	7.772	A
				C	0.48	0.12	203	151	0.003	0.48	0.69	0.0	0.0	2.491	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	1	0.36	372	283	0.005	1	1	0.0	0.0	3.520	A
				D	115	29	1269	958	0.120	116	113	0.0	0.0	4.326	A
B - Chelmsford Road	Entry	1	1	A	488	122	2470	1988	0.245	489	491	0.0	0.5	3.596	A
				B	1	0.28	626	518	0.002	1	1	0.0	0.0	4.253	A
				C	126	31	2470	1995	0.063	126	129	0.0	0.1	3.678	A
				D	370	92	2470	2035	0.182	369	362	0.0	0.4	3.564	A
C - A12 (W)	Entry	1	1	A	0.32	0.08	170	114	0.003	0.32	0.48	0.0	0.0	3.094	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	559	140	1590	1007	0.555	558	589	0.0	1.5	7.926	A
			2	A	2	0.56	678	457	0.005	2	2	0.0	0.0	2.907	A
				B	168	42	1590	1015	0.165	168	178	0.0	0.3	4.362	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	129	32	2367	1796	0.072	127	132	0.0	0.2	3.557	A
				B	189	47	2367	1794	0.105	188	191	0.0	0.2	3.400	A
				C	374	93	2367	1772	0.211	373	389	0.0	0.5	3.498	A
				D	0.16	0.04	600	452	0.000	0.16	1	0.0	0.0	4.782	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	492	123	1269	953	0.516	489	489	0.9	1.3	7.920	A
				C	0.16	0.04	203	153	0.001	0.16	0.64	0.0	0.0	3.949	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	2	0.40	321	247	0.006	1	1	0.0	0.0	3.911	A
				D	105	26	1269	958	0.109	104	110	0.0	0.1	4.528	A
				A	473	118	2470	2002	0.236	474	491	1.1	0.5	3.607	A
				B	0.80	0.20	329	275	0.003	0.80	0.64	0.0	0.0	3.078	A

B - Chelmsford Road	Entry	1	1	C	115	29	2470	1982	0.058	114	123	1.1	0.1	3.641	A
				D	368	92	2470	2042	0.180	368	365	1.1	0.3	3.438	A
C - A12 (W)	Entry	1	1	A	0.80	0.20	254	173	0.005	0.96	0.69	0.0	0.0	4.142	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	573	143	1590	1024	0.559	567	587	1.5	1.5	7.914	A
			2	A	0.64	0.16	339	224	0.003	0.80	1	0.0	0.0	3.908	A
				B	172	43	1590	1026	0.168	172	182	0.3	0.2	4.220	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	136	34	2367	1795	0.076	136	138	0.9	0.1	3.364	A
				B	192	48	2367	1796	0.107	191	193	0.9	0.2	3.364	A
				C	375	94	2367	1789	0.209	373	389	0.9	0.3	3.460	A
				D	1	0.36	789	607	0.002	1	1	0.0	0.0	3.420	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	494	124	1269	957	0.517	496	495	1.3	1.3	8.178	A
				C	0.32	0.08	118	94	0.003	0.32	0.37	0.0	0.0	5.193	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	1	0.36	440	337	0.004	1	1	0.1	0.0	4.911	A
				D	110	28	1269	952	0.116	110	112	0.1	0.1	4.324	A
B - Chelmsford Road	Entry	1	1	A	482	120	2470	2009	0.240	481	486	0.9	0.4	3.512	A
				B	0.96	0.24	626	518	0.002	0.96	1	0.0	0.0	2.663	A
				C	135	34	2470	1988	0.068	133	135	0.9	0.2	3.430	A
				D	363	91	2470	2039	0.178	365	362	0.9	0.3	3.423	A
C - A12 (W)	Entry	1	1	A	1	0.28	233	156	0.007	1	0.69	0.0	0.0	5.493	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	564	141	1590	1021	0.552	560	588	1.5	1.6	8.476	A
			2	A	2	0.40	339	234	0.007	2	1	0.0	0.0	2.278	A
				B	175	44	1590	1018	0.171	175	183	0.2	0.2	4.437	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	131	33	2367	1789	0.073	131	133	0.6	0.1	3.297	A
				B	184	46	2367	1801	0.102	182	185	0.6	0.3	3.113	A
				C	375	94	2367	1786	0.210	374	389	0.6	0.4	3.218	A
				D	1	0.36	726	559	0.003	1	1	0.0	0.0	3.097	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	486	121	1269	939	0.517	491	502	1.3	0.8	7.601	A
				C	0.16	0.04	135	105	0.002	0.16	0.43	0.0	0.0	4.469	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	1	0.28	321	246	0.005	1	1	0.1	0.0	3.773	A
				D	119	30	1269	947	0.125	118	116	0.1	0.2	4.421	A
B - Chelmsford Road	Entry	1	1	A	489	122	2470	1973	0.248	489	497	0.9	0.4	3.500	A
				B	0.96	0.24	725	590	0.002	0.96	1	0.0	0.0	3.562	A
				C	123	31	2470	1967	0.062	121	128	0.9	0.2	3.433	A
				D	380	95	2470	2012	0.189	380	359	0.9	0.3	3.500	A
C - A12 (W)	Entry	1	1	A	0.16	0.04	191	128	0.001	0.16	0.48	0.0	0.0	4.555	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	563	141	1590	1008	0.559	561	581	1.6	1.2	7.682	A
			2	A	0.96	0.24	509	342	0.003	0.96	1	0.0	0.0	4.210	A
				B	177	44	1590	996	0.178	177	181	0.2	0.3	4.352	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	136	34	2367	1776	0.076	137	136	0.7	0.1	3.369	A
				B	187	47	2367	1787	0.105	187	183	0.7	0.2	3.338	A
				C	391	98	2367	1773	0.221	391	394	0.7	0.3	3.337	A
				D	2	0.52	789	598	0.003	2	1	0.0	0.0	3.675	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	495	124	1269	948	0.522	496	500	0.8	1.2	8.031	A

A - A12 (E)	Entry	1	1	C	0.32	0.08	220	167	0.002	0.32	0.69	0.0	0.0	2.613	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0.64	0.16	254	196	0.003	0.64	0.80	0.0	0.0	3.122	A
				D	102	26	1269	950	0.107	102	113	0.2	0.2	4.390	A
B - Chelmsford Road	Entry	1	1	A	496	124	2470	2000	0.248	496	491	0.9	0.4	3.567	A
				B	1	0.32	593	487	0.003	1	1	0.0	0.0	2.685	A
				C	129	32	2470	1988	0.065	129	127	0.9	0.1	3.529	A
				D	369	92	2470	2041	0.181	370	369	0.9	0.3	3.448	A
C - A12 (W)	Entry	1	1	A	0.32	0.08	191	127	0.003	0.48	0.59	0.0	0.0	2.592	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	564	141	1590	1015	0.556	564	588	1.2	1.1	7.885	A
			2	A	0.48	0.12	276	187	0.003	0.64	0.75	0.0	0.0	3.052	A
				B	180	45	1590	1002	0.180	179	184	0.3	0.3	4.354	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	135	34	2367	1783	0.076	136	134	0.6	0.1	3.386	A
				B	185	46	2367	1788	0.103	184	193	0.6	0.2	3.269	A
				C	383	96	2367	1765	0.217	381	383	0.6	0.5	3.493	A
				D	1	0.32	600	459	0.003	1	1	0.0	0.0	2.499	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	486	121	1269	945	0.514	489	496	1.2	0.8	7.784	A
				C	0.64	0.16	169	131	0.005	0.64	0.53	0.0	0.0	4.847	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0.64	0.16	305	228	0.003	0.64	1	0.0	0.0	4.973	A
				D	113	28	1269	939	0.120	113	113	0.2	0.2	4.286	A
B - Chelmsford Road	Entry	1	1	A	463	116	2470	1974	0.234	464	484	0.8	0.5	3.660	A
				B	1	0.28	527	430	0.003	1	1	0.0	0.0	1.975	A
				C	123	31	2470	1971	0.062	122	129	0.8	0.2	3.556	A
				D	375	94	2470	2021	0.185	377	368	0.8	0.3	3.597	A
C - A12 (W)	Entry	1	1	A	0.64	0.16	297	196	0.003	0.64	0.80	0.0	0.0	3.205	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	556	139	1590	1023	0.544	547	587	1.1	1.6	7.807	A
			2	A	1	0.36	488	332	0.004	1	1	0.0	0.0	2.886	A
				B	176	44	1590	1023	0.172	175	184	0.3	0.2	4.262	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	128	32	2367	1790	0.072	129	129	0.7	0.1	3.374	A
				B	195	49	2367	1818	0.107	194	189	0.7	0.2	3.326	A
				C	392	98	2367	1796	0.218	390	385	0.7	0.4	3.360	A
				D	2	0.48	600	468	0.004	2	1	0.0	0.0	2.482	A

2032 Base + R03, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Lane Simulation	A - A12 (E) - Lane Simulation	Arm A: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	B - Chelmsford Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Geometry	D - Roman Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Profile Type	D11 - 2032 Base + R03, AM	The DIRECT profile type is intended to be used for demand that varies over time. You are using it with the 'Use O-D data' option, but your O-D data does not vary over time. Are you sure this is correct?
Info	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Mountnessing Roundabout	Large Roundabout		A, B, C, D	26.89	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	26.89	D

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Has entry-to-exit separation	Entry-to-exit separation (m)
A - A12 (E)	1212	✓	88.10
B - Chelmsford Road	667	✓	0.00
C - A12 (W)	996	✓	86.00
D - Roman Road	714	✓	0.00

Slope / Intercept / Capacity

[same as above]

Lane Simulation: Arm options

[same as above]

Lanes

[same as above]

Entry Lane slope and intercept

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D11	2032 Base + R03	AM	DIRECT	07:30	09:00	90	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	Scaling Factor (%)
A - A12 (E)		DIRECT	✓	100.000
B - Chelmsford Road		DIRECT	✓	100.000
C - A12 (W)		DIRECT	✓	100.000

D - Roman Road		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	1	692	11	139
	B - Chelmsford Road	432	1	268	362
	C - A12 (W)	3	235	1	465
	D - Roman Road	158	449	476	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	0	4	18	9
	B - Chelmsford Road	5	0	2	3
	C - A12 (W)	0	3	0	7
	D - Roman Road	6	2	5	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 (E)	97.50	24.8	F	843	1265
B - Chelmsford Road	5.12	1.7	A	1064	1597
C - A12 (W)	6.38	1.4	A	702	1053
D - Roman Road	6.07	2.0	A	1084	1626

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	848	212	1167	807	837	582	0.0	13.5	40.666	E
B - Chelmsford Road	1045	261	624	1046	1086	1350	0.0	1.4	4.915	A
C - A12 (W)	708	177	925	705	735	745	0.0	1.4	6.198	A
D - Roman Road	1080	270	670	1079	1118	959	0.0	1.7	5.792	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	848	212	1158	832	871	589	13.5	17.9	69.878	F
B - Chelmsford Road	1059	265	619	1059	1099	1371	1.4	1.4	4.833	A
C - A12 (W)	703	176	930	703	742	748	1.4	1.1	6.277	A
D - Roman Road	1074	269	674	1073	1128	959	1.7	1.8	5.728	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	841	210	1170	839	874	596	17.9	20.4	84.812	F
B - Chelmsford Road	1075	269	632	1074	1108	1377	1.4	1.5	4.957	A
C - A12 (W)	702	175	953	704	743	754	1.1	1.2	6.247	A
D - Roman Road	1091	273	679	1088	1129	978	1.8	2.0	6.003	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	844	211	1192	831	874	609	20.4	22.1	92.216	F
B - Chelmsford Road	1065	266	633	1065	1106	1390	1.5	1.5	5.117	A
C - A12 (W)	704	176	940	703	740	759	1.2	1.3	6.223	A
D - Roman Road	1108	277	690	1111	1140	953	2.0	1.6	6.067	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	838	210	1149	845	877	597	22.1	21.5	97.500	F
B - Chelmsford Road	1069	267	624	1070	1103	1370	1.5	1.5	5.036	A
C - A12 (W)	708	177	945	709	745	748	1.3	1.4	6.378	A
D - Roman Road	1069	267	675	1071	1112	979	1.6	1.8	5.808	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	842	211	1160	829	872	589	21.5	25.0	91.632	F
B - Chelmsford Road	1074	269	624	1070	1102	1365	1.5	1.7	4.982	A
C - A12 (W)	688	172	939	689	737	755	1.4	1.1	6.190	A
D - Roman Road	1078	270	668	1080	1127	960	1.8	1.7	5.881	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	697	712	0.979	657	671	0.0	13.3	48.075	E
			2	A, C, D	151	674	0.224	150	166	0.0	0.3	6.769	A
	Exit	1	1		582			582	618	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1045	1806	0.578	1046	1086	0.0	1.4	4.915	A
	Exit	1	1		1350			1350	1368	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	468	997	0.469	465	493	0.0	1.1	6.999	A
			2	A, B, C	240	1032	0.233	240	242	0.0	0.3	4.626	A
	Exit	1	1		745			745	776	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1080	1727	0.626	1079	1118	0.0	1.7	5.792	A
	Exit	1	1		959			959	1014	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	701	716	0.980	684	708	13.3	17.7	83.289	F
			2	A, C, D	147	682	0.215	147	163	0.3	0.2	6.913	A
	Exit	1	1		589			589	620	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1059	1815	0.583	1059	1099	1.4	1.4	4.833	A
	Exit	1	1		1371			1371	1412	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	463	992	0.467	462	497	1.1	0.9	7.148	A
			2	A, B, C	241	1030	0.234	241	245	0.3	0.3	4.579	A
	Exit	1	1		748			748	787	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1074	1721	0.624	1073	1128	1.7	1.8	5.728	A
	Exit	1	1		959			959	1019	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	689	710	0.968	686	708	17.7	20.1	101.949	F
			2	A, C, D	153	680	0.224	153	166	0.2	0.3	6.980	A
	Exit	1	1		596			596	630	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1075	1802	0.597	1074	1108	1.4	1.5	4.957	A
	Exit	1	1		1377			1377	1411	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	463	982	0.472	465	499	0.9	0.9	7.077	A
			2	A, B, C	239	1018	0.235	239	244	0.3	0.3	4.615	A
	Exit	1	1		754			754	788	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1091	1717	0.635	1088	1129	1.8	2.0	6.003	A
	Exit	1	1		978			978	1026	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	697	702	0.990	684	711	20.1	21.8	110.652	F
			2	A, C, D	148	665	0.222	148	163	0.3	0.3	6.947	A
	Exit	1	1		609			609	632	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1065	1796	0.593	1065	1106	1.5	1.5	5.117	A
	Exit	1	1		1390			1390	1425	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	459	990	0.464	459	493	0.9	1.0	7.073	A
			2	A, B, C	245	1027	0.238	243	247	0.3	0.3	4.587	A
	Exit	1	1		759			759	788	0.0	0.0	0.000	A

D - Roman Road	Entry	1	1	A, B, C, D	1108	1712	0.648	1111	1140	2.0	1.6	6.067	A
	Exit	1	1		953			953	1014	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	688	722	0.954	694	714	21.8	21.2	117.242	F
			2	A, C, D	150	687	0.218	151	163	0.3	0.3	6.940	A
	Exit	1	1		597			597	626	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1069	1811	0.590	1070	1103	1.5	1.5	5.036	A
	Exit	1	1		1370			1370	1405	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	471	985	0.477	470	500	1.0	1.1	7.330	A
			2	A, B, C	238	1025	0.232	238	245	0.3	0.3	4.512	A
	Exit	1	1		748			748	781	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1069	1723	0.621	1071	1112	1.6	1.8	5.808	A
	Exit	1	1		979			979	1026	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	695	716	0.972	682	710	21.2	24.7	110.983	F
			2	A, C, D	147	674	0.217	147	162	0.3	0.3	6.708	A
	Exit	1	1		589			589	626	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1074	1808	0.594	1070	1102	1.5	1.7	4.982	A
	Exit	1	1		1365			1365	1412	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	454	987	0.460	455	493	1.1	0.9	7.050	A
			2	A, B, C	234	1026	0.228	234	244	0.3	0.2	4.524	A
	Exit	1	1		755			755	786	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	1078	1725	0.625	1080	1127	1.8	1.7	5.881	A
	Exit	1	1		960			960	1015	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	697	174	1217	712	0.979	656	670	0.0	13.3	48.120	E
				C	0.51	0.13	197	95	0.005	0.51	0.89	0.0	0.0	6.763	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	2	0.47	419	264	0.007	2	2	0.0	0.0	6.026	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	1092	554	0.020	11	12	0.0	0.0	6.925	A
				D	138	35	1217	678	0.204	137	153	0.0	0.3	6.765	A
B - Chelmsford Road	Entry	1	1	A	426	107	2432	1779	0.240	427	448	0.0	0.6	4.955	A
				B	1	0.29	600	459	0.003	1	1	0.0	0.0	3.707	A
				C	260	65	2432	1836	0.142	261	268	0.0	0.3	4.858	A
				D	357	89	2432	1818	0.196	357	369	0.0	0.5	4.913	A
C - A12 (W)	Entry	1	1	A	1	0.32	432	291	0.004	1	1	0.0	0.0	4.945	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	467	117	1587	997	0.468	464	492	0.0	1.1	7.005	A
			2	A	2	0.54	554	366	0.006	2	2	0.0	0.0	3.268	A
				B	237	59	1587	1031	0.230	236	239	0.0	0.3	4.638	A
				C	1	0.31	425	282	0.004	1	1	0.0	0.0	4.306	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	151	38	2358	1700	0.089	151	166	0.0	0.2	5.796	A
				B	456	114	2358	1759	0.259	456	458	0.0	0.7	5.748	A
				C	472	118	2358	1705	0.277	472	494	0.0	0.8	5.834	A
				D	0.56	0.14	482	363	0.002	0.66	0.89	0.0	0.0	5.614	A

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	701	175	1217	716	0.980	684	707	13.3	17.7	83.332	F
				C	0.26	0.06	104	65	0.004	0.26	0.43	0.0	0.0	6.190	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	1	0.28	321	196	0.006	1	1	0.0	0.0	5.719	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	10	2	1098	587	0.017	10	12	0.3	0.0	7.433	A
				D	136	34	1217	684	0.198	136	150	0.3	0.2	6.884	A
				A	431	108	2432	1786	0.241	430	451	1.4	0.6	4.825	A
				B	0.82	0.20	590	453	0.002	0.82	1	0.0	0.0	4.437	A

B - Chelmsford Road	Entry	1	1	C	267	67	2432	1843	0.145	267	274	1.4	0.3	4.822	A
				D	361	90	2432	1828	0.197	361	373	1.4	0.4	4.851	A
C - A12 (W)	Entry	1	1	A	1	0.28	365	244	0.005	1	1	1.1	0.0	4.230	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	461	115	1587	992	0.466	461	496	1.1	0.9	7.154	A
			2	A	2	0.43	560	377	0.005	2	2	0.0	0.0	4.480	A
				B	238	59	1587	1030	0.231	238	242	0.3	0.3	4.585	A
				C	1	0.29	446	297	0.004	1	1	0.3	0.0	3.570	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	156	39	2358	1679	0.093	155	166	1.7	0.3	5.801	A
				B	448	112	2358	1755	0.255	448	462	1.7	0.7	5.713	A
				C	469	117	2358	1705	0.275	470	499	1.7	0.7	5.717	A
				D	0.92	0.23	472	362	0.003	0.87	0.87	0.0	0.0	6.869	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	688	172	1217	710	0.967	686	708	17.7	20.1	102.009	F
				C	0.56	0.14	98	48	0.012	0.56	0.49	0.0	0.0	4.467	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	1	0.28	259	157	0.007	1	0.94	0.2	0.0	6.910	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	10	3	1139	610	0.017	10	12	0.2	0.0	7.304	A
				D	141	35	1217	682	0.207	141	153	0.2	0.3	6.957	A
B - Chelmsford Road	Entry	1	1	A	436	109	2432	1775	0.246	436	458	1.4	0.6	5.020	A
				B	1	0.28	404	309	0.004	1	0.78	0.0	0.0	6.849	A
				C	266	67	2432	1834	0.145	265	274	1.4	0.4	4.874	A
				D	372	93	2432	1815	0.205	372	374	1.4	0.4	4.940	A
C - A12 (W)	Entry	1	1	A	1	0.36	452	301	0.005	1	1	0.0	0.0	4.406	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	462	115	1587	982	0.470	464	498	0.9	0.9	7.085	A
			2	A	2	0.46	567	376	0.005	2	2	0.3	0.0	3.705	A
				B	236	59	1587	1019	0.232	236	241	0.3	0.3	4.622	A
				C	1	0.26	365	241	0.004	1	1	0.0	0.0	4.757	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	156	39	2358	1682	0.092	156	167	1.8	0.3	6.091	A
				B	455	114	2358	1748	0.260	454	461	1.8	0.9	5.970	A
				C	479	120	2358	1700	0.282	477	500	1.8	0.8	6.006	A
				D	0.77	0.19	562	422	0.002	0.77	1	1.8	0.0	5.345	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	697	174	1217	702	0.990	683	711	20.1	21.8	110.693	F
				C	0.20	0.05	72	29	0.007	0.20	0.34	0.0	0.0	7.686	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	1	0.26	280	170	0.006	1	1	0.0	0.0	8.304	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	10	2	1118	579	0.017	10	11	0.3	0.0	7.009	A
				D	137	34	1217	669	0.204	137	151	0.3	0.3	6.933	A
B - Chelmsford Road	Entry	1	1	A	443	111	2432	1774	0.250	443	460	1.5	0.6	5.176	A
				B	0.87	0.22	642	492	0.002	0.87	1	1.5	0.0	4.914	A
				C	263	66	2432	1823	0.144	264	275	1.5	0.3	5.070	A
				D	358	89	2432	1807	0.198	358	370	1.5	0.5	5.081	A
C - A12 (W)	Entry	1	1	A	1	0.27	392	260	0.004	1	1	0.0	0.0	3.788	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	458	114	1587	990	0.462	458	492	0.9	1.0	7.080	A
			2	A	1	0.37	500	332	0.004	1	1	0.3	0.0	3.825	A
				B	242	61	1587	1027	0.236	241	244	0.3	0.3	4.593	A
				C	1	0.26	351	233	0.004	1	0.99	0.0	0.0	4.328	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	162	41	2358	1681	0.097	162	169	2.0	0.3	6.064	A
				B	463	116	2358	1739	0.266	465	470	2.0	0.6	6.004	A
				C	483	121	2358	1697	0.285	484	501	2.0	0.7	6.128	A
				D	0.77	0.19	522	392	0.002	0.71	0.99	0.0	0.0	6.677	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	688	172	1217	722	0.953	694	714	21.8	21.2	117.313	F

A - A12 (E)	Entry	1	1	C	0.41	0.10	104	53	0.008	0.46	0.51	0.0	0.0	6.763	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	1	0.27	300	184	0.006	1	1	0.0	0.0	6.530	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	10	2	1144	598	0.016	10	12	0.3	0.0	7.791	A
				D	140	35	1217	692	0.201	140	150	0.3	0.2	6.882	A
B - Chelmsford Road	Entry	1	1	A	434	109	2432	1793	0.242	434	453	1.5	0.6	5.053	A
				B	0.82	0.20	569	436	0.002	0.82	1	0.0	0.0	5.764	A
				C	266	67	2432	1833	0.145	267	273	1.5	0.4	5.019	A
				D	368	92	2432	1816	0.203	368	376	1.5	0.5	5.025	A
C - A12 (W)	Entry	1	1	A	0.61	0.15	331	220	0.003	0.66	0.97	0.0	0.0	4.512	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	470	117	1587	984	0.477	470	499	1.0	1.1	7.335	A
			2	A	2	0.52	547	363	0.006	2	2	0.3	0.0	3.661	A
				B	234	59	1587	1027	0.228	235	242	0.3	0.3	4.520	A
				C	1	0.29	371	249	0.005	1	1	0.0	0.0	4.277	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	159	40	2358	1688	0.094	159	168	1.6	0.2	5.805	A
				B	440	110	2358	1760	0.250	440	448	1.6	0.7	5.725	A
				C	469	117	2358	1704	0.275	470	495	1.6	0.8	5.886	A
				D	1	0.29	532	404	0.003	1	1	1.6	0.0	6.105	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	695	174	1217	716	0.971	681	710	21.2	24.7	111.055	F
				C	0.71	0.18	114	65	0.011	0.66	0.51	0.0	0.0	5.375	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0.77	0.19	280	171	0.004	0.66	1	0.3	0.0	6.855	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	1144	582	0.018	11	12	0.3	0.0	7.654	A
				D	135	34	1217	677	0.199	135	148	0.3	0.2	6.635	A
B - Chelmsford Road	Entry	1	1	A	432	108	2432	1782	0.242	431	453	1.5	0.6	5.005	A
				B	0.87	0.22	569	434	0.002	0.92	1	1.5	0.0	4.939	A
				C	270	68	2432	1839	0.147	268	274	1.5	0.5	4.898	A
				D	371	93	2432	1816	0.204	370	374	1.5	0.5	5.017	A
C - A12 (W)	Entry	1	1	A	1	0.36	432	290	0.005	1	1	0.0	0.0	3.875	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	453	113	1587	987	0.459	453	492	1.1	0.9	7.059	A
			2	A	2	0.47	574	384	0.005	2	2	0.0	0.0	4.578	A
				B	231	58	1587	1025	0.225	231	241	0.3	0.2	4.517	A
				C	0.92	0.23	392	260	0.004	0.92	1	0.0	0.0	5.788	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	154	38	2358	1694	0.091	154	168	1.8	0.3	5.920	A
				B	449	112	2358	1755	0.256	451	459	1.8	0.7	5.825	A
				C	474	118	2358	1703	0.278	474	498	1.8	0.8	5.922	A
				D	1	0.26	492	374	0.003	1	0.97	0.0	0.0	6.102	A

2032 Base + R03, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	B - Chelmsford Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Geometry	D - Roman Road - Large roundabout data	Large roundabout: if arm has an entry-exit separation, a non-zero value should be entered.
Warning	Profile Type	D12 - 2032 Base + R03, PM	The DIRECT profile type is intended to be used for demand that varies over time. You are using it with the 'Use O-D data' option, but your O-D data does not vary over time. Are you sure this is correct?
Info	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Mountnessing Roundabout	Large Roundabout		A, B, C, D	6.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.13	A

Arms

Arms
[same as above]

Roundabout Geometry
[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Has entry-to-exit separation	Entry-to-exit separation (m)
A - A12 (E)	952	✓	88.10
B - Chelmsford Road	504	✓	0.00
C - A12 (W)	1020	✓	86.00
D - Roman Road	832	✓	0.00

Slope / Intercept / Capacity
[same as above]

Lane Simulation: Arm options
[same as above]

Lanes
[same as above]

Entry Lane slope and intercept
[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D12	2032 Base + R03	PM	DIRECT	17:00	18:30	90	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	Scaling Factor (%)
A - A12 (E)		DIRECT	✓	100.000
B - Chelmsford Road		DIRECT	✓	100.000
C - A12 (W)		DIRECT	✓	100.000
D - Roman Road		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	0	532	2	111
	B - Chelmsford Road	501	1	186	388
	C - A12 (W)	2	285	0	566
	D - Roman Road	131	235	381	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 (E)	B - Chelmsford Road	C - A12 (W)	D - Roman Road
From	A - A12 (E)	0	1	0	1
	B - Chelmsford Road	2	0	1	0
	C - A12 (W)	0	3	0	4
	D - Roman Road	2	1	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 (E)	9.94	2.0	A	643	964
B - Chelmsford Road	4.04	1.3	A	1070	1605
C - A12 (W)	7.60	2.4	A	860	1290
D - Roman Road	4.10	1.0	A	745	1118

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	650	162	895	643	649	619	0.0	2.0	9.622	A
B - Chelmsford Road	1071	268	491	1074	1084	1047	0.0	1.1	3.840	A
C - A12 (W)	868	217	998	860	884	567	0.0	2.1	7.448	A
D - Roman Road	743	186	771	743	749	1087	0.0	0.8	3.909	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	629	157	888	633	650	642	2.0	1.4	9.887	A
B - Chelmsford Road	1071	268	490	1067	1084	1030	1.1	1.1	3.798	A
C - A12 (W)	843	211	998	842	883	560	2.1	1.7	7.601	A
D - Roman Road	745	186	783	747	751	1057	0.8	0.9	3.970	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	636	159	895	633	648	647	1.4	1.8	9.918	A
B - Chelmsford Road	1079	270	493	1086	1099	1036	1.1	1.0	4.042	A
C - A12 (W)	862	215	1019	849	878	559	1.7	2.4	7.335	A
D - Roman Road	742	186	802	741	761	1067	0.9	0.9	4.054	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	651	163	905	651	649	631	1.8	1.9	9.618	A
B - Chelmsford Road	1059	265	490	1063	1079	1065	1.0	1.0	3.959	A
C - A12 (W)	857	214	987	857	883	565	2.4	1.8	7.176	A
D - Roman Road	745	186	791	744	752	1052	0.9	1.0	4.099	A

18:00 - 18:15

	Total	Junction	Circulating	Throughput	Average	Throughput	Start	End queue		Unsignalised

Arm	Demand (Veh/hr)	Arrivals (Veh)	flow (Veh/hr)	(Veh/hr)	throughput (PCU/hr)	(exit side) (Veh/hr)	queue (Veh)	(Veh)	Delay (s)	level of service
A - A12 (E)	648	162	900	651	650	629	1.9	1.6	9.390	A
B - Chelmsford Road	1067	267	486	1067	1079	1065	1.0	1.3	3.866	A
C - A12 (W)	869	217	988	866	890	565	1.8	1.7	7.129	A
D - Roman Road	743	186	787	741	757	1067	1.0	0.8	3.874	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	642	161	903	643	655	635	1.6	1.7	9.940	A
B - Chelmsford Road	1073	268	498	1074	1083	1048	1.3	1.1	3.836	A
C - A12 (W)	861	215	996	855	886	576	1.7	1.9	7.365	A
D - Roman Road	752	188	787	751	760	1065	0.8	0.9	4.027	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	537	873	0.615	531	534	0.0	1.8	10.616	B
			2	A, C, D	113	871	0.130	112	115	0.0	0.2	4.978	A
	Exit	1	1		619			619	634	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1071	2010	0.533	1074	1084	0.0	1.1	3.840	A
	Exit	1	1		1047			1047	1064	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	588	1001	0.587	582	591	0.0	1.7	8.643	A
			2	A, B, C	280	1016	0.276	278	293	0.0	0.4	5.060	A
	Exit	1	1		567			567	574	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	743	1678	0.442	743	749	0.0	0.8	3.909	A
	Exit	1	1		1087			1087	1096	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	515	873	0.590	519	536	1.8	1.3	11.014	B
			2	A, C, D	114	878	0.129	113	114	0.2	0.1	4.618	A
	Exit	1	1		642			642	644	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1071	2010	0.533	1067	1084	1.1	1.1	3.798	A
	Exit	1	1		1030			1030	1066	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	569	1005	0.566	567	590	1.7	1.3	8.908	A
			2	A, B, C	274	1018	0.270	275	293	0.4	0.4	5.005	A
	Exit	1	1		560			560	574	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	745	1669	0.447	747	751	0.8	0.9	3.970	A
	Exit	1	1		1057			1057	1083	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	521	871	0.598	518	530	1.3	1.7	11.070	B
			2	A, C, D	115	864	0.133	115	118	0.1	0.1	4.696	A
	Exit	1	1		647			647	651	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1079	2009	0.537	1086	1099	1.1	1.0	4.042	A
	Exit	1	1		1036			1036	1066	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	576	994	0.579	565	579	1.3	1.9	8.366	A
			2	A, B, C	286	1000	0.286	284	299	0.4	0.5	5.349	A
	Exit	1	1		559			559	582	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	742	1653	0.449	741	761	0.9	0.9	4.054	A
	Exit	1	1		1067			1067	1087	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	542	865	0.626	542	535	1.7	1.7	10.641	B
			2	A, C, D	109	864	0.126	109	115	0.1	0.2	4.850	A
	Exit	1	1		631			631	641	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1059	2011	0.527	1063	1079	1.0	1.0	3.959	A
	Exit	1	1		1065			1065	1064	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	561	1006	0.559	562	585	1.9	1.3	8.289	A
			2	A, B, C	295	1019	0.290	295	298	0.5	0.4	5.022	A
	Exit	1	1		565			565	572	0.0	0.0	0.000	A

D - Roman Road	Entry	1	1	A, B, C, D	745	1661	0.449	744	752	0.9	1.0	4.099	A
	Exit	1	1		1052			1052	1087	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	537	866	0.620	541	539	1.7	1.4	10.316	B
			2	A, C, D	111	867	0.128	110	111	0.2	0.1	4.883	A
	Exit	1	1		629			629	648	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1067	2011	0.531	1067	1079	1.0	1.3	3.866	A
	Exit	1	1		1065			1065	1071	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	576	999	0.577	574	590	1.3	1.4	8.244	A
			2	A, B, C	293	1015	0.288	293	300	0.4	0.3	4.951	A
	Exit	1	1		565			565	575	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	743	1662	0.447	741	757	1.0	0.8	3.874	A
	Exit	1	1		1067			1067	1082	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	B, C	525	866	0.606	526	539	1.4	1.6	11.029	B
			2	A, C, D	118	864	0.136	118	115	0.1	0.1	4.870	A
	Exit	1	1		635			635	645	0.0	0.0	0.000	A
B - Chelmsford Road	Entry	1	1	A, B, C, D	1073	2000	0.536	1074	1083	1.3	1.1	3.836	A
	Exit	1	1		1048			1048	1071	0.0	0.0	0.000	A
C - A12 (W)	Entry	1	1	A, D	571	1004	0.569	565	592	1.4	1.4	8.490	A
			2	A, B, C	290	1015	0.286	290	294	0.3	0.4	5.130	A
	Exit	1	1		576			576	575	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A, B, C, D	752	1666	0.451	751	760	0.8	0.9	4.027	A
	Exit	1	1		1065			1065	1093	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	536	134	1247	873	0.614	531	534	0.0	1.8	10.621	B
				C	0.59	0.15	160	114	0.005	0.48	0.51	0.0	0.0	6.030	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	1	0.27	284	197	0.005	1	1	0.0	0.0	3.777	A
				D	112	28	1247	869	0.129	110	114	0.0	0.2	4.990	A
B - Chelmsford Road	Entry	1	1	A	492	123	2470	1990	0.247	491	504	0.0	0.6	3.888	A
				B	0.83	0.21	587	477	0.002	0.83	1	0.0	0.0	5.210	A
				C	187	47	2470	2009	0.093	188	189	0.0	0.2	3.756	A
				D	392	98	2470	2032	0.193	395	390	0.0	0.3	3.816	A
C - A12 (W)	Entry	1	1	A	0.71	0.18	298	194	0.004	0.71	0.79	0.0	0.0	4.711	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	588	147	1584	1001	0.587	581	590	0.0	1.7	8.649	A
			2	A	1	0.30	408	260	0.005	1	1	0.0	0.0	3.169	A
				B	279	70	1584	1016	0.275	277	292	0.0	0.4	5.068	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	127	32	2330	1664	0.076	126	129	0.0	0.2	3.931	A
				B	238	60	2330	1690	0.141	238	237	0.0	0.2	3.908	A
				C	377	94	2330	1675	0.225	378	383	0.0	0.3	3.904	A
				D	0.83	0.21	646	478	0.002	0.83	1	0.0	0.0	3.362	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	515	129	1247	873	0.590	519	535	1.8	1.3	11.021	B
				C	0.36	0.09	173	122	0.003	0.36	0.59	1.8	0.0	4.515	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	1	0.36	383	271	0.005	1	1	0.0	0.0	3.869	A
				D	112	28	1247	878	0.128	112	113	0.2	0.1	4.627	A
				A	508	127	2470	1996	0.255	507	513	1.1	0.5	3.800	A
				B	0.83	0.21	391	321	0.003	0.71	0.63	0.0	0.0	3.570	A

B - Chelmsford Road	Entry	1	1	C	184	46	2470	2009	0.091	182	190	1.1	0.2	3.881	A
				D	378	95	2470	2033	0.186	377	380	1.1	0.4	3.753	A
C - A12 (W)	Entry	1	1	A	0.71	0.18	204	136	0.005	0.71	0.55	0.0	0.0	3.914	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	568	142	1584	1004	0.566	566	589	1.7	1.3	8.913	A
			2	A	0.95	0.24	376	248	0.004	0.95	1	0.0	0.0	3.668	A
				B	273	68	1584	1018	0.269	274	292	0.4	0.4	5.009	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	133	33	2330	1666	0.080	133	130	0.8	0.2	3.924	A
				B	236	59	2330	1684	0.140	237	238	0.8	0.3	3.966	A
				C	374	94	2330	1661	0.225	376	382	0.8	0.4	3.990	A
				D	1	0.30	554	399	0.003	1	1	0.0	0.0	3.341	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	521	130	1247	871	0.598	518	530	1.3	1.7	11.077	B
				C	0.36	0.09	185	129	0.003	0.36	0.63	0.0	0.0	5.308	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	1	0.36	420	297	0.005	1	2	0.0	0.0	4.220	A
				D	114	28	1247	865	0.131	114	116	0.1	0.1	4.702	A
B - Chelmsford Road	Entry	1	1	A	512	128	2470	1992	0.257	516	518	1.1	0.4	4.079	A
				B	1	0.27	832	681	0.002	1	1	1.1	0.0	4.173	A
				C	180	45	2470	2005	0.090	182	187	1.1	0.2	4.015	A
				D	386	96	2470	2028	0.190	388	392	1.1	0.4	4.006	A
C - A12 (W)	Entry	1	1	A	0.83	0.21	188	121	0.007	0.83	0.51	0.0	0.0	4.491	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	575	144	1584	994	0.578	564	578	1.3	1.9	8.369	A
			2	A	1	0.33	502	329	0.004	1	1	0.0	0.0	3.985	A
				B	285	71	1584	997	0.285	283	298	0.4	0.5	5.355	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	129	32	2330	1646	0.079	129	131	0.9	0.1	4.095	A
				B	235	59	2330	1664	0.141	234	237	0.9	0.3	4.029	A
				C	377	94	2330	1650	0.229	377	392	0.9	0.5	4.057	A
				D	0.83	0.21	554	402	0.002	0.95	1	0.0	0.0	3.189	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	542	135	1247	866	0.626	542	534	1.7	1.7	10.645	B
				C	0.12	0.03	86	62	0.002	0.12	0.28	0.0	0.0	3.126	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	2	0.39	370	259	0.006	2	1	0.0	0.0	5.614	A
				D	108	27	1247	864	0.125	107	113	0.1	0.2	4.841	A
B - Chelmsford Road	Entry	1	1	A	491	123	2470	1994	0.246	494	504	1.0	0.4	3.911	A
				B	1	0.30	563	463	0.003	1	1	0.0	0.0	3.344	A
				C	184	46	2470	2013	0.092	184	185	1.0	0.2	3.981	A
				D	383	96	2470	2033	0.188	383	389	1.0	0.4	4.013	A
C - A12 (W)	Entry	1	1	A	1	0.27	408	263	0.004	1	1	0.0	0.0	3.616	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	560	140	1584	1006	0.558	560	584	1.9	1.3	8.298	A
			2	A	1	0.36	455	297	0.005	2	1	0.0	0.0	3.392	A
				B	294	73	1584	1020	0.288	294	297	0.5	0.4	5.030	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	134	34	2330	1661	0.081	134	134	0.9	0.2	4.208	A
				B	228	57	2330	1679	0.136	229	231	0.9	0.3	4.056	A
				C	382	95	2330	1654	0.231	380	386	0.9	0.5	4.088	A
				D	1	0.33	554	403	0.003	1	1	0.0	0.0	4.025	A

18:00 - 18:15

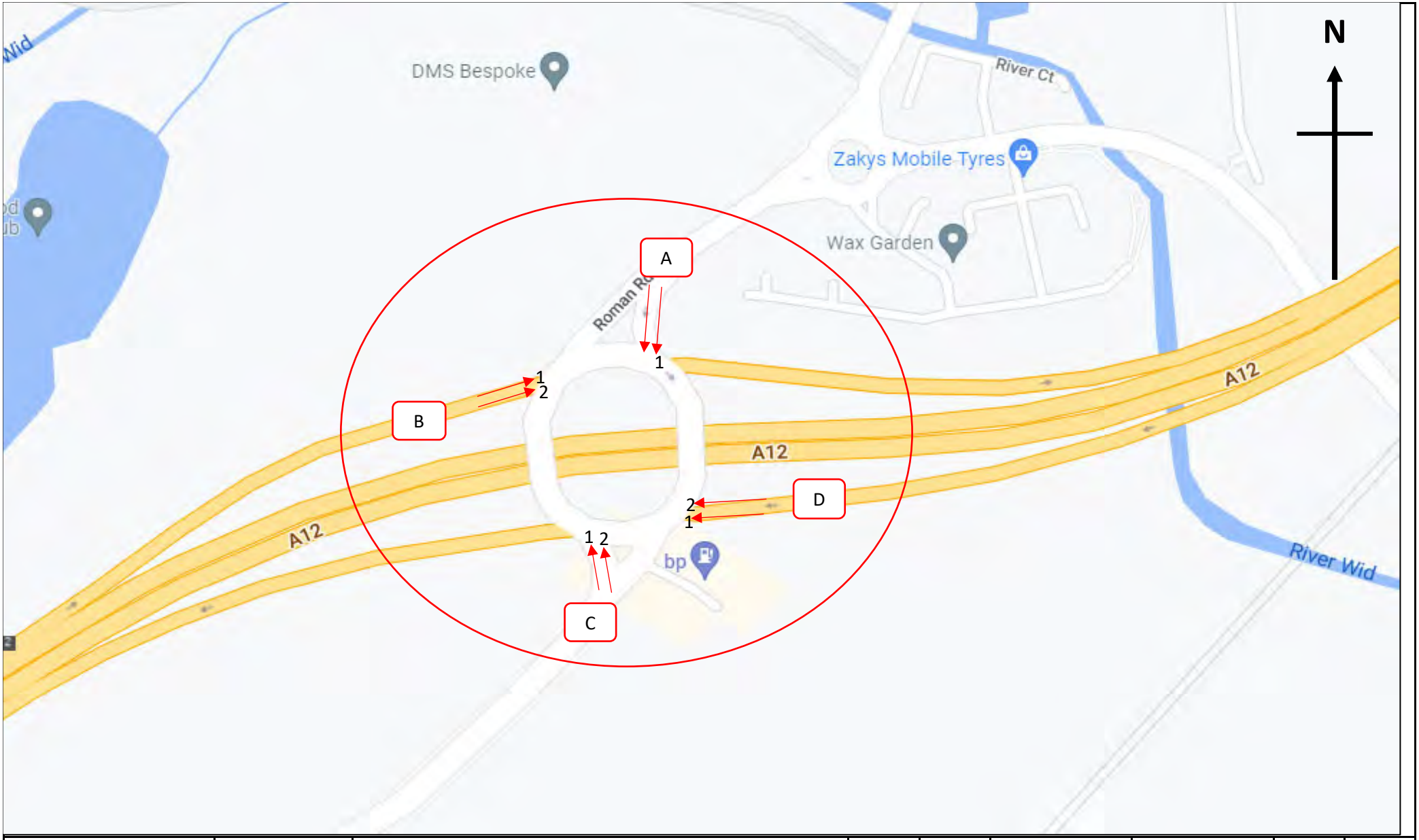
Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	537	134	1247	865	0.620	540	539	1.7	1.4	10.318	B

A - A12 (E)	Entry	1	1	C	0.48	0.12	86	61	0.008	0.48	0.28	0.0	0.0	5.775	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	1	0.30	346	242	0.005	1	1	0.0	0.0	4.914	A
				D	109	27	1247	867	0.126	109	109	0.2	0.1	4.883	A
B - Chelmsford Road	Entry	1	1	A	492	123	2470	1987	0.248	493	510	1.0	0.6	3.898	A
				B	1	0.27	587	482	0.002	1	1	0.0	0.0	3.675	A
				C	190	47	2470	2017	0.094	189	186	1.0	0.2	3.913	A
				D	384	96	2470	2034	0.189	384	382	1.0	0.5	3.803	A
C - A12 (W)	Entry	1	1	A	0.48	0.12	267	174	0.003	0.48	0.71	0.0	0.0	4.252	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	576	144	1584	999	0.577	573	589	1.3	1.4	8.249	A
			2	A	1	0.36	564	373	0.004	1	2	0.0	0.0	3.935	A
				B	291	73	1584	1015	0.287	291	299	0.4	0.3	4.957	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	134	34	2330	1664	0.081	134	136	1.0	0.1	3.930	A
				B	233	58	2330	1682	0.139	232	233	1.0	0.2	3.827	A
				C	375	94	2330	1656	0.227	374	387	1.0	0.4	3.883	A
				D	0.59	0.15	461	335	0.002	0.59	0.87	0.0	0.0	3.804	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Simulation max flow (PCU/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 (E)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	524	131	1247	866	0.605	525	539	1.4	1.6	11.035	B
				C	0.59	0.15	123	89	0.007	0.59	0.44	0.0	0.0	2.778	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	2	0.50	407	283	0.007	2	2	0.0	0.0	5.158	A
				D	115	29	1247	863	0.134	116	114	0.1	0.1	4.866	A
B - Chelmsford Road	Entry	1	1	A	495	124	2470	1978	0.250	495	509	1.3	0.5	3.862	A
				B	1	0.33	514	417	0.003	1	0.95	0.0	0.0	3.957	A
				C	194	49	2470	2004	0.097	194	186	1.3	0.1	3.800	A
				D	382	95	2470	2025	0.189	383	387	1.3	0.5	3.819	A
C - A12 (W)	Entry	1	1	A	0.83	0.21	282	191	0.004	0.83	0.83	0.0	0.0	4.860	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	570	143	1584	1003	0.568	565	591	1.4	1.4	8.495	A
			2	A	2	0.42	517	335	0.005	2	2	0.0	0.0	4.102	A
				B	288	72	1584	1014	0.284	288	293	0.3	0.4	5.135	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
D - Roman Road	Entry	1	1	A	138	34	2330	1668	0.083	137	134	0.8	0.2	4.045	A
				B	233	58	2330	1679	0.139	234	238	0.8	0.3	4.056	A
				C	380	95	2330	1660	0.229	379	386	0.8	0.5	4.007	A
				D	1	0.27	485	351	0.003	0.95	0.87	0.0	0.0	2.283	A

Appendix 5 – Queue Lengths



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 1, A12 / A1023 Chelmsford Road / Roman Road	**Project No:**	12854	**Drawing No:**	12854-01	**Drawn By:** EA
	Survey Date:	Wednesday 25th May 2022	**Project Name:**	Shenfield			
	Survey Times:	07:00 to 19:00	**Drawing Title:**	Site Layout and Observed Movements			

SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm A - Lane 1							Arm A - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
07:00	0	0	0	0	0	0	07:00	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
07:05	0	0	0	0	0	0	07:05	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
07:10	0	0	0	0	0	0	07:10	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	4	4	0	0	0	23
07:15	0	0	0	0	0	0	07:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3	3	0	0	0	17.25
07:20	0	0	0	0	0	0	07:20	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
07:25	0	0	0	0	0	0	07:25	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
07:30	0	0	0	0	0	0	07:30	0	0	0	0	0	0
Max Queue	8	8	0	0	0	46	Max Queue	2	2	0	0	0	11.5
07:35	0	0	0	0	0	0	07:35	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	9	9	0	0	0	51.75
07:40	0	0	0	0	0	0	07:40	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	11	11	0	0	0	63.25
07:45	6	6	0	0	0	34.5	07:45	0	0	0	0	0	0
Max Queue	14.8	11	1	1	0	85.1	Max Queue	10	10	0	0	0	57.5
07:50	0	0	0	0	0	0	07:50	0	0	0	0	0	0
Max Queue	9	9	0	0	0	51.75	Max Queue	2	2	0	0	0	11.5
07:55	2	2	0	0	0	11.5	07:55	1	1	0	0	0	5.75
Max Queue	7	7	0	0	0	40.25	Max Queue	2	2	0	0	0	11.5
08:00	0	0	0	0	0	0	08:00	0	0	0	0	0	0
Max Queue	14	14	0	0	0	80.5	Max Queue	4	4	0	0	0	23
08:05	0	0	0	0	0	0	08:05	0	0	0	0	0	0
Max Queue	14	14	0	0	0	80.5	Max Queue	6	6	0	0	0	34.5
08:10	0	0	0	0	0	0	08:10	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	3	3	0	0	0	17.25
08:15	0	0	0	0	0	0	08:15	1	1	0	0	0	5.75
Max Queue	18	18	0	0	0	103.5	Max Queue	7	7	0	0	0	40.25
08:20	0	0	0	0	0	0	08:20	0	0	0	0	0	0
Max Queue	5.8	2	1	1	0	33.35	Max Queue	3	3	0	0	0	17.25
08:25	0	0	0	0	0	0	08:25	0	0	0	0	0	0
Max Queue	8	8	0	0	0	46	Max Queue	2	2	0	0	0	11.5
08:30	1	1	0	0	0	5.75	08:30	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2	2	0	0	0	11.5
08:35	0	0	0	0	0	0	08:35	0	0	0	0	0	0
Max Queue	13.3	9	0	1	1	76.475	Max Queue	5	5	0	0	0	28.75
08:40	0	0	0	0	0	0	08:40	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
08:45	0	0	0	0	0	0	08:45	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
08:50	0	0	0	0	0	0	08:50	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
08:55	0	0	0	0	0	0	08:55	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
09:00	0	0	0	0	0	0	09:00	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
09:05	0	0	0	0	0	0	09:05	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
09:10	0	0	0	0	0	0	09:10	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
09:15	0	0	0	0	0	0	09:15	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
09:20	0	0	0	0	0	0	09:20	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
09:25	0	0	0	0	0	0	09:25	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	1	1	0	0	0	5.75
09:30	0	0	0	0	0	0	09:30	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
09:35	0	0	0	0	0	0	09:35	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
09:40	0	0	0	0	0	0	09:40	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
09:45	0	0	0	0	0	0	09:45	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	1	1	0	0	0	5.75
09:50	0	0	0	0	0	0	09:50	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
09:55	0	0	0	0	0	0	09:55	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
10:00	0	0	0	0	0	0	10:00	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
10:05	0	0	0	0	0	0	10:05	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
10:10	0	0	0	0	0	0	10:10	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	3.8	0	1	1	0	21.85
10:15	0	0	0	0	0	0	10:15	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
10:20	0	0	0	0	0	0	10:20	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
10:25	0	0	0	0	0	0	10:25	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
10:30	0	0	0	0	0	0	10:30	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	1	1	0	0	0	5.75
10:35	0	0	0	0	0	0	10:35	0	0	0	0	0	0
Max Queue	5.3	3	0	1	0	30.475	Max Queue	2	2	0	0	0	11.5
10:40	0	0	0	0	0	0	10:40	0	0	0	0	0	0
Max Queue	6.3	2	0	1	1	36.225	Max Queue	6	6	0	0	0	34.5
10:45	0	0	0	0	0	0	10:45	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
10:50	0	0	0	0	0	0	10:50	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
10:55	0	0	0	0	0	0	10:55	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75

0 0

SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm A - Lane 1							Arm A - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
11:00	0	0	0	0	0	0	11:00	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
11:05	0	0	0	0	0	0	11:05	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	3.5	2	1	0	0	20.125
11:10	0	0	0	0	0	0	11:10	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	3.3	1	0	1	0	18.975
11:15	0	0	0	0	0	0	11:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
11:20	0	0	0	0	0	0	11:20	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
11:25	0	0	0	0	0	0	11:25	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
11:30	0	0	0	0	0	0	11:30	0	0	0	0	0	0
Max Queue	3.3	1	0	1	0	18.975	Max Queue	4	4	0	0	0	23
11:35	0	0	0	0	0	0	11:35	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
11:40	0	0	0	0	0	0	11:40	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
11:45	0	0	0	0	0	0	11:45	0	0	0	0	0	0
Max Queue	5.3	3	0	1	0	30.475	Max Queue	0	0	0	0	0	0
11:50	5.3	3	0	1	0	30.475	11:50	0	0	0	0	0	0
Max Queue	5.3	3	0	1	0	30.475	Max Queue	0	0	0	0	0	0
11:55	0	0	0	0	0	0	11:55	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
12:00	0	0	0	0	0	0	12:00	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	1	1	0	0	0	5.75
12:05	0	0	0	0	0	0	12:05	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
12:10	0	0	0	0	0	0	12:10	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
12:15	0	0	0	0	0	0	12:15	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
12:20	0	0	0	0	0	0	12:20	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
12:25	0	0	0	0	0	0	12:25	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	3	3	0	0	0	17.25
12:30	0	0	0	0	0	0	12:30	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
12:35	0	0	0	0	0	0	12:35	0	0	0	0	0	0
Max Queue	2	0	0	0	1	11.5	Max Queue	1	1	0	0	0	5.75
12:40	0	0	0	0	0	0	12:40	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	0	0	0	0	0	0
12:45	0	0	0	0	0	0	12:45	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	2	2	0	0	0	11.5
12:50	0	0	0	0	0	0	12:50	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
12:55	0	0	0	0	0	0	12:55	0	0	0	0	0	0
Max Queue	2.3	0	0	1	0	13.225	Max Queue	3	3	0	0	0	17.25
13:00	0	0	0	0	0	0	13:00	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
13:05	0	0	0	0	0	0	13:05	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
13:10	0	0	0	0	0	0	13:10	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
13:15	0	0	0	0	0	0	13:15	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
13:20	0	0	0	0	0	0	13:20	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
13:25	0	0	0	0	0	0	13:25	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	0	0	0	0	0	0
13:30	0	0	0	0	0	0	13:30	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	2	2	0	0	0	11.5
13:35	0	0	0	0	0	0	13:35	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
13:40	0	0	0	0	0	0	13:40	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
13:45	0	0	0	0	0	0	13:45	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	2	2	0	0	0	11.5
13:50	0	0	0	0	0	0	13:50	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	0	0	0	0	0	0
13:55	0	0	0	0	0	0	13:55	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
14:00	0	0	0	0	0	0	14:00	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
14:05	0	0	0	0	0	0	14:05	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
14:10	0	0	0	0	0	0	14:10	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	0	0	0	0	0	0
14:15	0	0	0	0	0	0	14:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
14:20	0	0	0	0	0	0	14:20	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
14:25	0	0	0	0	0	0	14:25	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	2	2	0	0	0	11.5
14:30	2	2	0	0	0	11.5	14:30	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	3.5	2	1	0	0	20.125
14:35	0	0	0	0	0	0	14:35	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
14:40	0	0	0	0	0	0	14:40	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	3	3	0	0	0	17.25
14:45	2	2	0	0	0	11.5	14:45	0	0	0	0	0	0
Max Queue	5.5	4	1	0	0	31.625	Max Queue	2	2	0	0	0	11.5
14:50	0	0	0	0	0	0	14:50	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3.5	2	1	0	0	20.125
14:55	0	0	0	0	0	0	14:55	0	0	0	0	0	0
Max Queue	5.3	3	0	1	0	30.475	Max Queue	1	1	0	0	0	5.75

SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm A - Lane 1							Arm A - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
15:00	0	0	0	0	0	0	15:00	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1.5	0	1	0	0	8.625
15:05	0	0	0	0	0	0	15:05	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
15:10	0	0	0	0	0	0	15:10	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	1	1	0	0	0	5.75
15:15	0	0	0	0	0	0	15:15	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
15:20	0	0	0	0	0	0	15:20	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
15:25	0	0	0	0	0	0	15:25	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
15:30	0	0	0	0	0	0	15:30	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
15:35	0	0	0	0	0	0	15:35	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
15:40	0	0	0	0	0	0	15:40	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
15:45	0	0	0	0	0	0	15:45	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
15:50	0	0	0	0	0	0	15:50	0	0	0	0	0	0
Max Queue	7	5	0	0	1	40.25	Max Queue	2	2	0	0	0	11.5
15:55	0	0	0	0	0	0	15:55	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	3	3	0	0	0	17.25
16:00	0	0	0	0	0	0	16:00	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	5	5	0	0	0	28.75
16:05	0	0	0	0	0	0	16:05	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	2	2	0	0	0	11.5
16:10	1	1	0	0	0	5.75	16:10	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	5	5	0	0	0	28.75
16:15	0	0	0	0	0	0	16:15	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
16:20	0	0	0	0	0	0	16:20	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
16:25	0	0	0	0	0	0	16:25	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
16:30	0	0	0	0	0	0	16:30	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
16:35	0	0	0	0	0	0	16:35	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	4	4	0	0	0	23
16:40	1	1	0	0	0	5.75	16:40	4	4	0	0	0	23
Max Queue	6	6	0	0	0	34.5	Max Queue	4	4	0	0	0	23
16:45	0	0	0	0	0	0	16:45	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3	3	0	0	0	17.25
16:50	0	0	0	0	0	0	16:50	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3	3	0	0	0	17.25
16:55	0	0	0	0	0	0	16:55	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2	2	0	0	0	11.5
17:00	0	0	0	0	0	0	17:00	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
17:05	2	2	0	0	0	11.5	17:05	1	1	0	0	0	5.75
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
17:10	0	0	0	0	0	0	17:10	2	2	0	0	0	11.5
Max Queue	3	3	0	0	0	17.25	Max Queue	5	5	0	0	0	28.75
17:15	2	2	0	0	0	11.5	17:15	5	5	0	0	0	28.75
Max Queue	4	4	0	0	0	23	Max Queue	6	6	0	0	0	34.5
17:20	0	0	0	0	0	0	17:20	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3	3	0	0	0	17.25
17:25	0	0	0	0	0	0	17:25	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
17:30	0	0	0	0	0	0	17:30	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	4	4	0	0	0	23
17:35	0	0	0	0	0	0	17:35	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
17:40	0	0	0	0	0	0	17:40	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	3	3	0	0	0	17.25
17:45	1	1	0	0	0	5.75	17:45	3	3	0	0	0	17.25
Max Queue	3	3	0	0	0	17.25	Max Queue	5	5	0	0	0	28.75
17:50	0	0	0	0	0	0	17:50	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	5	5	0	0	0	28.75
17:55	0	0	0	0	0	0	17:55	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2	2	0	0	0	11.5
18:00	0	0	0	0	0	0	18:00	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	3	3	0	0	0	17.25
18:05	0	0	0	0	0	0	18:05	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
18:10	0	0	0	0	0	0	18:10	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
18:15	1	1	0	0	0	5.75	18:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3	3	0	0	0	17.25
18:20	1	1	0	0	0	5.75	18:20	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
18:25	0	0	0	0	0	0	18:25	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	5	5	0	0	0	28.75
18:30	0	0	0	0	0	0	18:30	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2	2	0	0	0	11.5
18:35	0	0	0	0	0	0	18:35	1	1	0	0	0	5.75
Max Queue	1	1	0	0	0	5.75	Max Queue	3	3	0	0	0	17.25
18:40	0	0	0	0	0	0	18:40	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	3	3	0	0	0	17.25
18:45	0	0	0	0	0	0	18:45	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
18:50	0	0	0	0	0	0	18:50	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
18:55	1	1	0	0	0	5.75	18:55	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75

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SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm B - Lane 1							Arm B - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
07:00	0	0	0	0	0	0	07:00	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	1	1	0	0	0	5.75
07:05	0	0	0	0	0	0	07:05	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	3	3	0	0	0	17.25
07:10	0	0	0	0	0	0	07:10	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
07:15	0	0	0	0	0	0	07:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1.5	0	1	0	0	8.625
07:20	0	0	0	0	0	0	07:20	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2.5	1	1	0	0	14.375
07:25	0	0	0	0	0	0	07:25	0	0	0	0	0	0
Max Queue	5.5	4	1	0	0	31.625	Max Queue	1	1	0	0	0	5.75
07:30	3	3	0	0	0	17.25	07:30	0	0	0	0	0	0
Max Queue	7	4	2	0	0	40.25	Max Queue	3	3	0	0	0	17.25
07:35	0	0	0	0	0	0	07:35	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3.5	2	1	0	0	20.125
07:40	0	0	0	0	0	0	07:40	2	2	0	0	0	11.5
Max Queue	4	4	0	0	0	23	Max Queue	2	2	0	0	0	11.5
07:45	0	0	0	0	0	0	07:45	0	0	0	0	0	0
Max Queue	10	10	0	0	0	57.5	Max Queue	3	3	0	0	0	17.25
07:50	3	3	0	0	0	17.25	07:50	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	3.5	2	1	0	0	20.125
07:55	1	1	0	0	0	5.75	07:55	2	2	0	0	0	11.5
Max Queue	6.5	5	1	0	0	37.375	Max Queue	2.5	1	1	0	0	14.375
08:00	1.5	0	1	0	0	8.625	08:00	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3	3	0	0	0	17.25
08:05	0	0	0	0	0	0	08:05	0	0	0	0	0	0
Max Queue	6.3	4	0	1	0	36.225	Max Queue	3	3	0	0	0	17.25
08:10	3	3	0	0	0	17.25	08:10	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3	3	0	0	0	17.25
08:15	0	0	0	0	0	0	08:15	2	2	0	0	0	11.5
Max Queue	4	4	0	0	0	23	Max Queue	2.5	1	1	0	0	14.375
08:20	0	0	0	0	0	0	08:20	2	2	0	0	0	11.5
Max Queue	7	7	0	0	0	40.25	Max Queue	2	2	0	0	0	11.5
08:25	1	1	0	0	0	5.75	08:25	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3	3	0	0	0	17.25
08:30	0	0	0	0	0	0	08:30	1	1	0	0	0	5.75
Max Queue	11	11	0	0	0	63.25	Max Queue	2.5	1	1	0	0	14.375
08:35	0	0	0	0	0	0	08:35	1	1	0	0	0	5.75
Max Queue	8	8	0	0	0	46	Max Queue	3	3	0	0	0	17.25
08:40	0	0	0	0	0	0	08:40	3	1	0	0	1	17.25
Max Queue	9	9	0	0	0	51.75	Max Queue	3	1	0	0	1	17.25
08:45	3	3	0	0	0	17.25	08:45	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
08:50	1	1	0	0	0	5.75	08:50	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
08:55	0	0	0	0	0	0	08:55	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2	2	0	0	0	11.5
09:00	0	0	0	0	0	0	09:00	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
09:05	0	0	0	0	0	0	09:05	1	1	0	0	0	5.75
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
09:10	0	0	0	0	0	0	09:10	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
09:15	3	3	0	0	0	17.25	09:15	0	0	0	0	0	0
Max Queue	3	0	2	0	0	17.25	Max Queue	1	1	0	0	0	5.75
09:20	0	0	0	0	0	0	09:20	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
09:25	0	0	0	0	0	0	09:25	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	1.5	0	1	0	0	8.625
09:30	0	0	0	0	0	0	09:30	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	1	1	0	0	0	5.75
09:35	0	0	0	0	0	0	09:35	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1.5	0	1	0	0	8.625
09:40	0	0	0	0	0	0	09:40	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
09:45	0	0	0	0	0	0	09:45	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
09:50	0	0	0	0	0	0	09:50	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	2	2	0	0	0	11.5
09:55	0	0	0	0	0	0	09:55	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
10:00	2	2	0	0	0	11.5	10:00	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
10:05	0	0	0	0	0	0	10:05	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
10:10	0	0	0	0	0	0	10:10	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	2.5	1	1	0	0	14.375
10:15	0	0	0	0	0	0	10:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
10:20	0	0	0	0	0	0	10:20	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2	2	0	0	0	11.5
10:25	0	0	0	0	0	0	10:25	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	1.5	0	1	0	0	8.625
10:30	0	0	0	0	0	0	10:30	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
10:35	0	0	0	0	0	0	10:35	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1.5	0	1	0	0	8.625
10:40	0	0	0	0	0	0	10:40	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2.3	0	0	1	0	13.225
10:45	0	0	0	0	0	0	10:45	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
10:50	0	0	0	0	0	0	10:50	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
10:55	0	0	0	0	0	0	10:55	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75

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SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm B - Lane 1							Arm B - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
11:00	1	1	0	0	0	5.75	11:00	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
11:05	0	0	0	0	0	0	11:05	0	0	0	0	0	0
Max Queue	4	1	2	0	0	23	Max Queue	2	2	0	0	0	11.5
11:10	0	0	0	0	0	0	11:10	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2.3	0	0	1	0	13.225
11:15	0	0	0	0	0	0	11:15	1	1	0	0	0	5.75
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
11:20	2	2	0	0	0	11.5	11:20	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
11:25	0	0	0	0	0	0	11:25	2	2	0	0	0	11.5
Max Queue	2.5	1	1	0	0	14.375	Max Queue	2	2	0	0	0	11.5
11:30	0	0	0	0	0	0	11:30	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1.5	0	1	0	0	8.625
11:35	0	0	0	0	0	0	11:35	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
11:40	0	0	0	0	0	0	11:40	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	3	3	0	0	0	17.25
11:45	0	0	0	0	0	0	11:45	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
11:50	0	0	0	0	0	0	11:50	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2	2	0	0	0	11.5
11:55	0	0	0	0	0	0	11:55	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
12:00	0	0	0	0	0	0	12:00	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1.5	0	1	0	0	8.625
12:05	0	0	0	0	0	0	12:05	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	2.3	0	0	1	0	13.225
12:10	1	1	0	0	0	5.75	12:10	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
12:15	0	0	0	0	0	0	12:15	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
12:20	3	3	0	0	0	17.25	12:20	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	2.3	0	0	1	0	13.225
12:25	0	0	0	0	0	0	12:25	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	1.5	0	1	0	0	8.625
12:30	0	0	0	0	0	0	12:30	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
12:35	0	0	0	0	0	0	12:35	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	4	4	0	0	0	23
12:40	0	0	0	0	0	0	12:40	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1.5	0	1	0	0	8.625
12:45	0	0	0	0	0	0	12:45	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	2.3	0	0	1	0	13.225
12:50	3	3	0	0	0	17.25	12:50	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
12:55	0	0	0	0	0	0	12:55	0	0	0	0	0	0
Max Queue	3.3	1	0	1	0	18.975	Max Queue	3	3	0	0	0	17.25
13:00	0	0	0	0	0	0	13:00	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2.5	1	1	0	0	14.375
13:05	0	0	0	0	0	0	13:05	0	0	0	0	0	0
Max Queue	5	2	2	0	0	28.75	Max Queue	2	2	0	0	0	11.5
13:10	0	0	0	0	0	0	13:10	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	0	0	0	0	0	0
13:15	0	0	0	0	0	0	13:15	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
13:20	0	0	0	0	0	0	13:20	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	1.5	0	1	0	0	8.625
13:25	0	0	0	0	0	0	13:25	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
13:30	0	0	0	0	0	0	13:30	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
13:35	0	0	0	0	0	0	13:35	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
13:40	0	0	0	0	0	0	13:40	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2.5	1	1	0	0	14.375
13:45	0	0	0	0	0	0	13:45	0	0	0	0	0	0
Max Queue	5.3	3	0	1	0	30.475	Max Queue	1	1	0	0	0	5.75
13:50	0	0	0	0	0	0	13:50	0	0	0	0	0	0
Max Queue	13	10	2	0	0	74.75	Max Queue	4.5	3	1	0	0	25.875
13:55	0	0	0	0	0	0	13:55	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	2	2	0	0	0	11.5
14:00	0	0	0	0	0	0	14:00	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	1	1	0	0	0	5.75
14:05	0	0	0	0	0	0	14:05	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	2	2	0	0	0	11.5
14:10	0	0	0	0	0	0	14:10	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	1	1	0	0	0	5.75
14:15	0	0	0	0	0	0	14:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3	3	0	0	0	17.25
14:20	0	0	0	0	0	0	14:20	0	0	0	0	0	0
Max Queue	2.3	0	0	1	0	13.225	Max Queue	2	2	0	0	0	11.5
14:25	0	0	0	0	0	0	14:25	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
14:30	1	1	0	0	0	5.75	14:30	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	3	3	0	0	0	17.25
14:35	2	2	0	0	0	11.5	14:35	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	2	2	0	0	0	11.5
14:40	1	1	0	0	0	5.75	14:40	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	4	2	0	0	1	23
14:45	0	0	0	0	0	0	14:45	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2	2	0	0	0	11.5
14:50	0	0	0	0	0	0	14:50	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	3	3	0	0	0	17.25
14:55	6	6	0	0	0	34.5	14:55	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	2	2	0	0	0	11.5

SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm B - Lane 1							Arm B - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
15:00	2	2	0	0	0	11.5	15:00	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
15:05	0	0	0	0	0	0	15:05	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
15:10	0	0	0	0	0	0	15:10	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
15:15	0	0	0	0	0	0	15:15	0	0	0	0	0	0
Max Queue	6.5	5	1	0	0	37.375	Max Queue	1	1	0	0	0	5.75
15:20	0	0	0	0	0	0	15:20	0	0	0	0	0	0
Max Queue	5.8	2	1	1	0	33.35	Max Queue	2	2	0	0	0	11.5
15:25	4.5	3	1	0	0	25.875	15:25	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	2	2	0	0	0	11.5
15:30	0	0	0	0	0	0	15:30	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	2	2	0	0	0	11.5
15:35	0	0	0	0	0	0	15:35	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	2	2	0	0	0	11.5
15:40	2.5	1	1	0	0	14.375	15:40	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	2.5	1	1	0	0	14.375
15:45	0	0	0	0	0	0	15:45	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	3	3	0	0	0	17.25
15:50	0	0	0	0	0	0	15:50	0	0	0	0	0	0
Max Queue	4.8	1	1	1	0	27.6	Max Queue	1	1	0	0	0	5.75
15:55	1	1	0	0	0	5.75	15:55	1	1	0	0	0	5.75
Max Queue	4	4	0	0	0	23	Max Queue	2	2	0	0	0	11.5
16:00	0	0	0	0	0	0	16:00	0	0	0	0	0	0
Max Queue	9	9	0	0	0	51.75	Max Queue	3	3	0	0	0	17.25
16:05	8	8	0	0	0	46	16:05	0	0	0	0	0	0
Max Queue	9.5	8	1	0	0	54.625	Max Queue	2.5	1	1	0	0	14.375
16:10	7	7	0	0	0	40.25	16:10	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	2.3	0	0	1	0	13.225
16:15	0	0	0	0	0	0	16:15	1	1	0	0	0	5.75
Max Queue	7	7	0	0	0	40.25	Max Queue	2.5	1	1	0	0	14.375
16:20	4	4	0	0	0	23	16:20	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	3	3	0	0	0	17.25
16:25	0	0	0	0	0	0	16:25	1	1	0	0	0	5.75
Max Queue	10	10	0	0	0	57.5	Max Queue	3	3	0	0	0	17.25
16:30	3	3	0	0	0	17.25	16:30	0	0	0	0	0	0
Max Queue	8	8	0	0	0	46	Max Queue	3	3	0	0	0	17.25
16:35	0	0	0	0	0	0	16:35	0	0	0	0	0	0
Max Queue	14	14	0	0	0	80.5	Max Queue	1	1	0	0	0	5.75
16:40	0	0	0	0	0	0	16:40	0	0	0	0	0	0
Max Queue	12	12	0	0	0	69	Max Queue	1	1	0	0	0	5.75
16:45	10.5	9	1	0	0	60.375	16:45	0	0	0	0	0	0
Max Queue	10.5	9	1	0	0	60.375	Max Queue	2	2	0	0	0	11.5
16:50	0	0	0	0	0	0	16:50	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	2	2	0	0	0	11.5
16:55	0	0	0	0	0	0	16:55	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	4	4	0	0	0	23
17:00	0	0	0	0	0	0	17:00	0	0	0	0	0	0
Max Queue	11	11	0	0	0	63.25	Max Queue	3.3	1	0	1	0	18.975
17:05	0	0	0	0	0	0	17:05	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	2.3	0	0	1	0	13.225
17:10	0	0	0	0	0	0	17:10	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	3	3	0	0	0	17.25
17:15	0	0	0	0	0	0	17:15	0	0	0	0	0	0
Max Queue	20.3	18	0	1	0	116.725	Max Queue	5.5	4	1	0	0	31.625
17:20	0	0	0	0	0	0	17:20	0	0	0	0	0	0
Max Queue	15	13	0	0	1	86.25	Max Queue	2	2	0	0	0	11.5
17:25	0	0	0	0	0	0	17:25	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	3	3	0	0	0	17.25
17:30	2	2	0	0	0	11.5	17:30	0	0	0	0	0	0
Max Queue	6.5	5	1	0	0	37.375	Max Queue	1	1	0	0	0	5.75
17:35	0	0	0	0	0	0	17:35	0	0	0	0	0	0
Max Queue	26	26	0	0	0	149.5	Max Queue	3	3	0	0	0	17.25
17:40	20	20	0	0	0	115	17:40	0	0	0	0	0	0
Max Queue	20	20	0	0	0	115	Max Queue	2	2	0	0	0	11.5
17:45	0	0	0	0	0	0	17:45	0	0	0	0	0	0
Max Queue	18	18	0	0	0	103.5	Max Queue	5	5	0	0	0	28.75
17:50	18	18	0	0	0	103.5	17:50	5	5	0	0	0	28.75
Max Queue	18	18	0	0	0	103.5	Max Queue	5	5	0	0	0	28.75
17:55	1	1	0	0	0	5.75	17:55	1	1	0	0	0	5.75
Max Queue	4	4	0	0	0	23	Max Queue	2	2	0	0	0	11.5
18:00	0	0	0	0	0	0	18:00	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
18:05	0	0	0	0	0	0	18:05	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
18:10	0	0	0	0	0	0	18:10	0	0	0	0	0	0
Max Queue	11	11	0	0	0	63.25	Max Queue	3	3	0	0	0	17.25
18:15	0	0	0	0	0	0	18:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2	2	0	0	0	11.5
18:20	0	0	0	0	0	0	18:20	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	4.3	2	0	1	0	24.725
18:25	0	0	0	0	0	0	18:25	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
18:30	0	0	0	0	0	0	18:30	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
18:35	0	0	0	0	0	0	18:35	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
18:40	1	1	0	0	0	5.75	18:40	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	3	3	0	0	0	17.25
18:45	0	0	0	0	0	0	18:45	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
18:50	1	1	0	0	0	5.75	18:50	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	0	0	0	0	0	0
18:55	0	0	0	0	0	0	18:55	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75

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SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm C - Lane 1							Arm C - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
07:00	0	0	0	0	0	0	07:00	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
07:05	3	3	0	0	0	17.25	07:05	0	0	0	0	0	0
Max Queue	8	8	0	0	0	46	Max Queue	2	2	0	0	0	11.5
07:10	0	0	0	0	0	0	07:10	6.5	5	1	0	0	37.375
Max Queue	2	2	0	0	0	11.5	Max Queue	6.5	5	1	0	0	37.375
07:15	0	0	0	0	0	0	07:15	1.5	0	1	0	0	8.625
Max Queue	2	2	0	0	0	11.5	Max Queue	5.5	4	1	0	0	31.625
07:20	0	0	0	0	0	0	07:20	0	0	0	0	0	0
Max Queue	9	9	0	0	0	51.75	Max Queue	5	5	0	0	0	28.75
07:25	0	0	0	0	0	0	07:25	0	0	0	0	0	0
Max Queue	5.3	3	0	1	0	30.475	Max Queue	0	0	0	0	0	0
07:30	0	0	0	0	0	0	07:30	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	6	6	0	0	0	34.5
07:35	0	0	0	0	0	0	07:35	0	0	0	0	0	0
Max Queue	5.5	4	1	0	0	31.625	Max Queue	2	2	0	0	0	11.5
07:40	0	0	0	0	0	0	07:40	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0
07:45	0	0	0	0	0	0	07:45	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	4	4	0	0	0	23
07:50	0	0	0	0	0	0	07:50	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	2	2	0	0	0	11.5
07:55	0	0	0	0	0	0	07:55	0	0	0	0	0	0
Max Queue	14	14	0	0	0	80.5	Max Queue	1	1	0	0	0	5.75
08:00	0	0	0	0	0	0	08:00	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2	2	0	0	0	11.5
08:05	0	0	0	0	0	0	08:05	0	0	0	0	0	0
Max Queue	10.5	9	1	0	0	60.375	Max Queue	0	0	0	0	0	0
08:10	0	0	0	0	0	0	08:10	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
08:15	1	1	0	0	0	5.75	08:15	0	0	0	0	0	0
Max Queue	29.5	28	1	0	0	169.625	Max Queue	0	0	0	0	0	0
08:20	3.5	2	1	0	0	20.125	08:20	1	1	0	0	0	5.75
Max Queue	15	15	0	0	0	86.25	Max Queue	0	0	0	0	0	0
08:25	0	0	0	0	0	0	08:25	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0
08:30	0	0	0	0	0	0	08:30	0	0	0	0	0	0
Max Queue	25	22	2	0	0	143.75	Max Queue	2	2	0	0	0	11.5
08:35	4	4	0	0	0	23	08:35	0	0	0	0	0	0
Max Queue	19	19	0	0	0	109.25	Max Queue	1	1	0	0	0	5.75
08:40	0	0	0	0	0	0	08:40	2	2	0	0	0	11.5
Max Queue	2	2	0	0	0	11.5	Max Queue	3	3	0	0	0	17.25
08:45	0	0	0	0	0	0	08:45	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
08:50	0	0	0	0	0	0	08:50	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
08:55	0	0	0	0	0	0	08:55	0	0	0	0	0	0
Max Queue	8	8	0	0	0	46	Max Queue	0	0	0	0	0	0
09:00	0	0	0	0	0	0	09:00	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	5	5	0	0	0	28.75
09:05	0	0	0	0	0	0	09:05	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
09:10	0	0	0	0	0	0	09:10	0	0	0	0	0	0
Max Queue	6.5	5	1	0	0	37.375	Max Queue	0	0	0	0	0	0
09:15	0	0	0	0	0	0	09:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
09:20	0	0	0	0	0	0	09:20	0	0	0	0	0	0
Max Queue	5	3	0	0	1	28.75	Max Queue	0	0	0	0	0	0
09:25	0	0	0	0	0	0	09:25	2	2	0	0	0	11.5
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
09:30	0	0	0	0	0	0	09:30	0	0	0	0	0	0
Max Queue	10.3	8	0	1	0	59.225	Max Queue	0	0	0	0	0	0
09:35	0	0	0	0	0	0	09:35	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	0	0	0	0	0	0
09:40	0	0	0	0	0	0	09:40	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
09:45	0	0	0	0	0	0	09:45	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
09:50	0	0	0	0	0	0	09:50	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
09:55	0	0	0	0	0	0	09:55	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	0	0	0	0	0	0
10:00	0	0	0	0	0	0	10:00	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
10:05	0	0	0	0	0	0	10:05	0	0	0	0	0	0
Max Queue	5.3	3	0	1	0	30.475	Max Queue	0	0	0	0	0	0
10:10	0	0	0	0	0	0	10:10	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	0	0	0	0	0	0
10:15	0	0	0	0	0	0	10:15	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
10:20	0	0	0	0	0	0	10:20	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
10:25	0	0	0	0	0	0	10:25	0	0	0	0	0	0
Max Queue	1.5	0	1	0	0	8.625	Max Queue	1	1	0	0	0	5.75
10:30	0	0	0	0	0	0	10:30	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
10:35	0	0	0	0	0	0	10:35	0	0	0	0	0	0
Max Queue	1.5	0	1	0	0	8.625	Max Queue	6	6	0	0	0	34.5
10:40	0	0	0	0	0	0	10:40	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
10:45	0	0	0	0	0	0	10:45	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	3	3	0	0	0	17.25
10:50	0	0	0	0	0	0	10:50	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
10:55	1	1	0	0	0	5.75	10:55	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0

1 0

SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm C - Lane 1							Arm C - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
11:00	0	0	0	0	0	0	11:00	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	1	1	0	0	0	5.75
11:05	0	0	0	0	0	0	11:05	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	3.5	2	1	0	0	20.125
11:10	0	0	0	0	0	0	11:10	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
11:15	0	0	0	0	0	0	11:15	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
11:20	0	0	0	0	0	0	11:20	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	3	3	0	0	0	17.25
11:25	0	0	0	0	0	0	11:25	0	0	0	0	0	0
Max Queue	4.3	2	0	1	0	24.725	Max Queue	0	0	0	0	0	0
11:30	0	0	0	0	0	0	11:30	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
11:35	0	0	0	0	0	0	11:35	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	4	4	0	0	0	23
11:40	0	0	0	0	0	0	11:40	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
11:45	0	0	0	0	0	0	11:45	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
11:50	0	0	0	0	0	0	11:50	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	0	0	0	0	0	0
11:55	0	0	0	0	0	0	11:55	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
12:00	0	0	0	0	0	0	12:00	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
12:05	0	0	0	0	0	0	12:05	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	1	1	0	0	0	5.75
12:10	0	0	0	0	0	0	12:10	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	6	6	0	0	0	34.5
12:15	4	4	0	0	0	23	12:15	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
12:20	0	0	0	0	0	0	12:20	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	4	4	0	0	0	23
12:25	0	0	0	0	0	0	12:25	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	6	6	0	0	0	34.5
12:30	3	3	0	0	0	17.25	12:30	6	6	0	0	0	34.5
Max Queue	3	3	0	0	0	17.25	Max Queue	6	6	0	0	0	34.5
12:35	0	0	0	0	0	0	12:35	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	4	4	0	0	0	23
12:40	0	0	0	0	0	0	12:40	0	0	0	0	0	0
Max Queue	6	4	0	0	1	34.5	Max Queue	1	1	0	0	0	5.75
12:45	4	4	0	0	0	23	12:45	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
12:50	0	0	0	0	0	0	12:50	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
12:55	0	0	0	0	0	0	12:55	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	1.5	0	1	0	0	8.625
13:00	0	0	0	0	0	0	13:00	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	3	3	0	0	0	17.25
13:05	0	0	0	0	0	0	13:05	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
13:10	0	0	0	0	0	0	13:10	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	3.5	2	1	0	0	20.125
13:15	0	0	0	0	0	0	13:15	0	0	0	0	0	0
Max Queue	7	4	2	0	0	40.25	Max Queue	0	0	0	0	0	0
13:20	7	4	2	0	0	40.25	13:20	0	0	0	0	0	0
Max Queue	7	4	2	0	0	40.25	Max Queue	0	0	0	0	0	0
13:25	0	0	0	0	0	0	13:25	2	2	0	0	0	11.5
Max Queue	2.5	1	1	0	0	14.375	Max Queue	0	0	0	0	0	0
13:30	0	0	0	0	0	0	13:30	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	1	1	0	0	0	5.75
13:35	0	0	0	0	0	0	13:35	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
13:40	0	0	0	0	0	0	13:40	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
13:45	0	0	0	0	0	0	13:45	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
13:50	0	0	0	0	0	0	13:50	0	0	0	0	0	0
Max Queue	13.3	11	0	1	0	76.475	Max Queue	0	0	0	0	0	0
13:55	0	0	0	0	0	0	13:55	0	0	0	0	0	0
Max Queue	14.3	12	0	1	0	82.225	Max Queue	0	0	0	0	0	0
14:00	0	0	0	0	0	0	14:00	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	7	7	0	0	0	40.25
14:05	0	0	0	0	0	0	14:05	0	0	0	0	0	0
Max Queue	8.3	6	0	1	0	47.725	Max Queue	0	0	0	0	0	0
14:10	0	0	0	0	0	0	14:10	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
14:15	1	1	0	0	0	5.75	14:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
14:20	0	0	0	0	0	0	14:20	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
14:25	0	0	0	0	0	0	14:25	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	3	3	0	0	0	17.25
14:30	0	0	0	0	0	0	14:30	0	0	0	0	0	0
Max Queue	3.3	1	0	1	0	18.975	Max Queue	0	0	0	0	0	0
14:35	0	0	0	0	0	0	14:35	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	0	0	0	0	0	0
14:40	0	0	0	0	0	0	14:40	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	4.3	2	0	1	0	24.725
14:45	0	0	0	0	0	0	14:45	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	6	6	0	0	0	34.5
14:50	0	0	0	0	0	0	14:50	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	7	7	0	0	0	40.25
14:55	0	0	0	0	0	0	14:55	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	0	0	0	0	0	0

12854 / SHENFIELD
MAY 2022
QUEUE LENGTH SURVEY

SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm C - Lane 1							Arm C - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
15:00	0	0	0	0	0	0	15:00	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	2	2	0	0	0	11.5
15:05	0	0	0	0	0	0	15:05	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0
15:10	0	0	0	0	0	0	15:10	0	0	0	0	0	0
Max Queue	16.3	14	0	1	0	93.725	Max Queue	0	0	0	0	0	0
15:15	0	0	0	0	0	0	15:15	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	4	4	0	0	0	23
15:20	0	0	0	0	0	0	15:20	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	4	4	0	0	0	23
15:25	0	0	0	0	0	0	15:25	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
15:30	0	0	0	0	0	0	15:30	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	3	3	0	0	0	17.25
15:35	3	3	0	0	0	17.25	15:35	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
15:40	0	0	0	0	0	0	15:40	0	0	0	0	0	0
Max Queue	13.5	12	1	0	0	77.625	Max Queue	0	0	0	0	0	0
15:45	0	0	0	0	0	0	15:45	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	2	2	0	0	0	11.5
15:50	0	0	0	0	0	0	15:50	0	0	0	0	0	0
Max Queue	6	3	2	0	0	34.5	Max Queue	4	4	0	0	0	23
15:55	0	0	0	0	0	0	15:55	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	4	4	0	0	0	23
16:00	0	0	0	0	0	0	16:00	0	0	0	0	0	0
Max Queue	12.6	8	0	2	0	72.45	Max Queue	0	0	0	0	0	0
16:05	4	4	0	0	0	23	16:05	0	0	0	0	0	0
Max Queue	5.5	4	1	0	0	31.625	Max Queue	6	6	0	0	0	34.5
16:10	0	0	0	0	0	0	16:10	0	0	0	0	0	0
Max Queue	15	15	0	0	0	86.25	Max Queue	2	2	0	0	0	11.5
16:15	4	4	0	0	0	23	16:15	1	1	0	0	0	5.75
Max Queue	23	23	0	0	0	132.25	Max Queue	0	0	0	0	0	0
16:20	0	0	0	0	0	0	16:20	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	4	4	0	0	0	23
16:25	0	0	0	0	0	0	16:25	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	2	2	0	0	0	11.5
16:30	0	0	0	0	0	0	16:30	0	0	0	0	0	0
Max Queue	13.5	12	1	0	0	77.625	Max Queue	0	0	0	0	0	0
16:35	0	0	0	0	0	0	16:35	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0
16:40	0	0	0	0	0	0	16:40	0	0	0	0	0	0
Max Queue	10	10	0	0	0	57.5	Max Queue	6	6	0	0	0	34.5
16:45	0	0	0	0	0	0	16:45	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2	2	0	0	0	11.5
16:50	0	0	0	0	0	0	16:50	0	0	0	0	0	0
Max Queue	12	12	0	0	0	69	Max Queue	0	0	0	0	0	0
16:55	0	0	0	0	0	0	16:55	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
17:00	0	0	0	0	0	0	17:00	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
17:05	0	0	0	0	0	0	17:05	0	0	0	0	0	0
Max Queue	5.3	3	0	1	0	30.475	Max Queue	2	2	0	0	0	11.5
17:10	0	0	0	0	0	0	17:10	0	0	0	0	0	0
Max Queue	20	16	0	0	2	115	Max Queue	7	7	0	0	0	40.25
17:15	20	16	0	0	2	115	17:15	7	7	0	0	0	40.25
Max Queue	26	26	0	0	0	149.5	Max Queue	2	2	0	0	0	11.5
17:20	0	0	0	0	0	0	17:20	3	3	0	0	0	17.25
Max Queue	4	4	0	0	0	23	Max Queue	3	3	0	0	0	17.25
17:25	0	0	0	0	0	0	17:25	0	0	0	0	0	0
Max Queue	13	13	0	0	0	74.75	Max Queue	7	7	0	0	0	40.25
17:30	2	2	0	0	0	11.5	17:30	3	3	0	0	0	17.25
Max Queue	0	0	0	0	0	0	Max Queue	6	4	0	0	1	34.5
17:35	0	0	0	0	0	0	17:35	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
17:40	1	1	0	0	0	5.75	17:40	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	6	6	0	0	0	34.5
17:45	1	1	0	0	0	5.75	17:45	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	3	3	0	0	0	17.25
17:50	0	0	0	0	0	0	17:50	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
17:55	2.5	1	1	0	0	14.375	17:55	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
18:00	0	0	0	0	0	0	18:00	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	5	5	0	0	0	28.75
18:05	3	3	0	0	0	17.25	18:05	2	2	0	0	0	11.5
Max Queue	7	7	0	0	0	40.25	Max Queue	0	0	0	0	0	0
18:10	0	0	0	0	0	0	18:10	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	6	6	0	0	0	34.5
18:15	0	0	0	0	0	0	18:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
18:20	0	0	0	0	0	0	18:20	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	5	5	0	0	0	28.75
18:25	0	0	0	0	0	0	18:25	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	0	0	0	0	0	0
18:30	0	0	0	0	0	0	18:30	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	2	2	0	0	0	11.5
18:35	0	0	0	0	0	0	18:35	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
18:40	0	0	0	0	0	0	18:40	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
18:45	0	0	0	0	0	0	18:45	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
18:50	0	0	0	0	0	0	18:50	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	7	7	0	0	0	40.25
18:55	0	0	0	0	0	0	18:55	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0

2 1

SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm D - Lane 1							Arm D - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
07:00	0	0	0	0	0	0	07:00	0	0	0	0	0	0
Max Queue	6.5	5	1	0	0	37.375	Max Queue	1	1	0	0	0	5.75
07:05	0	0	0	0	0	0	07:05	0	0	0	0	0	0
Max Queue	15	12	2	0	0	86.25	Max Queue	12	12	0	0	0	69
07:10	11	11	0	0	0	63.25	07:10	10	10	0	0	0	57.5
Max Queue	11	11	0	0	0	63.25	Max Queue	10	10	0	0	0	57.5
07:15	4	4	0	0	0	23	07:15	5	5	0	0	0	28.75
Max Queue	17.5	16	1	0	0	100.625	Max Queue	7.5	6	1	0	0	43.125
07:20	0	0	0	0	0	0	07:20	0	0	0	0	0	0
Max Queue	26.3	24	0	1	0	151.225	Max Queue	11	11	0	0	0	63.25
07:25	12	12	0	0	0	69	07:25	0	0	0	0	0	0
Max Queue	18	18	0	0	0	103.5	Max Queue	0	0	0	0	0	0
07:30	6	6	0	0	0	34.5	07:30	0	0	0	0	0	0
Max Queue	23.5	22	1	0	0	135.125	Max Queue	4	4	0	0	0	23
07:35	23.5	22	1	0	0	135.125	07:35	4	4	0	0	0	23
Max Queue	30	27	2	0	0	172.5	Max Queue	2	2	0	0	0	11.5
07:40	26.5	22	3	0	0	152.375	07:40	5	2	2	0	0	28.75
Max Queue	30	30	0	0	0	172.5	Max Queue	10	10	0	0	0	57.5
07:45	30.8	27	1	1	0	177.1	07:45	1	1	0	0	0	5.75
Max Queue	44	41	2	0	0	253	Max Queue	13.5	12	1	0	0	77.625
07:50	22.5	21	1	0	0	129.375	07:50	2	2	0	0	0	11.5
Max Queue	22.5	21	1	0	0	129.375	Max Queue	2	2	0	0	0	11.5
07:55	7.3	5	0	1	0	41.975	07:55	0	0	0	0	0	0
Max Queue	20	20	0	0	0	115	Max Queue	6.5	5	1	0	0	37.375
08:00	3	3	0	0	0	17.25	08:00	0	0	0	0	0	0
Max Queue	17	14	2	0	0	97.75	Max Queue	3	3	0	0	0	17.25
08:05	19.5	18	1	0	0	112.125	08:05	1	1	0	0	0	5.75
Max Queue	18	15	2	0	0	103.5	Max Queue	3.5	2	1	0	0	20.125
08:10	1	1	0	0	0	5.75	08:10	0	0	0	0	0	0
Max Queue	10	10	0	0	0	57.5	Max Queue	1	1	0	0	0	5.75
08:15	9.3	7	0	1	0	53.475	08:15	1.5	0	1	0	0	8.625
Max Queue	9	9	0	0	0	51.75	Max Queue	3	3	0	0	0	17.25
08:20	7	7	0	0	0	40.25	08:20	0	0	0	0	0	0
Max Queue	21	21	0	0	0	120.75	Max Queue	1	1	0	0	0	5.75
08:25	10	10	0	0	0	57.5	08:25	1	1	0	0	0	5.75
Max Queue	21.8	18	1	1	0	125.35	Max Queue	6	6	0	0	0	34.5
08:30	16	14	0	0	1	92	08:30	2	2	0	0	0	11.5
Max Queue	16	14	0	0	1	92	Max Queue	2	2	0	0	0	11.5
08:35	12	12	0	0	0	69	08:35	0	0	0	0	0	0
Max Queue	12	12	0	0	0	69	Max Queue	0	0	0	0	0	0
08:40	0	0	0	0	0	0	08:40	0	0	0	0	0	0
Max Queue	18	18	0	0	0	103.5	Max Queue	0	0	0	0	0	0
08:45	2	2	0	0	0	11.5	08:45	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	2	2	0	0	0	11.5
08:50	0	0	0	0	0	0	08:50	0	0	0	0	0	0
Max Queue	16	16	0	0	0	92	Max Queue	0	0	0	0	0	0
08:55	0	0	0	0	0	0	08:55	0	0	0	0	0	0
Max Queue	14	14	0	0	0	80.5	Max Queue	3	3	0	0	0	17.25
09:00	12	12	0	0	0	69	09:00	0	0	0	0	0	0
Max Queue	12	12	0	0	0	69	Max Queue	0	0	0	0	0	0
09:05	0	0	0	0	0	0	09:05	0	0	0	0	0	0
Max Queue	4.5	3	1	0	0	25.875	Max Queue	1.5	0	1	0	0	8.625
09:10	0	0	0	0	0	0	09:10	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	0	0	0	0	0	0
09:15	0	0	0	0	0	0	09:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
09:20	0	0	0	0	0	0	09:20	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	0	0	0	0	0	0
09:25	0	0	0	0	0	0	09:25	0	0	0	0	0	0
Max Queue	11	11	0	0	0	63.25	Max Queue	0	0	0	0	0	0
09:30	0	0	0	0	0	0	09:30	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
09:35	0	0	0	0	0	0	09:35	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1.5	0	1	0	0	8.625
09:40	0	0	0	0	0	0	09:40	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
09:45	0	0	0	0	0	0	09:45	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
09:50	0	0	0	0	0	0	09:50	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
09:55	0	0	0	0	0	0	09:55	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	0	0	0	0	0	0
10:00	0	0	0	0	0	0	10:00	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
10:05	0	0	0	0	0	0	10:05	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1.5	0	1	0	0	8.625
10:10	2	2	0	0	0	11.5	10:10	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	0	0	0	0	0	0
10:15	0	0	0	0	0	0	10:15	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
10:20	0	0	0	0	0	0	10:20	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	3	3	0	0	0	17.25
10:25	0	0	0	0	0	0	10:25	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0
10:30	2	2	0	0	0	11.5	10:30	1	1	0	0	0	5.75
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
10:35	0	0	0	0	0	0	10:35	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
10:40	0	0	0	0	0	0	10:40	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
10:45	0	0	0	0	0	0	10:45	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	0	0	0	0	0	0
10:50	0	0	0	0	0	0	10:50	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	3	3	0	0	0	17.25
10:55	0	0	0	0	0	0	10:55	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0

7 0

SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm D - Lane 1							Arm D - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
11:00	0	0	0	0	0	0	11:00	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	2.3	0	0	1	0	13.225
11:05	0	0	0	0	0	0	11:05	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0
11:10	0	0	0	0	0	0	11:10	0	0	0	0	0	0
Max Queue	9.5	8	1	0	0	54.625	Max Queue	0	0	0	0	0	0
11:15	4	4	0	0	0	23	11:15	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0
11:20	4	4	0	0	0	23	11:20	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0
11:25	0	0	0	0	0	0	11:25	0	0	0	0	0	0
Max Queue	4.5	3	1	0	0	25.875	Max Queue	0	0	0	0	0	0
11:30	0	0	0	0	0	0	11:30	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
11:35	0	0	0	0	0	0	11:35	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	1	1	0	0	0	5.75
11:40	0	0	0	0	0	0	11:40	0	0	0	0	0	0
Max Queue	4.5	3	1	0	0	25.875	Max Queue	0	0	0	0	0	0
11:45	0	0	0	0	0	0	11:45	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	3	3	0	0	0	17.25
11:50	0	0	0	0	0	0	11:50	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
11:55	1	1	0	0	0	5.75	11:55	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	0	0	0	0	0	0
12:00	1	1	0	0	0	5.75	12:00	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
12:05	0	0	0	0	0	0	12:05	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
12:10	1	1	0	0	0	5.75	12:10	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
12:15	1	1	0	0	0	5.75	12:15	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
12:20	0	0	0	0	0	0	12:20	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	1.5	0	1	0	0	8.625
12:25	0	0	0	0	0	0	12:25	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
12:30	2	2	0	0	0	11.5	12:30	1	1	0	0	0	5.75
Max Queue	3	3	0	0	0	17.25	Max Queue	3	3	0	0	0	17.25
12:35	0	0	0	0	0	0	12:35	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
12:40	0	0	0	0	0	0	12:40	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	1	1	0	0	0	5.75
12:45	2	2	0	0	0	11.5	12:45	0	0	0	0	0	0
Max Queue	8	8	0	0	0	46	Max Queue	0	0	0	0	0	0
12:50	0	0	0	0	0	0	12:50	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
12:55	1	1	0	0	0	5.75	12:55	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
13:00	2	2	0	0	0	11.5	13:00	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
13:05	0	0	0	0	0	0	13:05	0	0	0	0	0	0
Max Queue	9.5	8	1	0	0	54.625	Max Queue	4.3	2	0	1	0	24.725
13:10	1	1	0	0	0	5.75	13:10	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
13:15	1	1	0	0	0	5.75	13:15	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
13:20	0	0	0	0	0	0	13:20	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
13:25	2	2	0	0	0	11.5	13:25	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
13:30	0	0	0	0	0	0	13:30	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	0	0	0	0	0	0
13:35	0	0	0	0	0	0	13:35	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	0	0	0	0	0	0
13:40	0	0	0	0	0	0	13:40	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
13:45	2	2	0	0	0	11.5	13:45	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
13:50	0	0	0	0	0	0	13:50	0	0	0	0	0	0
Max Queue	4	2	0	0	1	23	Max Queue	0	0	0	0	0	0
13:55	0	0	0	0	0	0	13:55	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
14:00	0	0	0	0	0	0	14:00	0	0	0	0	0	0
Max Queue	9	9	0	0	0	51.75	Max Queue	0	0	0	0	0	0
14:05	0	0	0	0	0	0	14:05	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	3.5	2	1	0	0	20.125
14:10	0	0	0	0	0	0	14:10	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
14:15	0	0	0	0	0	0	14:15	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1.5	0	1	0	0	8.625
14:20	0	0	0	0	0	0	14:20	0	0	0	0	0	0
Max Queue	0	0	0	0	0	0	Max Queue	2.3	0	0	1	0	13.225
14:25	1	1	0	0	0	5.75	14:25	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	0	0	0	0	0	0
14:30	0	0	0	0	0	0	14:30	0	0	0	0	0	0
Max Queue	4	2	0	0	1	23	Max Queue	0	0	0	0	0	0
14:35	0	0	0	0	0	0	14:35	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75
14:40	1	1	0	0	0	5.75	14:40	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	3.3	1	0	1	0	18.975
14:45	2	2	0	0	0	11.5	14:45	0	0	0	0	0	0
Max Queue	12	12	0	0	0	69	Max Queue	1	1	0	0	0	5.75
14:50	7	7	0	0	0	40.25	14:50	0	0	0	0	0	0
Max Queue	9	9	0	0	0	51.75	Max Queue	0	0	0	0	0	0
14:55	0	0	0	0	0	0	14:55	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1	1	0	0	0	5.75

SITE: 1 DATE: 25/05/2022

LOCATION: A12 / A1023 Chelmsford Road / Roman Road DAY: WEDNESDAY

ANALYSIS: Queue at (i) each 5 minute interval and the (ii) Maximum Queue per 5 minute period

Arm D - Lane 1							Arm D - Lane 2						
Time	Total	Cars	OGV1	OGV2	PSV	Metres	Time	Total	Cars	OGV1	OGV2	PSV	Metres
15:00	0	0	0	0	0	0	15:00	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
15:05	3.5	2	1	0	0	20.125	15:05	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
15:10	0	0	0	0	0	0	15:10	0	0	0	0	0	0
Max Queue	11	11	0	0	0	63.25	Max Queue	1.5	0	1	0	0	8.625
15:15	1	1	0	0	0	5.75	15:15	0	0	0	0	0	0
Max Queue	6	6	0	0	0	34.5	Max Queue	0	0	0	0	0	0
15:20	0	0	0	0	0	0	15:20	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
15:25	0	0	0	0	0	0	15:25	0	0	0	0	0	0
Max Queue	5.5	4	1	0	0	31.625	Max Queue	0	0	0	0	0	0
15:30	0	0	0	0	0	0	15:30	0	0	0	0	0	0
Max Queue	3.3	1	0	1	0	18.975	Max Queue	0	0	0	0	0	0
15:35	0	0	0	0	0	0	15:35	0	0	0	0	0	0
Max Queue	1	1	0	0	0	5.75	Max Queue	1	1	0	0	0	5.75
15:40	1	1	0	0	0	5.75	15:40	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
15:45	5	5	0	0	0	28.75	15:45	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0
15:50	1	1	0	0	0	5.75	15:50	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
15:55	0	0	0	0	0	0	15:55	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0
16:00	0	0	0	0	0	0	16:00	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	5	5	0	0	0	28.75
16:05	2	2	0	0	0	11.5	16:05	1.5	0	1	0	0	8.625
Max Queue	6	6	0	0	0	34.5	Max Queue	1	1	0	0	0	5.75
16:10	0	0	0	0	0	0	16:10	0	0	0	0	0	0
Max Queue	7.5	6	1	0	0	43.125	Max Queue	0	0	0	0	0	0
16:15	1	1	0	0	0	5.75	16:15	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	2	2	0	0	0	11.5
16:20	0	0	0	0	0	0	16:20	0	0	0	0	0	0
Max Queue	3.5	2	1	0	0	20.125	Max Queue	1	1	0	0	0	5.75
16:25	1	1	0	0	0	5.75	16:25	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	0	0	0	0	0	0
16:30	0	0	0	0	0	0	16:30	0	0	0	0	0	0
Max Queue	5.5	4	1	0	0	31.625	Max Queue	4	4	0	0	0	23
16:35	1	1	0	0	0	5.75	16:35	0	0	0	0	0	0
Max Queue	2.5	1	1	0	0	14.375	Max Queue	1	1	0	0	0	5.75
16:40	0	0	0	0	0	0	16:40	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	1	1	0	0	0	5.75
16:45	1	1	0	0	0	5.75	16:45	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	1	1	0	0	0	5.75
16:50	0	0	0	0	0	0	16:50	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	0	0	0	0	0	0
16:55	0	0	0	0	0	0	16:55	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
17:00	0	0	0	0	0	0	17:00	0	0	0	0	0	0
Max Queue	10	10	0	0	0	57.5	Max Queue	0	0	0	0	0	0
17:05	1	1	0	0	0	5.75	17:05	1	1	0	0	0	5.75
Max Queue	8	8	0	0	0	46	Max Queue	1	1	0	0	0	5.75
17:10	0	0	0	0	0	0	17:10	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	1	1	0	0	0	5.75
17:15	0	0	0	0	0	0	17:15	0	0	0	0	0	0
Max Queue	8	8	0	0	0	46	Max Queue	0	0	0	0	0	0
17:20	0	0	0	0	0	0	17:20	0	0	0	0	0	0
Max Queue	8	8	0	0	0	46	Max Queue	1	1	0	0	0	5.75
17:25	6	6	0	0	0	34.5	17:25	2	2	0	0	0	11.5
Max Queue	6	6	0	0	0	34.5	Max Queue	2	2	0	0	0	11.5
17:30	0	0	0	0	0	0	17:30	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	0	0	0	0	0	0
17:35	0	0	0	0	0	0	17:35	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	2	2	0	0	0	11.5
17:40	3	3	0	0	0	17.25	17:40	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	3	3	0	0	0	17.25
17:45	0	0	0	0	0	0	17:45	0	0	0	0	0	0
Max Queue	12	12	0	0	0	69	Max Queue	2	2	0	0	0	11.5
17:50	3	3	0	0	0	17.25	17:50	0	0	0	0	0	0
Max Queue	3	3	0	0	0	17.25	Max Queue	3	3	0	0	0	17.25
17:55	0	0	0	0	0	0	17:55	1	1	0	0	0	5.75
Max Queue	0	0	0	0	0	0	Max Queue	2	2	0	0	0	11.5
18:00	1	1	0	0	0	5.75	18:00	0	0	0	0	0	0
Max Queue	6	4	0	0	1	34.5	Max Queue	0	0	0	0	0	0
18:05	0	0	0	0	0	0	18:05	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
18:10	0	0	0	0	0	0	18:10	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
18:15	0	0	0	0	0	0	18:15	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
18:20	0	0	0	0	0	0	18:20	0	0	0	0	0	0
Max Queue	5	5	0	0	0	28.75	Max Queue	1	1	0	0	0	5.75
18:25	1	1	0	0	0	5.75	18:25	0	0	0	0	0	0
Max Queue	7.5	6	1	0	0	43.125	Max Queue	0	0	0	0	0	0
18:30	2	2	0	0	0	11.5	18:30	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	1.5	0	1	0	0	8.625
18:35	0	0	0	0	0	0	18:35	1	1	0	0	0	5.75
Max Queue	1	1	0	0	0	5.75	Max Queue	2	2	0	0	0	11.5
18:40	0	0	0	0	0	0	18:40	0	0	0	0	0	0
Max Queue	7	7	0	0	0	40.25	Max Queue	1	1	0	0	0	5.75
18:45	0	0	0	0	0	0	18:45	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0
18:50	0	0	0	0	0	0	18:50	0	0	0	0	0	0
Max Queue	2	2	0	0	0	11.5	Max Queue	0	0	0	0	0	0
18:55	0	0	0	0	0	0	18:55	0	0	0	0	0	0
Max Queue	4	4	0	0	0	23	Max Queue	0	0	0	0	0	0

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Vehicle Type	PCU VALUES
Car/Taxi/Lgv	1
Other Goods Vehicle - OGV1	1.5
Other Goods Vehicle - OGV2	2.3
Coach/PSV	2
Motorcycle - MCL	0.4
Pedal Cycle - PCL	0.2

Contact

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