

## Gartree 2

### Transport Assessment

Mace (on behalf of Ministry of Justice)

12/08/2021

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### Client signoff

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# Non-Technical Summary

## Planning Application Overview

Atkins has been commissioned to support an Outline Planning Application for a Category B Adult Male Resettlement Prison located to the south of HMP Gartree in Leicestershire. The Prison will have capacity for up to 1,715 prisoners and up to 858 staff will be employed at the site (both uniformed and non-uniformed).

## Measuring Transport Impacts

The Outline Planning Application will be supported by a Transport Assessment, Travel Plan and Construction Traffic Management Plan. The Transport Assessment considers the impact of the Prison on the existing transport network and seeks to understand the number of trips that are expected to be generated by staff and visitors. The Outline Travel Plan provides a strategy for reducing single occupancy car trips and promoting sustainable transport for staff and visitors. The Construction Traffic Management Plan focusses on impacts during the construction phase and identifies how the impact on the existing transport network can be reduced.

## COVID-19

It is well known that COVID-19 has impacted the way that people travel. The Transport Assessment required information on how many vehicles are using nearby roads. Traffic surveys were undertaken in June 2021. To ensure that the data collected in 2021 is representative of traffic flows prior to COVID-19, the traffic surveys have been validated against historic traffic data from 2017 and 2018 (provided by Leicestershire County Council).

## Prison Access

Access to the Prison will be from Welland Avenue and all traffic associated with the Prison will be required to arrive/depart via Foxton Road to reduce the impact on Gartree Village.

## Staff and Visitors

It is assumed that there will be 672 vehicles arriving at the Prison every day, these vehicles will also depart on the same day, therefore totalling 1,344 trips per day.

Considering shift patterns, legal visits and visiting times, the busiest time of day is expected to be between 07:00-08:00 in the morning (226 trips) and 17:00-18:00 in the evening (257). Using 2011 Census data, it is expected that approximately 45% of trips would access the Prison from the south (via the A4304) and 55% would access the Prison from the north (via Gallow Field Road).

## Car Parking

The demand for parking has been assessed by considering the number of staff and visitors arriving at and departing the Prison throughout the day. This, along with the availability of existing public transport provision and examining the travel characteristics for the area, has demonstrated that a maximum of 506 parking spaces are required at any one time. The Prison will provide 523 car parking spaces, which includes 16 disabled spaces, 53 electric vehicle charging spaces and 27 car sharing spaces.

## Transport Impacts and Mitigation

The Transport Assessment has considered the impact of vehicles associated with the Prison on the transport network. This has included a review of queues and delays on the existing roads. The analysis has demonstrated that the existing roads will continue to operate within capacity once the Prison is operational.

It is proposed to introduce a highway improvement scheme along the southern section of Welland Avenue. The scheme will include new carriageway markings and signage, the introduction of traffic calming measures and the construction of new pedestrian footways. The purpose of this scheme is to improve pedestrian access along Welland Avenue and to ensure that all traffic associated with the Prison arrives and departs via Foxton Road.

# 1. Introduction

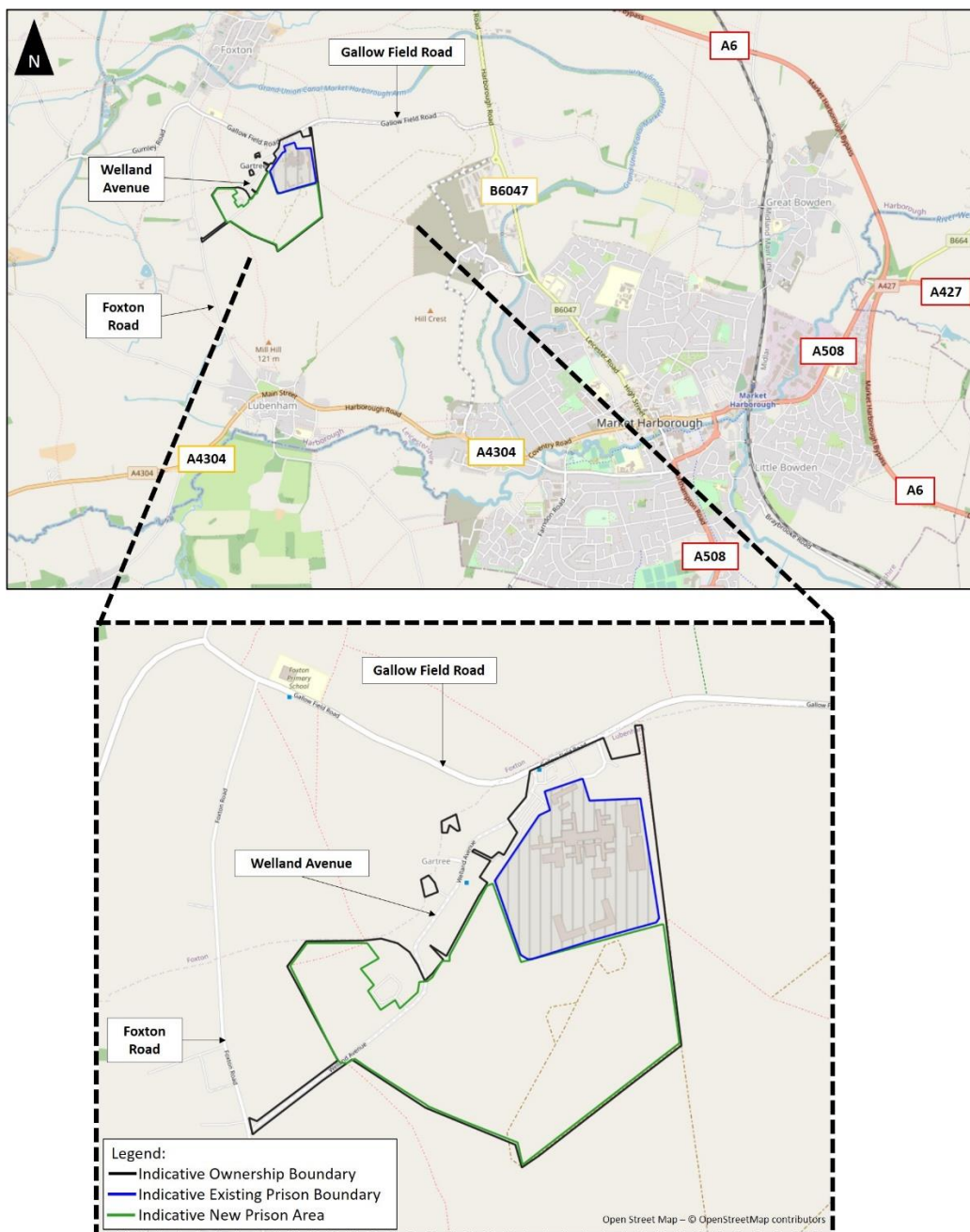
## 1.1. Background

The Ministry of Justice (MoJ) and the National Offender Management Service (NOMS) have appointed consultants to prepare the documents required for the submission of an Outline Planning Application (OPA) to support a new prison (referred to as Gartree 2) located adjacent to the existing HMP Gartree, in Leicestershire.

Atkins has been commissioned to prepare a Transport Assessment (TA), Outline Travel Plan (OTP), and Framework Construction Traffic Management Plan (CTMP) to support the OPA. Gartree 2 is proposed to be a Category B Adult Male resettlement prison with a capacity of up to 1,715 located on land to the south of HMP Gartree.

The site location is outlined on Figure 1-1.

**Figure 1-1 - Site Location Plan**



## 1.2. Report Purpose

The purpose of this TA is to evaluate the transportation aspects of the development proposals and consider the existing highway network and sustainable transport provision within the vicinity of the proposed development. This TA has been prepared in accordance with 'Travel Plans, Transport Assessments and Statements' guidance from the Ministry of Housing, Communities & Local Government.

This TA should be read in conjunction with the OTP and Framework CTMP for the proposed development.

## 1.3. Pre-Application Highways Discussions

Pre-Application scoping discussions were undertaken with Leicestershire County Council (LCC) and Harborough District Council (HDC) at the start of the project. As the project has developed, we have sought to engage in further discussion with LCC and HDC prior to the submission of the application. Further details in relation to the pre-application scoping discussions are shown in Table 1-1.

**Table 1-1 - Pre-Application Highways Summary**

Date / Location	Items Discussed
2 <sup>nd</sup> February 2021 (Microsoft Teams)	<ul style="list-style-type: none"> <li>• Atkins presented the proposed Trip Generation/ Assignment Methodology to LCC.</li> <li>• Atkins discussed the availability of historic traffic data with LCC due to the ongoing impact of COVID-19.</li> <li>• LCC confirmed that they did not envisage any highway capacity issues in the vicinity of the development site.</li> <li>• LCC confirmed that Atkins should use TEMPro to account for any background traffic growth.</li> <li>• LCC confirmed that Atkins should consider the historic accident record at the Harborough Road/ Gallow Field Road/ Leicester Lane junction and the Gallow Field Road/ Foxton Road junction.</li> </ul>
3 <sup>rd</sup> June 2021 (Microsoft Teams)	<ul style="list-style-type: none"> <li>• Following confirmation that LCC were issuing Survey Permits again, Atkins confirmed that they had commissioned Traffic Surveys to be undertaken in June 2019.</li> <li>• LCC confirmed that Welland Avenue is unadopted and therefore LCC do not have any concerns relating to the proposed site access.</li> <li>• HDC raised concerns regarding the additional traffic movements along Welland Avenue. Particularly in relation to the impact on the existing residential properties to the north of Welland Avenue (Gartree).</li> <li>• Both LCC and HDC requested that HGVs access the site via the A4303 to the south to avoid the Gallow Field Road/ Foxton Road junction.</li> <li>• Atkins confirmed that they would present the findings of the Standalone Junction Capacity Assessment during the next meeting on the 8<sup>th</sup> July 2021.</li> </ul>
8 <sup>th</sup> July 2021 (Microsoft Teams)	<ul style="list-style-type: none"> <li>• Atkins presented the traffic assessment scenarios.</li> <li>• Atkins presented the findings of the Standalone Junction Capacity Assessment. The analysis demonstrated that the Prison would not have a material impact on the existing highway network.</li> <li>• Atkins confirmed that following engagement with residents along Welland Avenue, it was proposed to access the site via Foxton Road to the south. LCC stated that whilst Welland Avenue is unadopted, LCC would like to see the details of any proposals along Welland Avenue within the TA.</li> <li>• LCC asked Atkins to consider the impact of the Prison on Foxton Primary School, specifically in terms of additional traffic routing along Gallow Field Road. Atkins agreed to present the findings at the next meeting on the 5<sup>th</sup> August 2021.</li> </ul>

5<sup>th</sup> August 2021  
(Microsoft Teams)

- Atkins presented the Network Peak Hour and Development Peak Hour Trip Generation at the Harborough Road/ Gallow Field Road/ Leicester Lane junction and the Gallow Field Road/ Foxtton Road junction. The analysis demonstrated that the Development Peak occurs outside of the Network Peak at both locations.
- Atkins also discussed the impact of the Prison on Foxtton Primary School. Atkins confirmed that the Development Peak occurs outside of the School Operational Hours and that following a review of the historic accident records there have been zero accidents at this location within the latest 5-year period.
- Atkins confirmed that the MoJ do not propose to introduce any off-site highway mitigation as a result of the proposed development.
- Atkins confirmed that the MoJ proposed to introduce a highway improvement scheme along Welland Avenue to reduce vehicle speeds and improve pedestrian access.

## 1.4. Report Structure

This report includes the following sections:

- **Section 2** provides a review of relevant national and local policy and guidance;
- **Section 3** describes the baseline conditions, in terms of the local highway network, personal injury accident (PIA) data and multi-modal accessibility;
- **Section 4** provides details of the proposed development, including site access arrangements;
- **Section 5** discusses the estimated trip generation and assignment;
- **Section 6** provides details of the parking provision at the proposed development;
- **Section 7** summarises the impact of the development proposals;
- **Section 8** provides a summary of the mitigation proposals; and
- **Section 9** summarises the findings and conclusions.



## 2. Planning Policy and Guidance

### 2.1. Introduction

This Chapter provides a review of the transportation policy that is considered relevant to the proposed development at a national and local level. The following documents have been included in this review:

- National Policy:
  - National Planning Policy Framework (NPPF)
- Local Policy and Guidance:
  - Harborough Local Plan 2011- 2031;
  - Leicestershire County Council Local Transport Plan 2011-2026; and
  - Leicestershire Highway Design Guide.

### 2.2. National Policy

#### 2.2.1. National Planning Policy Framework (NPPF) (2021)

The NPPF was first published in March 2012, updated in February 2019, and revised in July 2021. It sets out the government's planning policies for England and how these are expected to be applied. The NPPF aims to make the planning system more accessible, and to promote sustainable growth. It replaces all the previous Planning Policy Statements (PPSs) and Planning Policy Guidance (PPGs) including PPG13 (Transport) and PPS3 (Residential).

The NPPF states that significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be considered in both plan-making and decision-making (Paragraph 105. Section 9).

The NPPF states that planning policies should:

- Support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities (Paragraph 106.a. Section 9);
- Be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned (Paragraph 106.b. Section 9);
- Identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development (Paragraph 106.c. Section 9);
- Provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking (drawing on Local Cycling and Walking Infrastructure Plans) (Paragraph 106.d. Section 9); and
- Provide for any large-scale transport facilities that need to be in the area, and the infrastructure and wider development required to support their operation, expansion, and contribution to the wider economy (Paragraph 106.e. Section 9).

The NPPF states that in assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location (Paragraph 110.a. Section 9);
- Safe and suitable access to the site can be achieved for all users (Paragraph 110.b. Section 9);

- The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code (Paragraph 110.c. Section 9); and
- Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree (Paragraph 110.d. Section 9).

The NPPF also states that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe (Paragraph 111. Section 9).

Within this context, applications for development should:

- Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second—so far as possible—to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use (Paragraph 112.a. Section 9);
- Address the needs of people with disabilities and reduced mobility in relation to all modes of transport (Paragraph 112.b. Section 9);
- Create places that are safe, secure, and attractive—which minimise the scope for conflicts between pedestrians, cyclists, and vehicles, avoid unnecessary street clutter, and respond to local character and design standards (Paragraph 112.c. Section 9);
- Allow for the efficient delivery of goods, and access by service and emergency vehicles (Paragraph 112.d. Section 9); and
- Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations (Paragraph 112.e. Section 9).

All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a Transport Statement or Transport Assessment so that the likely impacts of the proposal can be assessed (Paragraph 113. Section 9).

## 2.3. Local Policy & Guidance

### 2.3.1. Leicestershire County Council Local Transport Plan 3 2011 – 2026

The Leicestershire County Council Local Transport Plan 3 (LTP3) sets out how Leicestershire will manage and develop the County's transport system for the period up to 2026 and focuses on the strategic approach which will be adopted. The long-term vision for the county's transport system over the course of LTP3 is for Leicestershire to be recognised as a place that has, with the help of its residents and businesses, a first class transport system that enables economic and social travel in ways that improve people's health, safety and prosperity, as well as their environment and their quality of life.

The LTP3 identifies a series of strategic goals which the success the LTP3 strategy will be based on:

1. A transport system that supports a prosperous economy and provides successfully for population growth;
2. An efficient, resilient and sustainable transport system that is well managed and maintained;
3. A transport system that helps to reduce the carbon footprint of Leicestershire;
4. An accessible and integrated transport system that helps promote equality of opportunity for all our residents;
5. A transport system that improves the safety, health and security of our residents; and
6. A transport system that helps to improve the quality of life for our residents and makes Leicestershire a more attractive place to live, work and visit.

It is the intention that the delivery of strategic the transport goals will result in improved outcomes for the people of Leicestershire including:

- A transport system that provides more consistent, predictable and reliable journey times for the movement of people and goods;

- A transport system and its assets which are effectively managed and well maintained;
- A transport system that is resilient to the impacts of climate change;
- The negative impact of our transport system on the environment and individuals is reduced;
- More people walk, cycle and use public transport as part of their daily journeys, including to access key services;
- Effective and integrated public and community transport provision, including targeted and innovative travel solutions which meet the essential needs of Leicestershire residents;
- The number of road casualties is reduced;
- There is improved satisfaction with the transport system amongst both users and residents; and
- The natural environment can be accessed easily and efficiently, particularly by bike or on foot.

Encouraging active and sustainable travel will help to meet the county's transportation, health and wellbeing, and environmental targets. The LPT3 seeks to increase uptake of active and sustainable travel by:

- Working through the planning system to seek to reduce the need to travel;
- Improve the quality of the walking, cycling and public transport services, facilities and infrastructure on offer across the County;
- Increase efforts to influence travel choices and raise the awareness of residents and businesses about the impacts of their travel behaviour on the environment, and people's health and quality of life. Travel marketing and promotion and travel planning have been identified as key measures to achieve this; and
- Encouraging less polluting travel by car.

### 2.3.2. **Harborough Local Plan 2011 – 2031**

The Harborough Local Plan explains how the Harborough District will change and develop over the plan period up to 2031. The Local Plan explains how much and what types of development will take place in the district, where it will be built and how and when it will be delivered. New growth across Harborough District needs to be 'sustainable' by supporting the local economy, providing social benefits, protecting and enhancing the natural and built environment, and reducing the need to travel particularly by private car.

The Local Plan provides an overall vision for the District, a number of specific objectives and a detailed set of policies to explain how the vision and objectives will be achieved. The vision is that in 2031, the Harborough District will be a vibrant, safe and prosperous place which retains its identity as a predominantly rural area of villages and market towns where local communities enjoy a high quality of life, and improved its resilience to the impacts of climate change. The Local Plan prioritises locating new development in the most sustainable locations within the District, and providing increased provision for walking and cycling, and improved access to public transport for new developments to help contribute to a reduction in the District's carbon footprint. The main areas of focus for development are Market Harborough and Lutterworth, settlements near to the edge of Leicester, Broughton Astley and the rural centres.

Objective 10 of the Local Plan is to provide greater opportunities to reduce car use, thereby reducing the impacts of road traffic on local communities, the environment and air quality. This objective can be achieved through the Local Plan by locating development where there is good access to jobs, services, and facilities, and by supporting improvements in public transport, walking and cycling networks.

Policy IN2 Sustainable Transport aims to assist in the delivery of the goals and outcomes of the Leicestershire County Council Local Transport Plan 2 (2011-2026). Development proposals should seek to incorporate the following sustainable transport measures to their application:

- Maximise the use and efficiency of existing transport facilities and where necessary provide mitigating measures to deal with the impacts of development on the transport network, both within and outside the District;
- Measures to facilitate and encourage safe access by cycle and on foot;
- Protection of, connection to, and extension where practicable of existing pedestrian, cycle and equestrian routes;
- Provision for public transport enhancement where justified, including information and waiting facilities and measures to encourage public transport use; and



- Provision of electric vehicle recharging facilities where appropriate.

### 2.3.3. Leicestershire Highway Design Guide

The Leicestershire Highway Design Guide provides a set of design principles for the design of new developments. The design guide complements the guidance contained in Manual for Streets. The Highway Design Guide provides detail on parking provision in relation to new developments. Parking provision should be considered in relation to any transport assessment and travel plan associated with a development proposal.

Parking standards are provided for a prison in the Highway Design Guide. Where no parking standard is given for a particular development land use the following factors are taken into consideration to determine parking provision:

- The control of on-street parking in the area;
- The development's exact nature and likely use;
- Its geographical location;
- The standard of the surrounding road network and the traffic and parking conditions on it;
- How accessible the development is using other methods of transport, including public transport, walking or cycling; and
- For all non-residential developments, disabled parking should be provided in addition to the general parking provision.

Cycle parking standards are also provided for new developments. The guidance states that cycle parking must:

- Be secure and normally with weather protection provided at least for employee parking;
- Be conveniently located at entrances to buildings;
- Enjoy good natural observation;
- Be well lit; and
- Be located so it does not obstruct pedestrian and cycle routes.

## 2.4. Policy Summary

This TA has been prepared in line with the national and local policy context outlined above, and in accordance with 'Travel Plans, Transport Assessments and Statements' guidance from the Ministry of Housing, Communities & Local Government.

### 3. Baseline Conditions

#### 3.1. Introduction

This section of the TA outlines the baseline conditions in the vicinity of the proposed development, including a review of the site location, local transport network, existing levels of accessibility and local sustainable transport links.

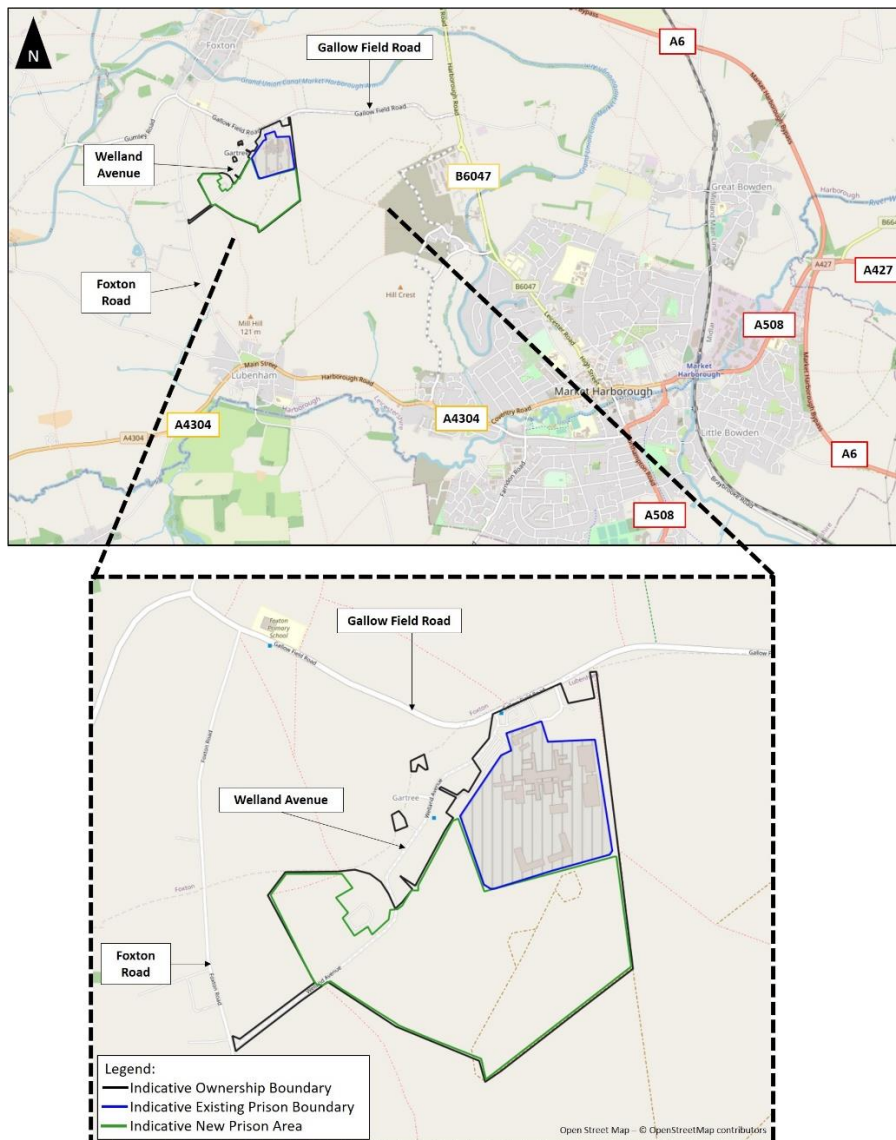
#### 3.2. Site Location and Existing Use

The development site is located in Gartree, Leicestershire, north west of Market Harborough. Gartree 2 is proposed to be located on land to the south of HMP Gartree. HMP Gartree is a Category B men’s prison with a capacity of approximately 700 inmates. There is an existing staff and visitor car park for HMP Gartree which is accessed off Gallow Field Road/ Welland Avenue.

#### 3.3. Local Highway Network

The location of the proposed development in the context of the surrounding highway network is illustrated on Figure 3-1.

Figure 3-1 - Local Highway Network



### 3.3.1. Welland Avenue

HMP Gartree is accessed via Welland Avenue, a private road subject to a 15mph speed limit. Welland Avenue also provides access to a number of residential properties in Gartree. Welland Avenue is accessed from Gallow Field Road via a priority controlled junction to the north and Foxtton Road via a priority controlled junction to the south. Welland Avenue is approximately 5.7m wide.

### 3.3.2. Gallow Field Road

Gallow Field Road is a single carriageway road which runs east to west and is subject to the national speed limit. Gallow Field Road provides access between the village of Foxtton to the west, and the B6047 Harborough Road to the east. On the approach to Foxtton Primary School from both directions, there is a school safety zone in place which restricts vehicle speeds to 20mph and is operational during the AM and PM School Peaks. Gallow Field Road is subject to a 7.5 tonne weight limit restriction except for loading vehicles.

There is no pedestrian infrastructure provision located along Gallow Field Road between Welland Avenue and the B6047 Harborough Road. There is an unlit footway located to the west of Welland Avenue along the westbound side of the carriageway, which provides pedestrian access to the village of Foxtton and Foxtton Primary School.

An Automatic Traffic Count (ATC) was undertaken in June 2021 along Gallow Field Road between Welland Avenue and the B6047 Harborough Road junction. The ATC data included the 85<sup>th</sup> percentile speeds. Throughout the duration of the survey period the 85<sup>th</sup> percentile speed was 55.8mph eastbound and 54.9mph westbound. The ATC data is provided in Appendix A.

The two-way Annual Average Daily Traffic (AADT) along Gallow Field has been calculated for the 2021 Baseline (see Table 3-1). Further information with regards to how the 2021 Baseline has been calculated is provided in Section 7 of this report.

**Table 3-1 - Gallow Field Road Two-Way AADT (2021)**

Link Name	AADT
Gallow Field Road, west of Harborough Road / Leicester Lane / Gallow Field Road Junction	3,220
Gallow Field Road, east of Gallow Field Road / Welland Avenue Junction	3,219
Gallow Field Road, west of Gallow Field Road / Welland Avenue Junction	2,792
Gallow Field Road, east of Gallow Field Road / Foxtton Road Junction	2,778

### 3.3.3. Foxtton Road

Foxtton Road is a single carriageway road which provides access between the village of Foxtton to the north and the village of Lubenham to the south. Foxtton Road is subject to national speed limit between the Gallow Field Road/ Foxtton Road junction and the village of Lubenham. Foxtton Road is subject to a 30mph speed limit between Lubenham and the A4304. Welland Avenue, which provides access to HMP Gartree, forms a priority controlled junction with Foxtton Road. Foxtton Road is subject to a 7.5 tonne weight limit restriction except for loading vehicles. There is no pedestrian infrastructure located along Foxtton Road between Foxtton and Lubenham.

An ATC was undertaken in June 2021 along Foxtton Road between Welland Avenue and the village of Lubenham. The ATC data included the 85<sup>th</sup> percentile speeds. Throughout the duration of the survey period the 85<sup>th</sup> percentile speed was 59.7 mph northbound and 56.7 mph southbound. The ATC data is provided in Appendix A.

The two-way AADT along Foxtton Road has been calculated for the 2021 Baseline (see Table 3-2).

**Table 3-2 - Foxtton Road Two-Way AADT (2021)**

Link Name	AADT
Foxtton Road, south of Gallow Field Road / Foxtton Road Junction	2,503
Foxtton Road, north of Foxtton Road / Welland Avenue Junction	2,516
Foxtton Road, south of Foxtton Road / Welland Avenue Junction	2,654
Foxtton Road, north of A4304 Main Street / Foxtton Road Junction	3,753

### 3.3.4. A4304

The A4304 Harborough Road is a single carriageway which provides access between Market Harborough to the east and M1 Junction 20 to the west. The A4304 is subject to a 30mph speed limit through the village of Lubenham.

### 3.3.5. B6047

The B6047 is a single carriageway which runs north to south and provides access between Market Harborough to the south and the A6 to the north. The A6 and A4304 provide access to the wider Strategic Road Network (SRN) around Market Harborough, including the A508 and A427. The B6047 is subject to a 50mph speed limit in the vicinity of the B6047/ Leicester Lane / Gallow Field Road junction.

## 3.4. Sustainable Transport

This section summarises the existing sustainable transport provision in the vicinity of the site.

### 3.4.1. Pedestrian Access

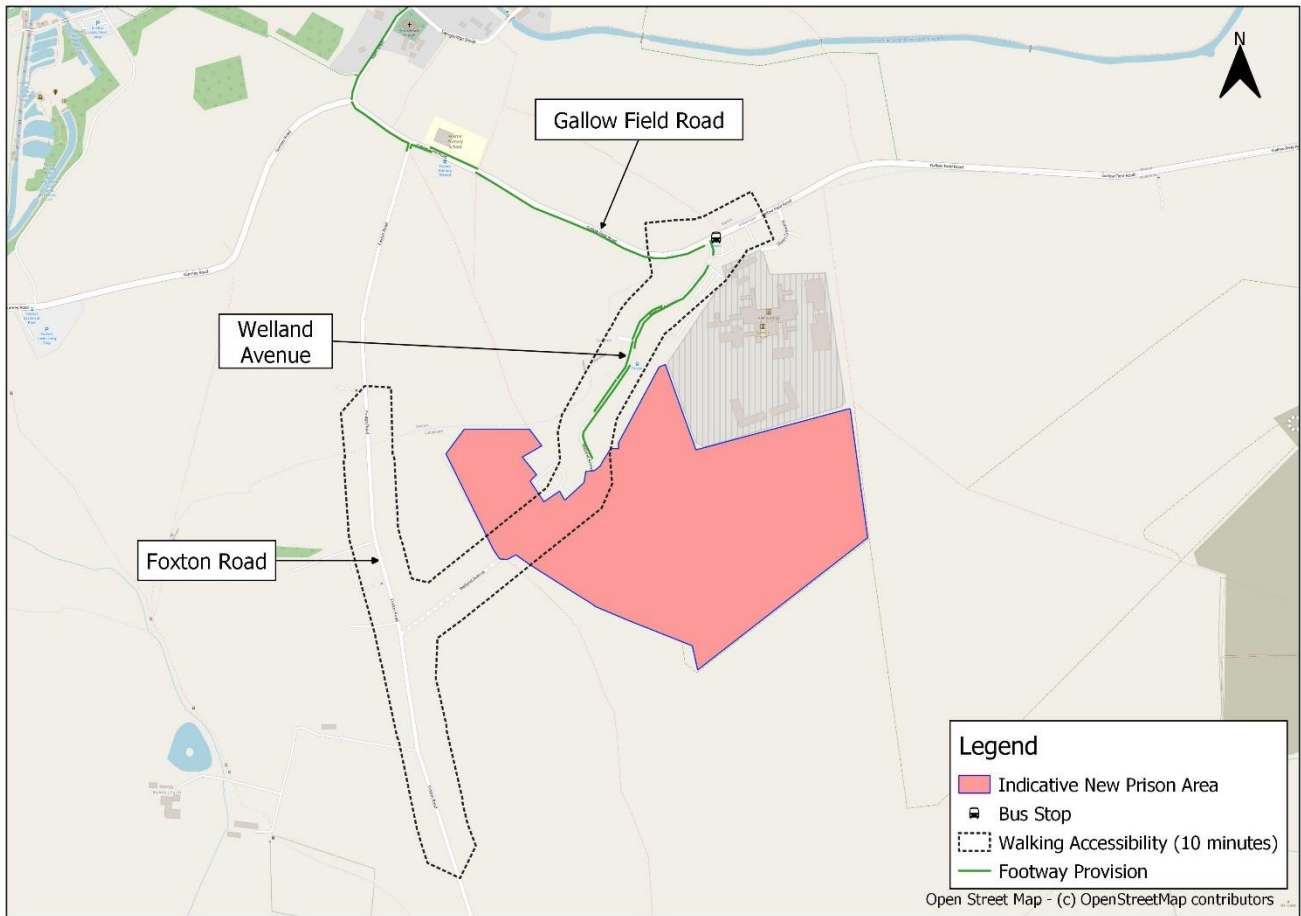
Pedestrian access to local amenities within the vicinity of the proposed development is limited. Figure 3-2 demonstrates that within a 10-minute walk of the development site, based on a walking speed of 1.4m/s<sup>1</sup>, pedestrians can reach the bus stops located on Welland Avenue and Gallow Field Road.

In terms of footway provision in the vicinity of the proposed development, footways are shown on Figure 3-2. There is footway provision along Welland Avenue between the Gallow Field Road / Welland Avenue junction and the southern end of the residential properties on Welland Avenue. There are also footways along the westbound carriageway of Gallow Field Road providing pedestrian access between the Gallow Field Road / Welland Avenue junction to Foxton Primary School and Foxton Village. However, there are no footways along Foxton Road, Gallow Field Road to the east of the Gallow Field Road / Welland Avenue junction, or Welland Avenue between the Foxton Road / Welland Avenue junction and the start of the residential properties.

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<sup>1</sup> Providing for Journeys on Food (CIHT)

**Figure 3-2 - Walking Accessibility**



### 3.4.2. Cycle Access

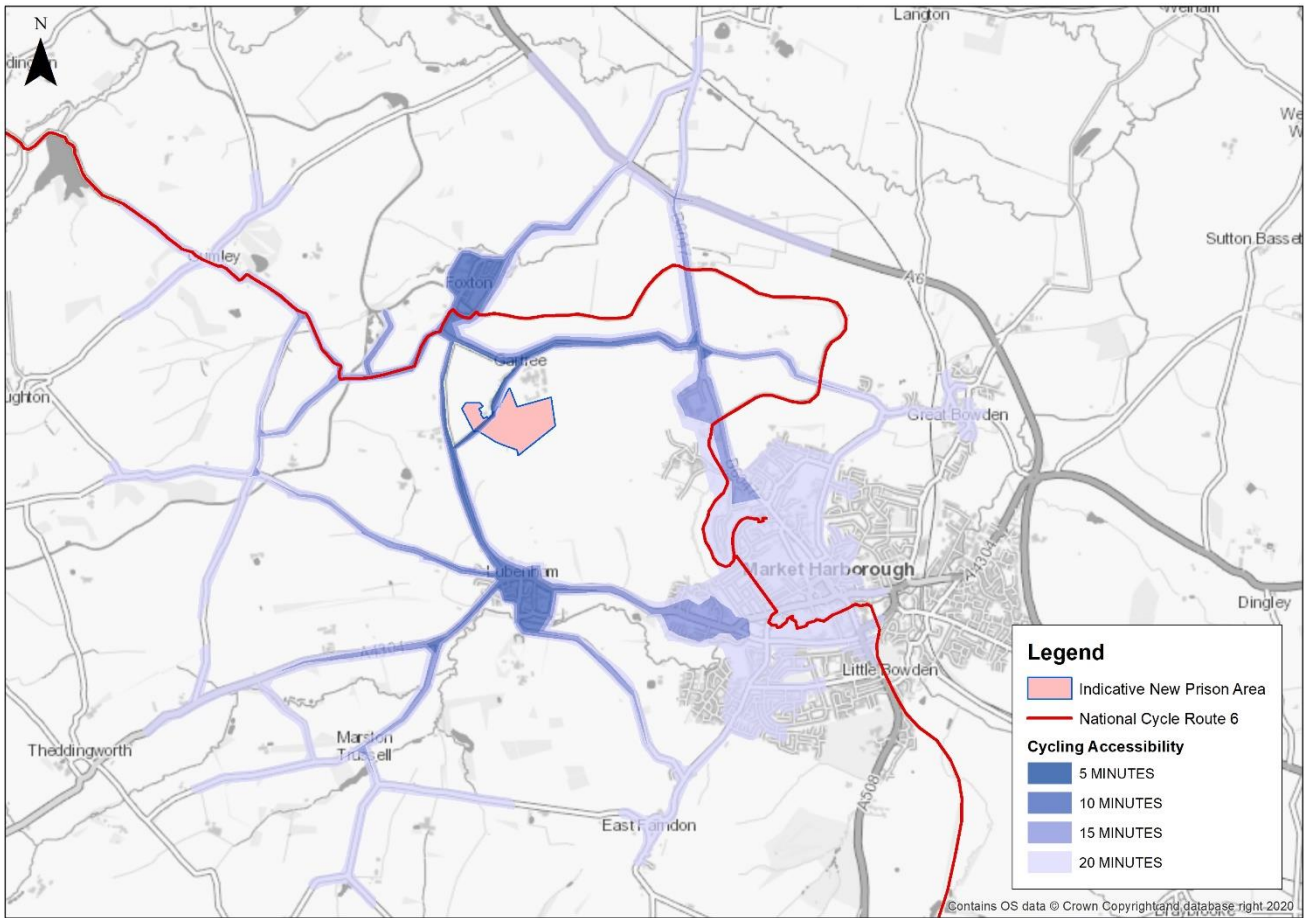
Figure 3-3 shows that based on a cycling speed of 4.4m/s<sup>2</sup>, a cyclist would be able to reach the villages of Foxton and Lubenham within a 10-minute cycle of the site, and Market Harborough within a 20-minute cycle of the site. However, there is limited formal cycle infrastructure on the immediate highway network and therefore cyclists would be required to use the existing local highway network.

National Cycle Route (NCR) 6 is a long-distance route running from London to the Lake District, with a mixture of on-road and off-road cycle provision. From Market Harborough, NCR 6 routes along the Grand Union Canal to reach Foxton Locks. The NCR provides on-road provision from Foxton Locks to south Leicester. NCR 6 can be accessed from the proposed development at the junction of Gallow Field Road/ Gumley Road/ Main Street within a 10-minute cycle of the site.

<sup>2</sup> Sustrans, Cycle Friendly Employers' Information Sheet



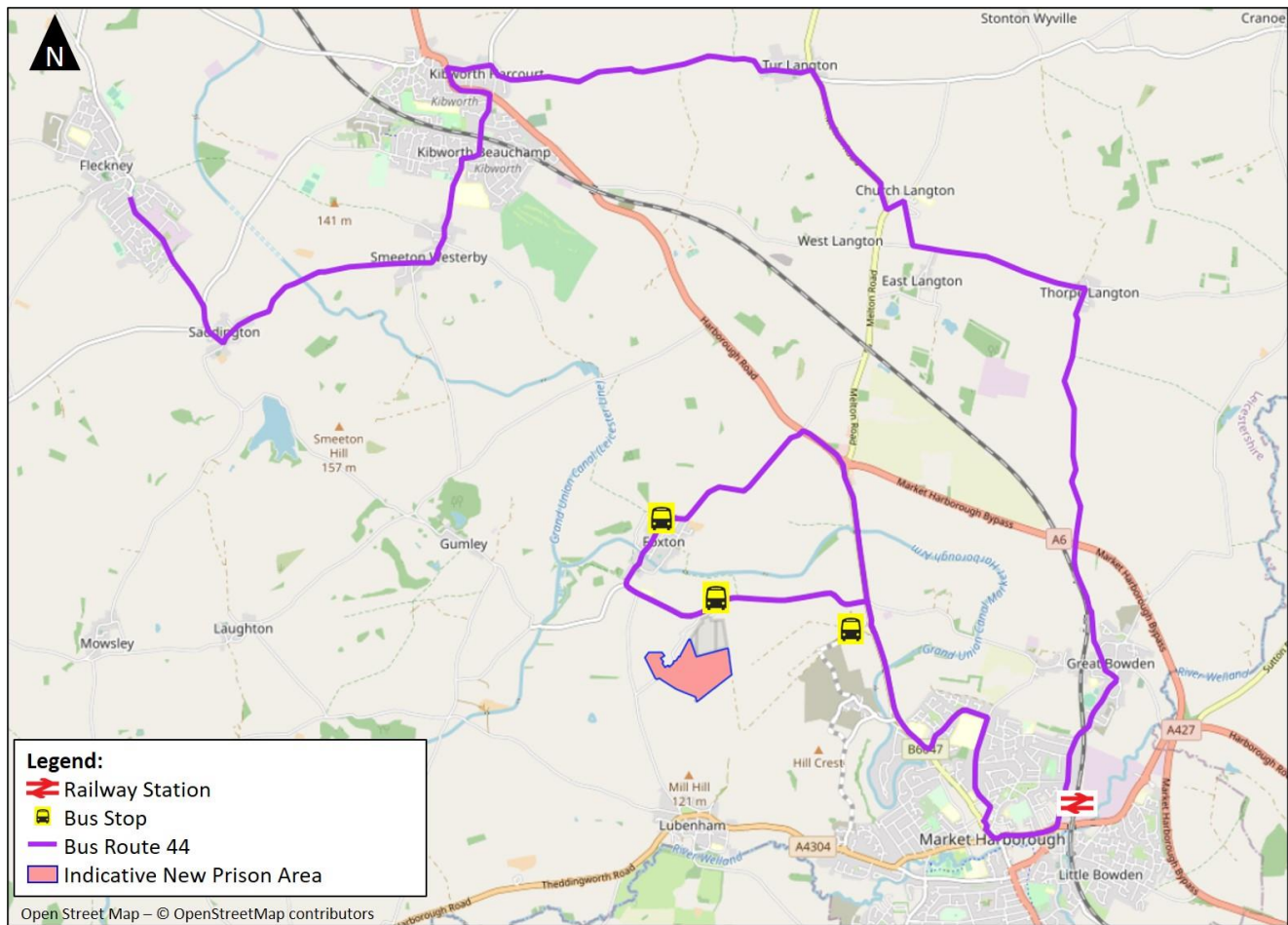
Figure 3-3 - Cycling Accessibility



### 3.4.3. Public Transport

This section summarises the public transport provision in the vicinity of the site, including bus and rail services. A summary of the existing public transport provision is outlined on Figure 3-4.

Figure 3-4 - Public Transport Provision



3.4.3.1. Bus

The site is served by the number 44 bus service, which travels between Fleckney, Market Harborough, and Foxtan. The service operates once every one to two hours Monday – Saturday, with no Sunday service, further service information is provided in Table 3-3.

It is important to note that the existing 44 bus route operates a one-way loop from the B6047 Harborough Road/ Gallow Field Road/ Leicester Lane junction around Foxtan and Gartree. The service from Market Harborough towards Foxtan routes via Langton Road, and does not route via Gartree. The nearest bus stop to the proposed development is Gartree, located on Gallow Field Road, as shown on Figure 3-4.

Table 3-3 - Bus Services

Route	Bus Stop Location	Monday – Saturday First/Last Service	Monday – Saturday Frequency	Sunday Service
<b>44 (Centrebuss) – Fleckney – Kibworth – Thorpe Langton – Market Harborough - Foxtan</b>				
Towards Market Harborough and Fleckney	Gartree, Gallow Field Road	First Service: 06:48 Last Service: 18:18	One service every 1-2 hours	No Service

Source: Centrebuss, (data obtained 13/07/2021)

### 3.4.3.2. Rail

The nearest Railway Station to the proposed development is Market Harborough Railway Station as shown in Figure 3-4. The Railway Station is located in excess of a 20-minute cycle from the proposed development. However, the number 44 bus service serves Market Harborough Railway Station.

Market Harborough Railway Station is well served by regular train services operated by East Midlands Railway to London St Pancras International, Nottingham, Leicester, Kettering, and Bedford. Further information is provided in Table 3-4. The station is managed by East Midlands Railway and has 219 parking spaces within the Railway Station car park. The station also has 36 cycle parking spaces.

**Table 3-4 - Rail Services**

Destination	Average Journey Time	Monday – Friday First/Last Service	Monday – Friday Frequency	Saturday First/Last Service	Saturday Frequency	Sunday First/Last Service	Sunday Frequency
Leicester	12 minutes	<i>First Service:</i> 05:38 <i>Last Service:</i> 23:50	2 services per hour	<i>First Service:</i> 05:36 <i>Last Service:</i> 23:29	2 services per hour	<i>First Service:</i> 10:32 <i>Last Service:</i> 23:34	2 services per hour
Nottingham	44 minutes	<i>First Service:</i> 06:18 <i>Last Service:</i> 23:50	2 services per hour	<i>First Service:</i> 06:20 <i>Last Service:</i> 23:29	2 services per hour	<i>First Service:</i> 10:32 <i>Last Service:</i> 22:51	1 service per hour
London St Pancras	62 minutes	<i>First Service:</i> 05:04 <i>Last Service:</i> 23:05	2 services per hour	<i>First Service:</i> 05:33 <i>Last Service:</i> 22:09	2 services per hour	<i>First Service:</i> 07:43 <i>Last Service:</i> 21:54	2 services per hour

Source: National Rail (data obtained 13/07/2021)

## 3.5. BREEAM

The number and type of existing accessible amenities located within 500m of the site has been assessed. The type of accessible amenities has been taken from Table 7.1 within BREEAM Tra 01<sup>3</sup>. The analysis indicates that there are no accessible amenities located within 500m of the site.

The existing Accessibility Index (AI) score has been calculated as part of the BREEAM assessment of the site. The AI score for the site is 0.64 which reflects the existing public transport provision identified.

This Transport Assessment meets the requirements of BREEAM 2018 New Construction Tra01.

## 3.6. Personal Injury Accident Analysis

Personal Injury Accident (PIA) data from the Department for Transport has been obtained for the latest five-year period available (2016-2020). The study area covers the immediate highway network, and includes the following roads:

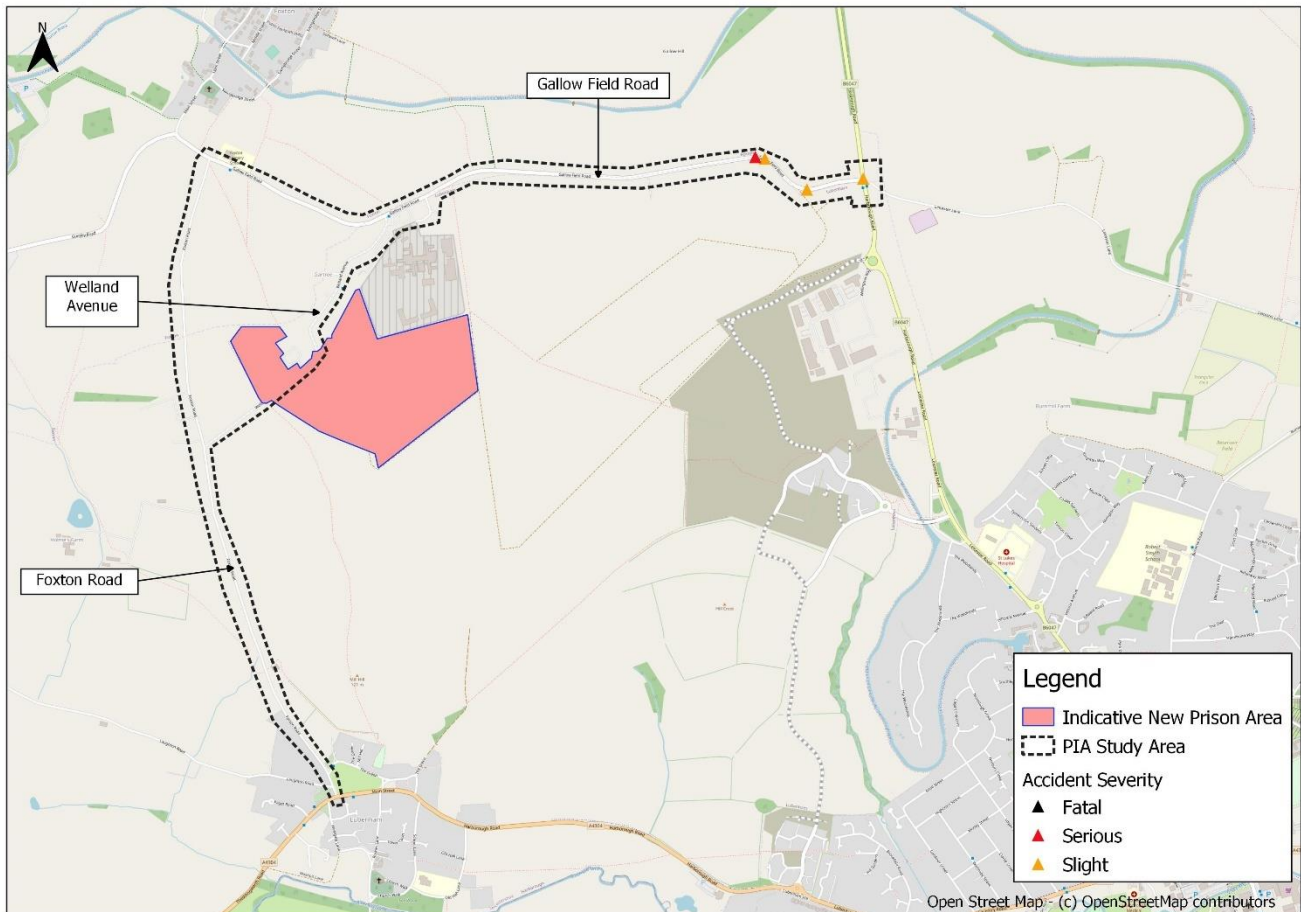
<sup>3</sup> [Tra 01 Transport assessment and travel plan \(breeam.com\)](#)



- Welland Avenue;
- Gallow Field Road; and
- Foxton Road.

Figure 3-5 shows the location and severity of the recorded PIAs within the study area during the five-year analysis period.

**Figure 3-5 - Recorded PIAs - Study Area**



### 3.6.1. PIA Severity

The severity of a PIA is categorised as slight, serious, or fatal as defined by the DfT:

- **Slight** – one in which at least one person is slightly injured. This includes minor injuries such as sprains, bruises, slight cuts, or shock, requiring only roadside attention.
- **Serious** – one in which a person is detained in hospital as an ‘in-patient’, or any of the following injuries whether or not they are detained in hospital: fractures, concussion, internal injuries, crushing, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries causing death 30 or more days after the accidents. An injured casualty is recorded as seriously or slightly injured by the policy based on information available within a short time of the accident. This generally will not reflect the results of a medical examination but may be influenced accordingly to whether the casualty is hospitalised or not. Hospitalisation procedures will vary regionally.
- **Fatal** – one in which at least one person is killed, either immediately or at any time within 30 days after the accident.

### 3.6.2. PIA Severity by Year

The total number of slight, serious and fatal accidents within the study area are shown in Table 3-5 below.

**Table 3-5 - Severity of Accidents – Study Area (2016-2020)**

Severity	2016	2017	2018	2019	2020	Total
Fatal	0	0	0	0	0	0
Serious	0	0	1	0	0	1
Slight	1	1	1	0	0	3
Total	1	1	2	0	0	4

Table 3-5 indicates that there have been no recorded fatalities across the study area in the last five years, there has been one serious accident and three slight accidents.

### 3.6.3. PIA Severity by Location

Table 3-6 presents a summary of the PIAs recorded by severity at the following links within the study area:

- Link One – Gallow Field Road between B6047 and Welland Avenue;
- Link Two – Gallow Field Road between Welland Avenue and Foxtan Road;
- Link Three – Foxtan Road between Gallow Field Road and Welland Avenue;
- Link Four – Foxtan Road between Welland Avenue and A4304; and
- Link Five – Welland Avenue.

**Table 3-6 - Severity of Accidents – Per Link (2016-2020)**

Severity	Link One	Link Two	Link Three	Link Four	Link Five
Fatal	0	0	0	0	0
Serious	1	0	0	0	0
Slight	2	0	0	0	0
Total	3	0	0	0	0

Table 3-6 demonstrates that no ‘fatal’ PIAs occurred at any of the links within the study area between 2016 and 2020. The analysis demonstrates that 1 ‘serious’ PIA and 2 ‘slight’ PIAs occurred on one link within the study area over the analysis period. It is therefore considered that there are no pre-existing safety concerns on the links within the study area.

Table 3-7 presents a summary of PIAs by severity at the following junctions within the study area:

- Junction One – B6047 / Leicester Lane / Gallow Field Road;
- Junction Two – Gallow Field Road / Welland Avenue;
- Junction Three – Gallow Field Road / Foxtan Road;
- Junction Four – Foxtan Road / Welland Avenue; and
- Junction Five – Foxtan Road / A4304.

**Table 3-7 - Severity of Accidents – Per Junction (2016-2020)**

Severity	Junction One	Junction Two	Junction Three	Junction Four	Junction Five
Fatal	0	0	0	0	0
Serious	0	0	0	0	0
Slight	1	0	0	0	0
Total	1	0	0	0	0

Table 3-7 demonstrates that no 'fatal' or 'serious' PIAs occurred at any of the junctions within the study area between 2016 and 2020. At four out of the five junctions within the study area, no PIAs were recorded within the latest five year period. Table 3-7 demonstrates that one 'slight' PIA occurred at the junction of B6047 / Leicester Lane / Gallow Field Road during the analysis period.

During the pre-application scoping discussions, LCC requested that Atkins give consideration of the B6047/ Leicester Lane / Gallow Field Road junction as they have received feedback from local stakeholders regarding potential safety concerns at this location. Atkins has obtained PIA data from LCC for the latest five-year period at this location. The PIA data is presented in Appendix B. The PIA data confirms that there has only been one 'slight' PIA within the latest five-year period which involved two vehicles colliding whilst making opposing movements. We recognise that not all accidents or close calls are recorded, therefore, it will be important that the impact from the development at this location is further considered.

The PIA data confirms that there has only been one 'slight' PIA within the latest five-year period which involved two vehicles colliding whilst making opposing movements.

### 3.7. Existing Travel Behaviours

Journey to work modal splits for the local area have been used to indicate existing travel behaviours. Table 3-8 shows the mode shares for Harborough (District Area).

**Table 3-8 – Census Journey to Work Mode Splits – Harborough (District Area)**

Mode	Percentage (%)
Car Driver	75.3%
Car Passenger	7.3%
Taxi	0.2%
Motorcycle	0.7%
Bus	2.5%
Train	0.8%
Cycle	2.5%
Walk	10.6%
Total	100%

*Source: 2011 Census Data*

Table 3-8 shows that the majority of journeys to work within Harborough are undertaken by car (82.6%), with a small proportion of journeys using public transport (3.3%), walking (10.6%) or cycling (2.5%).

There are limited destinations that are accessible via walking from the site. Therefore, the proportion of walking trips in Table 3-8 have been removed and other modes factored up accordingly. The revised travel behaviours used to inform traffic generation for the proposed development are presented in Table 3-9.

**Table 3-9 – Travel Behaviours - Harbourough (District Area) - Updated**

Mode	Percentage (%)
Car Driver	84.3%
Car Passenger	8.2%
Taxi	0.3%
Motorcycle	0.8%
Bus	2.8%
Train	0.9%
Cycle	2.8%
Walk	0.0%
Total	100%

The mode shares presented in Table 3-9 provide an indication of travel behaviours for the purposes of this assessment. Given the rural location, public transport provision and the operational hours of the proposed prison, it is to be expected that the majority of staff, visitor and legal trips are to be undertaken by car.

## 4. Development Proposals

### 4.1. Introduction

This section of the TA provides a description of the proposed development including site access arrangements, and parking provision.

### 4.2. Development Description

Outline Planning Application with all matters reserved expect for access and scale for the construction of a new Category B prison of up to 82,555sqm GEA within a secure perimeter fence together with access parking, landscaping and associated engineering works on land adjacent to HMP Gartree, Gallow Field Rd, Market Harborough, Leicestershire LE16 7RP. The indicative site layout is provided in Appendix C.

The indicative site layout proposes a range of buildings and facilities typical of a Category B resettlement prison, including:

- Seven new houseblocks each accommodating up to 245 prisoners (1,715 prisoners in total), totalling c. 53,122 sqm GEA;
- Supporting development including kitchen, workshops, kennels, Entrance Resource Hub, Central Services Hub and support buildings, totalling c. 29,433 sqm GEA; and
- Ancillary development including car parking (c. 523 spaces), internal road layout and perimeter fencing.

Other development proposed includes kennels, polytunnels, car parking (c. 523 spaces), internal road layout and perimeter fencing. A bicycle shelter is also proposed.

The new prison will be designed and built to be highly sustainable and to exceed local and national planning policy requirements in terms of sustainability. MoJ's aspirations include targeting near zero carbon operations, 10% biodiversity net gain, and at least BREEAM 'Excellent' certification, with endeavours to achieving BREEAM 'Outstanding'.

The prison will accommodate up to 1,715 adult male prisoners and will be designed and constructed to Category B working prison standard. Based on a prisoner to staff ratio of 0.5, there will be up to 858 staff employed at the site (uniformed and non-uniformed).

Safe access will be designed into the development proposals in accordance with BREEAM Hea07<sup>4</sup> requirements.

### 4.3. Site Access Arrangements

#### 4.3.1. Vehicular Access

##### 4.3.1.1. Operational Access

HMP Gartree is accessed off Welland Avenue, a private access road. Gartree 2 is proposed to be accessed via a new priority controlled junction located along the southern section of Welland Avenue. The location of the proposed operational access is shown on the proposed site masterplan provided in Appendix C. The layout of the operational access is shown in Appendix D (DWG: GART-ATK-HGN-WELL-DR-D-0001).

Vehicular access to Gartree 2 will be taken from the southern section of Welland Avenue via Foxtan Road. All vehicular traffic associated with Gartree 2 will be managed through directional signage along Welland Avenue.

In addition to directional signage along Welland Avenue, it is proposed to introduce a highway improvement scheme along the southern section of Welland Avenue to further ensure that all traffic associated with the Prison arrives and departs via Foxtan Road. The proposed highway improvement scheme is shown in Appendix E (DWG: GART-ATK-HGN-WELL-DR-D-0003). The scheme will include new centre line carriageway markings, repeater speed limit signs, carriageway narrowing with a priority give way arrangement, speed cushions either side of the proposed road narrowing, and the construction of new pedestrian footways.

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<sup>4</sup> Hea 07 Safe and healthy surroundings (breeam.com)

All staff will receive instructions on how to access Gartree 2 during the induction process, whilst travel information for visitors will also be added to the prison's visitor information page on the Justice website. In addition, a visitor transport information board will be located in a communal area to disseminate up to date public transport timetables for use by visitors.

Further details on how traffic flows along Welland Avenue will be managed is included within the associated OTP.

#### 4.3.1.2. Construction Access

Construction access to Gartree 2 will be provided via a new temporary construction access located along the southern section of Welland Avenue. Once the construction phase has finished, the temporary construction access will be converted into the operational site access. The layout of the temporary construction access is shown in Appendix D (DWG: GART-ATK-HGN-WELL-DR-D-0001). All vehicles associated with the construction phase will route to the site via the A4304 and access Welland Avenue via Foxton Road. Further details in relation to the construction phase of the development is included within the associated Framework CTMP.

#### 4.3.2. Pedestrian and Cycle Access

It is proposed that pedestrian and cycle access to the site will be provided via new footways along Welland Avenue which will provide access to the north of the car park. The layout of the pedestrian access and new footway provision is shown in Appendix E (DWG: GART-ATK-HGN-WELL-DR-D-0003). Vehicle speeds within the site will be low to reduce conflict between vehicles and Non-Motorised Users (NMUs).

### 4.4. Parking and Servicing Arrangements

#### 4.4.1. Parking Provision

It is proposed to provide a total of 523 parking spaces as part of the proposed development. Further details in relation to the proposed parking provision is provided in Section 6 of this report.

#### 4.4.2. Servicing

In terms of servicing arrangements, the proposed operational access will be used to undertake all servicing and deliveries. These activities will typically occur outside of the network peak hours. All servicing vehicles associated with Gartree 2 will route to the site via the A4304 and access Welland Avenue via Foxton Road.

## 5. Trip Generation and Distribution

### 5.1. Introduction

This section summarises the proposed trip generation, distribution and traffic assignment associated with Gartree 2.

### 5.2. Trip Generation

Given the nature of the proposed land use, there is limited publicly available information about trip generation. Therefore, trip generation for the site has been based on the methodology presented in Appendix F which is based on information used in previous planning applications for HMP sites. This has been reviewed by the MoJ to ensure that it remains robust and up to date.

Table 5-1 below, presents the proposed staff shift patterns.

**Table 5-1 - Staff Shift Patterns**

Title	Time Period	Proportion of Staff (%)
<b>Uniformed Staff</b>		
Early Shift	07:00 to 12:30	22%
Main Shift	08:00 to 17:30	48%
Late Shift	13:30 to 20:30	23%
Nights	20:00 to 07:00	6%
<b>Non-uniformed Staff (Flexible Working)</b>		
Early Shift	08:30 to 16:30	48%
Main Shift	09:30 to 17:00	52%

Based on information provided by the MoJ, it is assumed that staff arrive throughout the hour prior to the start of their shift and leave throughout the hour after a shift finishing. Due to operational processes, staff usually have a longer lead in time to allow them to go through security and hand-over shifts. Therefore, it is estimated that staff will arrive between 07:00-08:00 and leave between 17:30-18:30 for 'Main' uniform shift, and arrive between 07:30-08:30, and leave between 16:30-17:30 for the 'Early' non-uniform shift.

#### 5.2.1. Modal Splits

Journey to Work data from the 2011 Census has been interrogated to understand likely travel modes of staff and visitors. Table 3-9 shows the amended Census Data of the proposed splits which will be adopted for the development site. This is based on the existing modal splits from the 2011 Census.

##### 5.2.1.1. Staff

It is noted in Section 3 that existing modal splits for the area reflect the existing sustainable transport options, and the limited opportunities for trips to be undertaken by public transport. These modal splits have been applied to daytime staff but have been amended (\*) for those working late shifts as it is considered that these staff are not likely to walk, cycle or use public transport. The proposed modal splits for staff are shown in Table 5-2.



**Table 5-2 - Modal Split for Staff**

Mode	Day Shift	Late Shift
Home Working	0.0%	0.0%
Car Driver	84.3%	90.1%
Taxi	0.3%	0.3%
Motorcycle	0.8%	0.9%
Car Passenger	8.2%	8.8%
Bus*	2.8%	
Train*	0.9%	
Cycle*	2.8%	
Walk*	0.0%	
<b>Total</b>	100%	100%

\*modes excluded from late/night shift due to being undesirable or unavailable

#### 5.2.1.2. Visitors

Given the location of the site and to provide a robust estimate of vehicle trip generation, it is assumed that all visitor trips and legal visits will be made by private car. Therefore, for the purposes of this assessment the modal split for visitors and legal visits is as shown in Table 5-3.

**Table 5-3 - Modal Split for Visitors and Legal Visits**

Mode	Visitor Trips	Legal Visits
Car	100%	100%
Taxi/ Public Transport	0%	0%

The proposed facility would operate as a Category B prison. Prisoners in such facilities are allowed two visits per month this has been determined from prison visitation rates from other similar prisons. Assuming visits are spread evenly across the month, this equates to 114 visits per day. It is assumed that there are two visiting periods per day Monday to Thursday and Saturday, 09:30-12:30 (2 x 90 minute slots), and 14:30-16:30 (2 x 90 minute slots), and one visiting period on Friday and Saturday between the hours of 09:30-12:30. Additionally evening visits take place twice a week between the hours of 17:00-19:00. For a typical weekday, this results in four visiting periods each day. It is assumed daily visits are spread evenly across these visiting periods.

Each prisoner can be visited by a maximum of three people. It is assumed that the visitors of each individual prisoner will all travel together. Therefore, each prisoner will only generate a single 'Visiting Trip'. It has been assumed visitors will arrive in the hour before the start time of the visiting period.

In addition to the social visits, there will also be ad hoc legal visits utilising five legal visit rooms. These trips are unlikely to generate material traffic volumes or occur during the peak hour. For robustness these trips have been added to the social visits.

#### 5.2.2. Vehicular Trip Generation

The methodology for estimating the staff and visitor trips is based on the methodology outlined within this chapter for staff and visitors, and can also be found in Appendix F. The full calculations for applying this methodology are presented in Appendix G.

Figure 5-1 presents the total trip generation profile for Gartree 2, the Gartree 2 development trip generation considers staff and visitor arrivals and departures.



**Figure 5-1 - Gartree 2 Development Trip Generation**

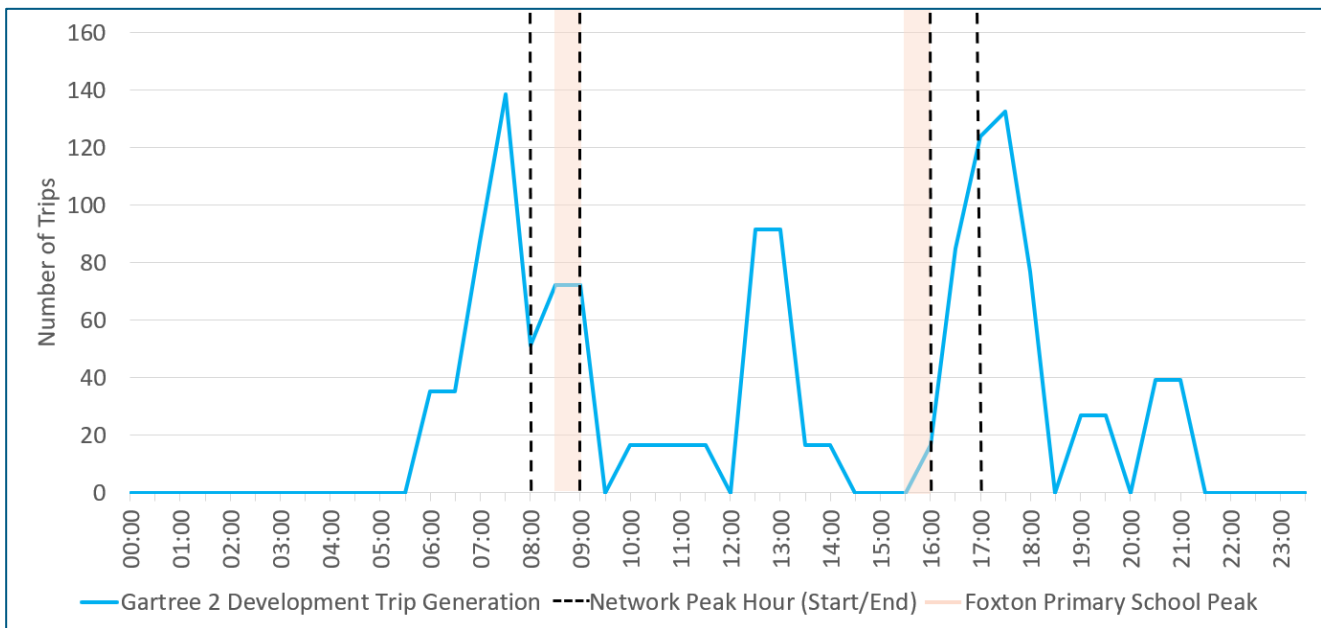


Figure 5-1 demonstrates that the AM development peak is 07:00-08:00 and the PM development peak is 17:00-18:00. The development peak occurs outside of the existing network peak hours (08:00-09:00 and 16:00-17:00) and the Foxton Primary School peak hours (08:30-09:00 and 15:30-16:00).

The total peak hour trip generation (PCUs) for Gartree 2 is shown in Table 5-4. Please note that the peak hour refers to the development peak hour trip generation and not the local highway network peak.

No HGV movements are anticipated during the AM and PM peaks, and therefore no HGV movements have been included in Table 5-4. HGV movements for servicing are anticipated to occur throughout the rest of the day in line with background HGV percentages.

**Table 5-4 - AM and PM Peak Trip Generation for Staff and Visitors**

	Vehicles per hour					
	AM Peak (07:00 to 08:00)		PM Peak (17:00 to 18:00)		Daily	
	IN	OUT	IN	OUT	IN	OUT
Staff	205	21	0	240	538	538
Visitors	0	0	0	17	134	134
<b>Total</b>	205	21	0	257	672	672

Visiting times are co-ordinated, so they do not coincide with peak vehicle movements from staff, therefore minimising the impact on the local highway network during its busiest periods.

### 5.3. Trip Distribution

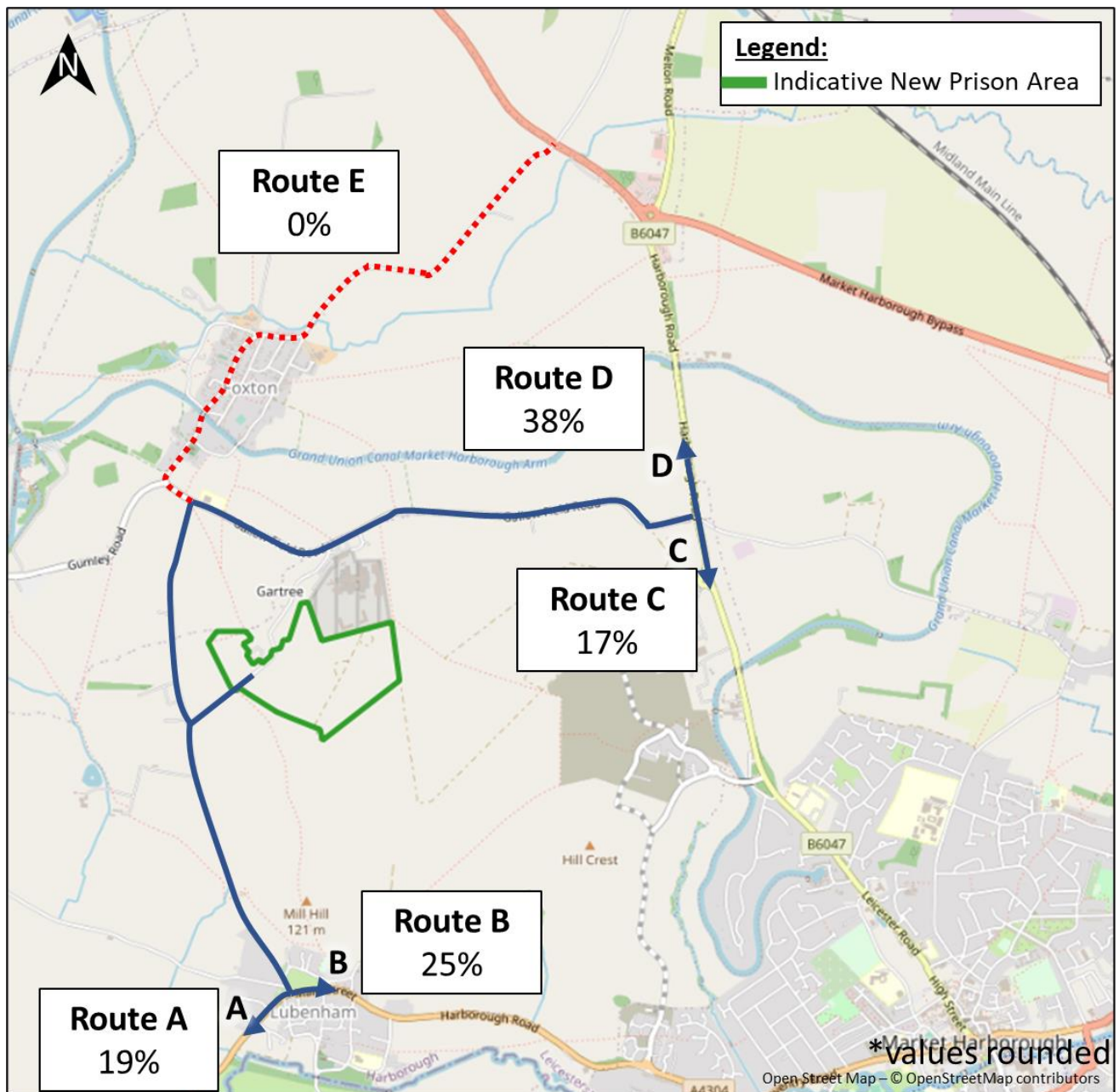
The estimated trip distribution for the proposed development was derived using Census 2011 Journey to Work data for journeys to MSOA Harborough 007. The trip distribution was calculated using an online journey planning website to determine which road a vehicle would take from each MSOA to the proposed development site.

The resultant distribution and associated calculations are presented in Appendix H and summarised in Table 5-5 and Figure 5-2.

**Table 5-5 - Estimated Vehicle Trip Distribution**

Route	Distribution
A – A4302 Theddingworth Road (West)	19%
B – A4304 Harborough Road (East)	25%
C – B6047 Harborough Road (South)	17%
D – B6047 Harborough Road (North)	38%
<b>Total</b>	<b>100%</b>

**Figure 5-2 - Trip Distribution Routes**



There is potential that some trips generated by the prison would use Route E to access the Prison from the A6 instead of Route D. If 100% of these trips routed via Route E, this would equate to 22 trips during the AM Network Peak (08:00-09:00) and 18 trips during the PM Network Peak (17:00-18:00). It is not considered that this number of trips would result in a material impact on the existing highway network.

However, Foxton Locks and Gartree are signposted via the B6047 Harborough Road from the A6 and online journey route planning software indicates that Route E and Route D are comparable in terms of journey times. Therefore, for the purposes of this assessment it is considered robust to assume that all staff/ visitors will use the B6047 Harborough Road / Gallow Field Road / Leicester Lane junction to access the Prison.

It is acknowledged that people who live in Foxton Village and work at the Prison would route via Main Street, Gallow Field Road, and Foxton Road. Our analysis shows approximately 1% of trips generated by the Prison would come from Foxton Village. It is not considered that the number of trips using this route would result in a material impact on the existing highway network.

### 5.3.1. Trip Assignment

When the trip distribution is applied to the trip generation presented in Table 5-4, it results in the two-way vehicle movements shown in the traffic flow diagrams included in Appendix I.

## 5.4. Multi-Modal Trip Generation

In addition to the vehicle trip generation outlined in Table 5-4, the multi-modal trip generation has also been calculated, and is presented in Table 5-6.

**Table 5-6 - AM and PM Peak Trip Generation for Staff and Visitors**

		AM Peak (07:00 to 08:00)		PM Peak (17:00 to 18:00)		Daily	
		IN	OUT	IN	OUT	IN	OUT
Staff	Car Driver	205	21	0	240	538	538
	Taxi	1	0	0	1	2	2
	Motorcycle	2	0	0	2	5	5
	Car Passenger	20	2	0	23	52	52
	Bus	7	0	0	8	14	14
	Train	2	0	0	2	4	4
	Cycle	7	0	0	8	14	14
	Walk	0	0	0	0	0	0
Visitors	Car	0	0	0	17	134	134
<b>Total</b>		244	23	0	301	765	765

\*values rounded

It is forecast that the proposed development would generate 226 and 257 two-way car driver trips during the development AM and PM peak hours, respectively. The vehicle trips have been determined using existing travel characteristics for the local area, so reflect the current options for journeys undertaken by sustainable transport at this location. These trips have been distributed using Census 2011 Journey to Work data for journeys to MSOA Harborough 007 to determine the likely routes these trips will take on the local highway network. The multi-modal trips generated by the proposed development have also been calculated. These also reflect the limited opportunities available for undertaking trips by sustainable transport modes at this location.

# 6. Parking Strategy

## 6.1. Introduction

This section of the report provides further details of the parking to be provided at the proposed development, including parking accumulation and parking management.

## 6.2. Car Parking Accumulation

It is proposed to provide on-site parking for use by staff and visitors to the development. Operating/ visiting times have been used to determine the arrival and departure times of uniform staff, non-uniform staff and visitors, informing the parking accumulation presented in Figure 6-1. The methodology for calculating this parking accumulation accounts for overlapping during shift changes and assumes that arrivals and departures will occur during the hour before and after the shifts starts or ends, based on evidence from other similar facilities. The full methodology is presented in Appendix J.

**Figure 6-1 - Parking Accumulation**

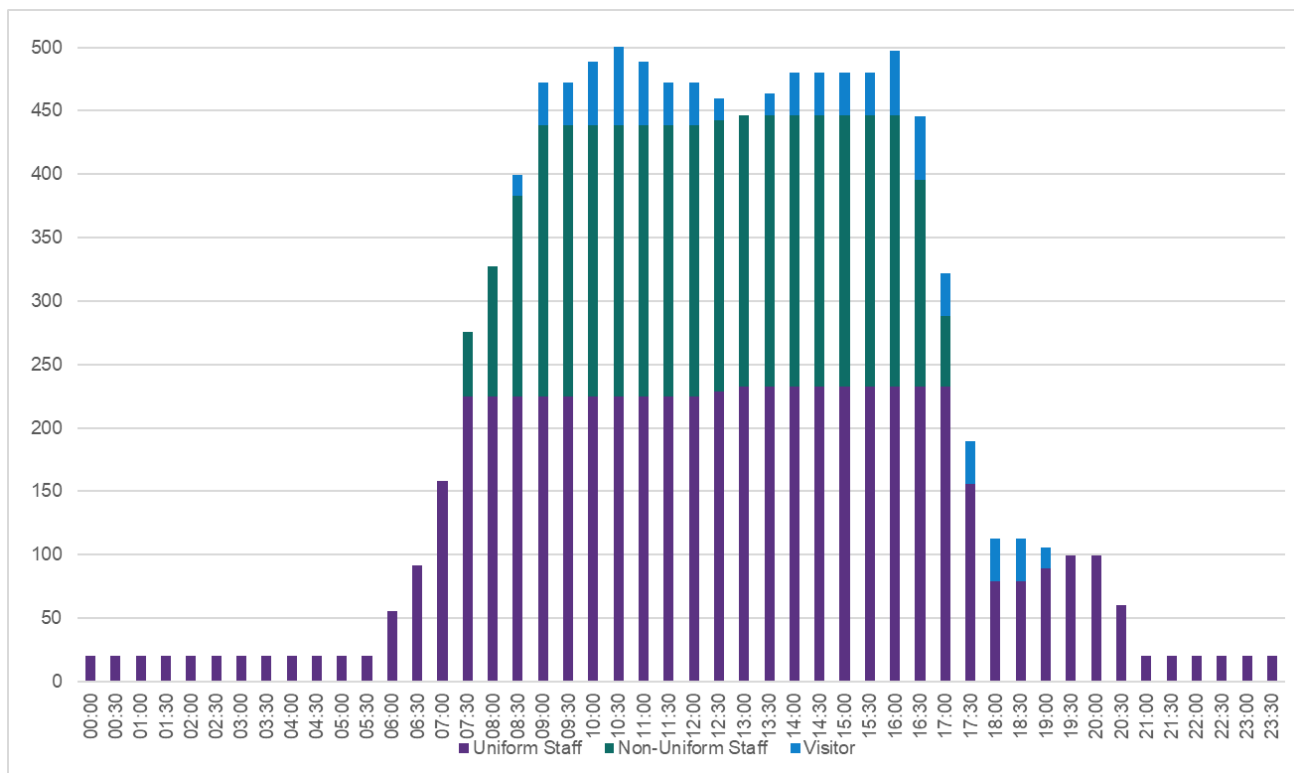


Figure 6-1 indicates that the maximum car parking accumulation is 506 vehicles based on the demand from uniform staff, non-uniform staff and visitors. This value has been determined by considering the availability of existing public transport, and the existing travel characteristics at this location.

## 6.3. Parking Provision and Management

### 6.3.1. Car Parking Provision

It is proposed to provide 523 on-site car parking spaces for use by staff and visitors to the development. Of the 523 spaces, 16 disabled parking spaces will be provided in close proximity to the main entrance of the prison for use by disabled users of the site. This has been determined in line with guidance within the Leicestershire Highway Design Guide.

In accordance with BREEAM Tra02, electric charging stations of a minimum of 3kW will be provided for 10% of the total car parking capacity, this equates to 53 electric vehicle charging spaces.

Furthermore, BREEAM Tra02 requires 5% of the total car parking capacity to be allocated for car sharers. Therefore, it is proposed to provide 27 car sharing spaces.

### 6.3.2. Cycle Parking Provision

In the absence of detailed guidance on cycle parking specific to this land use within the Leicestershire Highway Design Guide, a cycling accumulation exercise has been undertaken to estimate the number of cycle parking spaces required on site. The cycle parking accumulation has been undertaken using the same methodology as the car parking accumulation in Section 6.2. The maximum cycle parking accumulation for the site based on the number of cycle trips is 14 bicycles. This value has been determined by considering the availability of public transport, and the existing travel characteristics at this location.

However, to encourage a modal shift towards sustainable transport and to meet BREEAM Tra02 criteria it is proposed to provide 51 cycle parking spaces on site. As outlined within the associated OTP, annual staff and visitor monitoring surveys will be undertaken to monitor the use of car and cycle parking facilities.

## 6.4. Summary

It is proposed to provide a total of 523 car parking spaces at the proposed development for use by staff and visitors, including provision for disabled users, electric vehicle charging points, and car sharing. This provision considers the maximum parking accumulation associated with the site, meeting the predicted parking needs so that neither staff nor visitors would need to park off site. It is considered that this is a suitable level of provision for the proposed development, considering modal splits and the availability of public transport. The car parks would be managed by the occupier of the prison and monitored through the OTP.

# 7. Development Impact Assessment

## 7.1. Introduction

This section of the report considers the impact of the proposed development on the existing transport network.

## 7.2. Traffic Assessment Methodology

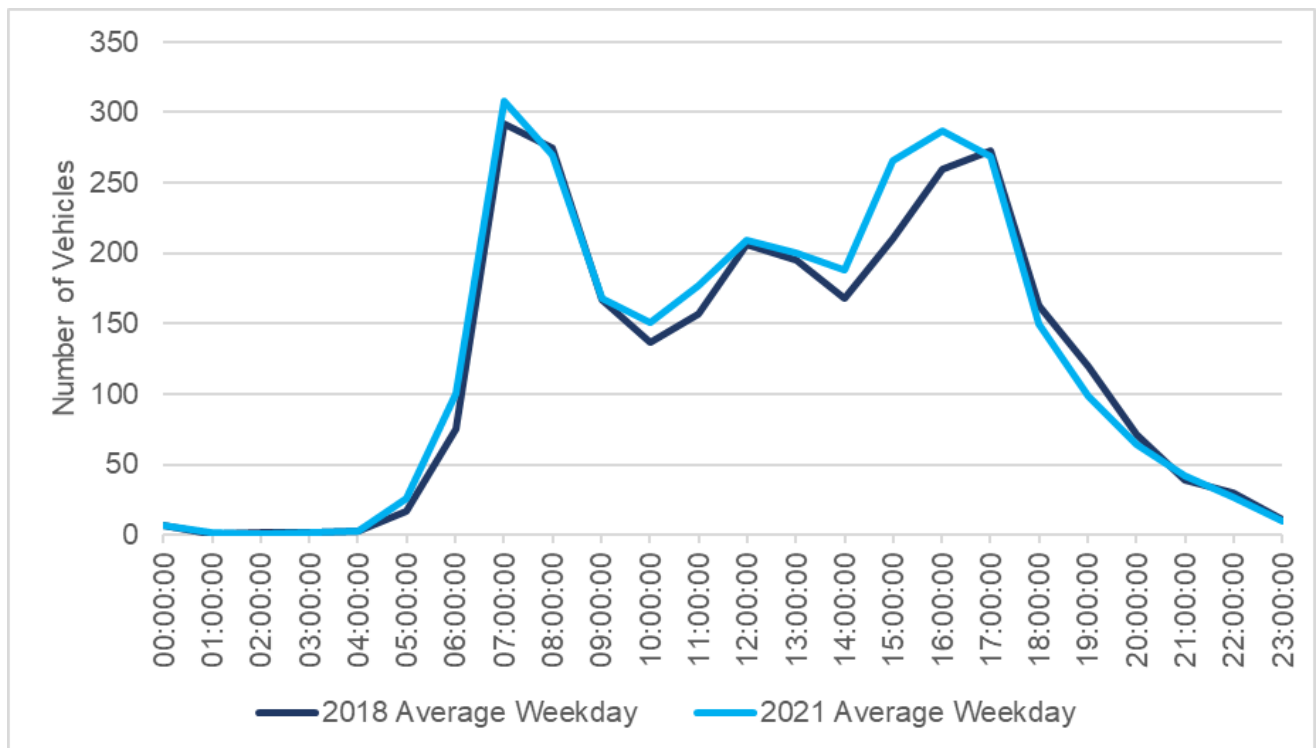
### 7.2.1. Traffic Data

#### 7.2.1.1. COVID-19

The conventional approach to assessing the impact of vehicle trips from the development would be to collect baseline traffic information for the local highway network, and then understand the impact ‘without’ and ‘with’ the development. However, the COVID-19 pandemic has resulted in some non-typical traffic conditions as a result of changes to travel behaviours such as greater home working. Therefore, it has been agreed with LCC that traffic surveys conducted in June 2021 would be factored to account for any changes in traffic volumes as a result of COVID-19 and the June 2021 traffic data would be validated against historic traffic data provided by LCC. The historic traffic data provided by LCC is provided in Appendix K.

Figure 7-1 presents a comparison of traffic flows on Gallow Field Road between September 2018 and June 2021. The graph indicates that traffic flows in June 2021 were comparable to pre-pandemic levels.

**Figure 7-1 - Gallow Field Road Traffic Flow Comparison**



#### 7.2.1.2. 2021 Traffic Surveys

Traffic surveys were undertaken in June 2021 at the locations outlined in Table 7-1 and Figure 7-2. As outlined, it has been agreed with LCC that traffic surveys conducted in June 2021 would be factored to account for any changes in traffic volumes as a result of COVID-19. The COVID-19 factors were issued directly to the traffic survey company and applied to the data as part of the permit application process.

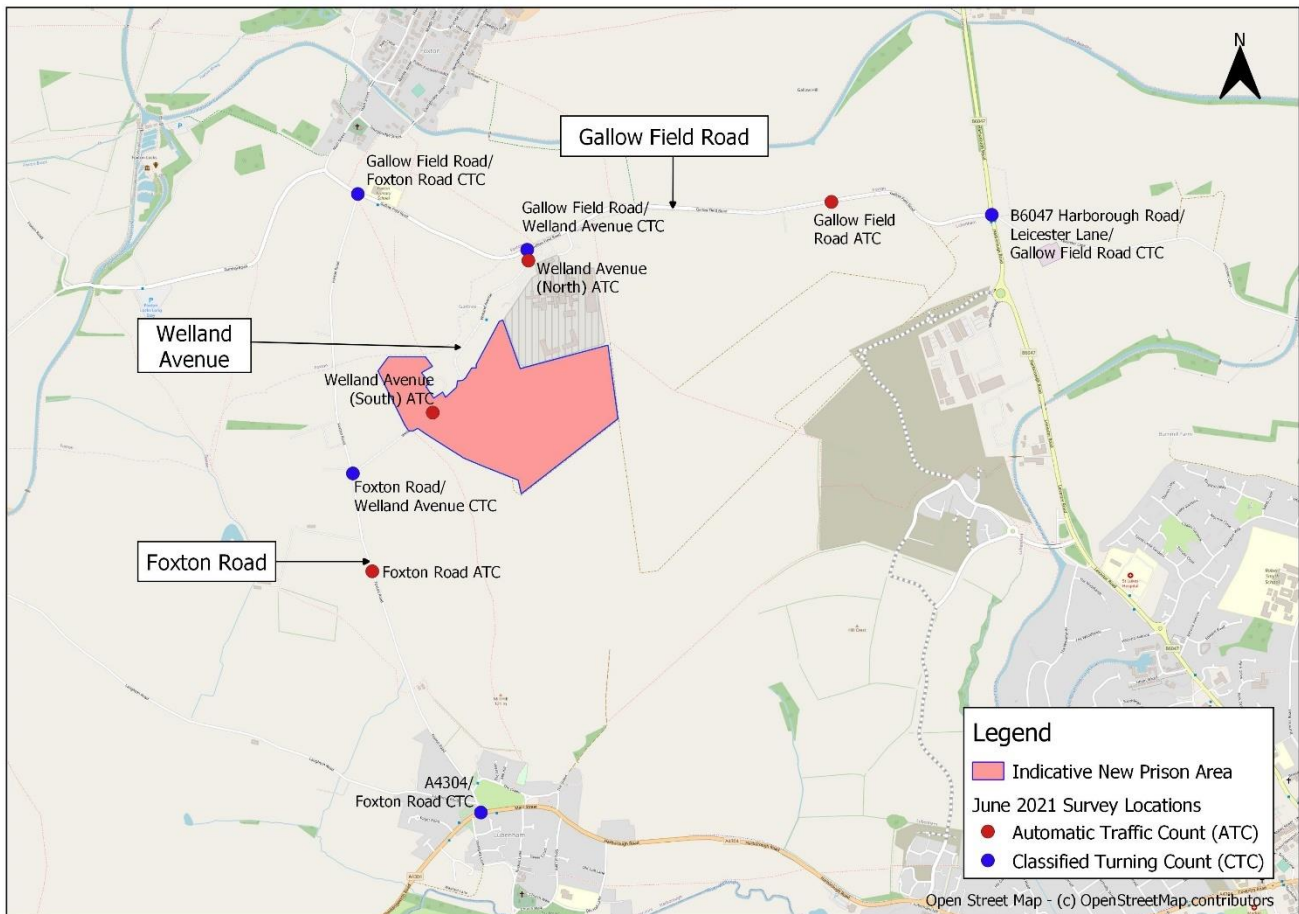


Classified Turning Counts (CTCs) were undertaken on a neutral weekday, and the ATCs were undertaken over a seven-day period. The survey data for these sites are presented in Appendix A.

**Table 7-1 - June 2021 Traffic Count Data Summary**

Location	Survey Type	Date of Survey
B6047 Harborough Road / Leicester Lane / Gallow Field Road	Classified Turning Count	June 2021
Gallow Field Road / Welland Avenue	Classified Turning Count	June 2021
Gallow Field Road / Foxtan Road	Classified Turning Count	June 2021
Foxtan Road / Welland Avenue	Classified Turning Count	June 2021
A4304 / Foxtan Road	Classified Turning Count	June 2021
Gallow Field Road	Automatic Traffic Count	June 2021
Foxtan Road	Automatic Traffic Count	June 2021
Welland Avenue (North)	Automatic Traffic Count	June 2021
Welland Avenue (South)	Automatic Traffic Count	June 2021

**Figure 7-2 - June 2021 Traffic Survey Count Locations**



## 7.2.2. Traffic Growth Factors

Traffic growth factors have been extracted from TEMPro v7.2 and applied to the 2021 traffic count data to establish a 2025 future baseline. A summary of the TEMPro local growth factors for Harborough local authority are provided in Table 7-2.

**Table 7-2 - TEMPro Growth Factors**

	2021 – 2025
AM Peak	1.0721
PM Peak	1.0729

## 7.2.3. Committed Development

The cumulative impact of any committed development sites in the vicinity of the proposed development have been accounted for within TEMPro v7.2.

## 7.2.4. Future Development Proposals

### 7.2.4.1. HMP Gartree Expansion

There are proposals to expand the existing HMP Gartree site in addition to constructing Gartree 2. The HMP Gartree site is subject to a future planning application and has been included within this assessment for sensitivity test purposes only.

The HMP Gartree expansion proposals are for an additional 120 inmates (Category B). The methodology for estimating the staff and visitor trips associated with the proposed expansion of HMP Gartree is based on the assumptions outlined in Appendix F.

The peak hour trip generation (PCUs) for the proposed expansion is shown in Table 7-3. The full outputs are provided in Appendix L. Deliveries and servicing are anticipated to occur outside of the network peak hours and visiting times will be co-ordinated to avoid staff vehicle movements.

The two-way vehicular movements associated with the proposed HMP Gartree expansion are provided in Appendix L.

**Table 7-3 - HMP Gartree Trip Generation - Proposed Expansion**

	Vehicles per hour					
	AM Peak (07:00 to 08:00)		PM Peak (17:00 to 18:00)		Daily	
	IN	OUT	IN	OUT	IN	OUT
Staff	14	1	0	17	38	38
Visitors	0	0	0	4	28	28
<b>Total</b>	14	1	0	20	66	66

## 7.2.5. Assessment Locations

The forecast distribution and assignment indicates that 56% of trips would travel north along Foxtan Road from the Foxtan Road / Welland Avenue junction to the B6047 Harborough Road / Leicester Lane / Gallow Field Road junction, and 44% would travel south along Foxtan Road from the Foxtan Road / Welland Avenue junction to the A4304/ Foxtan Road junction. Therefore, standalone junction capacity analysis has been undertaken at the following junctions:

- The proposed site access junction (off Welland Avenue);
- Gallow Field Road / Foxtan Road junction;
- B6047 Harborough Road / Leicester Lane / Gallow Field Road junction; and
- A4304 / Foxtan Road junction.



### 7.2.6. Traffic Scenarios

The four junctions identified have been assessed during the development AM Peak (07:00-08:00) and PM Peak (17:00-18:00) for the following scenarios:

- **2021 Baseline:**
  - 2021 Traffic Count Data.
- **2025 Opening Year without Development:**
  - 2021 Baseline Flows Factored to 2025.
- **2025 Opening Year with Development:**
  - 2021 Baseline Flows Factored to 2025.
  - Gartree 2 Traffic Added.
- **2025 Cumulative with Development (Sensitivity Test):**
  - 2021 Baseline Flows Factored to 2025.
  - Gartree 2 Traffic Added.
  - Proposed HMP Gartree Expansion Traffic Added.

## 7.3. Standalone Junction Capacity Assessment

### 7.3.1. Assessment Software

#### 7.3.1.1. Junctions 9

Junctions 9 software has been used to undertake the standalone junction capacity assessment of the B6047 Harborough Road / Leicester Lane / Gallow Field Road junction, A4304 / Foxtton Road junction, Gallow Field Road / Foxtton Road junction, and Proposed Site Access/ Welland Avenue junction.

Junctions 9 software allows a range of traffic flow profiles to be adopted when undertaking peak period model runs. Generally, an RFC (Ratio of Flow to Capacity) of below 0.85 (for roundabout and priority junctions) indicates that a junction operates within capacity for the assessed flows. An RFC of over 1.0 indicates that a junction is operating over capacity.

#### 7.3.2. Geometries

The geometries used to inform the standalone junction capacity modelling have been derived from OS Base Mapping using AutoCAD.

### 7.3.3. Proposed Site Access / Welland Avenue

#### 7.3.3.1. Assessment Flows

Table 7-4 provides a summary of the traffic flows (PCUs) for the Proposed Site Access/ Welland Avenue junction, this junction has been modelled in Junctions 9 using a one-hour flow profile.

**Table 7-4 - Proposed Site Access / Welland Avenue Traffic Flow Summary (PCUs)**

Arm (From)	Arm (To)	2025 Opening Year with Development		2025 Opening Year Cumulative (Sensitivity Test)	
		AM Peak	PM Peak	AM Peak	PM Peak
Welland Avenue (N)	Site Access	0	0	0	0
	Welland Avenue (S)	16	14	16	14
Site Access	Welland Avenue (N)	0	0	0	0
	Welland Avenue (S)	21	256	21	256
Welland Avenue (S)	Welland Avenue (N)	10	10	10	10
	Site Access	205	0	205	0

### 7.3.3.2. Standalone Junction Capacity Assessment

Table 7-5 presents the results of the standalone junction capacity assessment for the Proposed Site Access / Welland Avenue junction. The full outputs are provided in Appendix M.

**Table 7-5 - Model Outputs - Proposed Site Access / Welland Avenue Junction**

Approach Arm	AM Peak (07:00-08:00)			PM Peak (17:00-18:00)		
	Queue (PCU)	Delay (S)	RFC	Queue (PCU)	Delay (S)	RFC
<b>2025 Opening Year with Development</b>						
Site Access	0.0	5.51	0.03	0.7	9.10	0.42
Welland Avenue (S)	0.7	10.36	0.40	0.0	0.00	0.00
<b>2025 Opening Year Cumulative (Sensitivity Test)</b>						
Site Access	0.0	5.51	0.03	0.7	9.10	0.42
Welland Avenue (S)	0.7	10.36	0.40	0.0	0.00	0.00

The results from the standalone junction capacity modelling indicate that the Proposed Site Access / Welland Avenue junction is forecast to operate within acceptable thresholds of capacity in all of the assessment scenarios.

### 7.3.4. Gallow Field Road / Foxtan Road

#### 7.3.4.1. Assessment Flows

Table 7-6 provides a summary of the traffic flows (PCUs) for the Gallow Field Road / Foxtan Road junction, this junction has been modelled in Junctions 9 using a one-hour flow profile.

**Table 7-6 – Gallow Field Road / Foxtton Road Traffic Flow Summary (PCUs)**

Arm (From)	Arm (To)	2021 Baseline		2025 Opening Year without Development		2025 Opening Year with Development		2025 with Development Cumulative (Sensitivity Test)	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
Gallow Field Road (E)	Foxtton Road	53	73	57	78	172	78	172	87
	Gallow Field Road (W)	21	68	23	71	23	71	23	71
Foxtton Road	Gallow Field Road (E)	102	65	109	70	121	213	127	213
	Gallow Field Road (W)	17	41	18	44	18	44	18	44
Gallow Field Road (W)	Gallow Field Road (E)	48	50	51	54	51	54	51	54
	Foxtton Road	24	52	26	56	26	56	26	56

**7.3.4.2. Standalone Junction Capacity Assessment**

Table 7-7 presents the results of the standalone junction capacity assessment for the Gallow Field Road / Foxtton Road junction. The full outputs are provided in Appendix N.

**Table 7-7 - Model Outputs - Gallow Field Road / Foxtton Road Junction**

Approach Arm	AM Peak (07:00-08:00)			PM Peak (17:00-18:00)		
	Queue (PCU)	Delay (S)	RFC	Queue (PCU)	Delay (S)	RFC
<b>2021 Baseline</b>						
Foxtton Road	0.4	10.55	0.28	0.3	9.96	0.24
Gallow Field Road (W)	0.1	5.65	0.04	0.1	5.94	0.09
<b>2025 Opening Year without Development</b>						
Foxtton Road	0.4	10.89	0.30	0.4	10.30	0.26
Gallow Field Road (W)	0.1	5.67	0.05	0.1	6.00	0.10
<b>2025 Opening Year with Development</b>						
Foxtton Road	0.5	11.82	0.33	1.6	21.55	0.63
Gallow Field Road (W)	0.1	5.97	0.05	0.1	5.99	0.10
<b>2025 Opening Year Cumulative with Development (Sensitivity)</b>						
Foxtton Road	0.5	12.11	0.35	1.7	21.66	0.63
Gallow Field Road (W)	0.1	5.97	0.05	0.1	6.02	0.10

The results from the standalone junction capacity modelling indicate that the Gallow Field Road / Foxtton Road junction is forecast to operate within acceptable thresholds of capacity in all the assessment scenarios.

#### 7.3.4.3. Development Impact Assessment

The Gallow Field Road / Foxtton Road junction is forecast to operate within acceptable thresholds of capacity. In addition:

- There have been zero PIAs recorded at this location within the latest five year period (2016 – 2020);
- There is an existing school safety zone in place which restricts vehicle speeds to 20mph during the AM and PM School Peaks; and
- As identified in Figure 5-1, the proposed development peak occurs outside of the network peak hour and the Foxtton Primary School operational hours.

Therefore, it is not considered that the additional vehicle trips at this location would require any mitigation as a result of the development proposals.

#### 7.3.5. B6047 Harborough Road / Leicester Lane / Gallow Field Road

##### 7.3.5.1. Assessment Flows

Table 7-8 provides a summary of the traffic flows (PCUs) for the B6047 Harborough Road / Leicester Lane / Gallow Field Road junction, this junction has been modelled in Junctions 9 using a one-hour flow profile.

**Table 7-8 - Harbrough Road / Leicester Lane / Gallow Field Road Flow Summary (PCUs)**

Arm (From)	Arm (To)	2021 Baseline		2025 Opening Year without Development		2025 Opening Year with Development		2025 with Development Cumulative (Sensitivity Test)	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
B6047 Harbrough Road (N)	Leicester Lane	34	42	36	45	36	45	36	45
	B6047 Harbrough Road (S)	476	443	510	475	510	475	510	475
	Gallow Field Road	156	62	167	67	246	67	252	67
Leicester Lane	B6047 Harbrough Road (N)	27	23	29	25	29	25	29	25
	B6047 Harbrough Road (S)	12	9	13	10	13	10	13	10
	Gallow Field Road	12	23	13	25	13	25	13	25
B6047 Harbrough Road (S)	B6047 Harbrough Road (N)	446	518	478	556	478	556	478	556
	Leicester Lane	3	18	3	19	3	19	3	19
	Gallow Field Road	45	41	48	44	84	44	87	44
Gallow Field Road	B6047 Harbrough Road (N)	62	121	66	130	74	228	75	236
	Leicester Lane	15	29	16	31	16	31	16	31
	B6047 Harbrough Road (S)	46	37	49	40	53	84	53	88

**7.3.5.2. Standalone Junction Capacity Assessment**

Table 7-9 presents the results of the standalone junction capacity assessment for the B6047 Harbrough Road/ Leicester Lane / Gallow Field Road junction. The full outputs are provided in Appendix O.

**Table 7-9 - Model Outputs - Harbrough Road / Leicester Lane / Gallow Field Road Junction**

Approach Arm		AM Peak (07:00-08:00)			PM Peak (17:00-18:00)		
		Queue (PCU)	Delay (S)	RFC	Queue (PCU)	Delay (S)	RFC
<b>2021 Baseline</b>							
Leicester Lane	Left Out	0.1	11.08	0.05	0.1	11.09	0.07
	Right Out	0.2	16.07	0.14	0.2	15.92	0.14
Harbrough Road (N)	Right In	0.5	10.45	0.33	0.2	8.70	0.14
Gallow Field Road	Left Out	0.2	8.24	0.15	0.4	9.49	0.28
	Right Out	0.2	14.54	0.18	0.2	14.54	0.18
Harbrough Road (S)	Right In	0.0	7.75	0.01	0.0	7.72	0.04
<b>2025 Opening Year without Development</b>							
Leicester Lane	Left Out	0.1	11.81	0.06	0.1	11.91	0.08
	Right Out	0.2	17.86	0.16	0.2	17.75	0.16
Harbrough Road (N)	Right In	0.6	11.11	0.35	0.2	9.07	0.15
Gallow Field Road	Left Out	0.2	8.80	0.17	0.5	10.42	0.32
	Right Out	0.3	16.36	0.21	0.3	16.34	0.20
Harbrough Road (S)	Right In	0.0	8.02	0.01	0.0	7.93	0.04
<b>2025 Opening Year with Development</b>							
Leicester Lane	Left Out	0.1	12.79	0.07	0.1	12.05	0.08
	Right Out	0.2	20.44	0.18	0.2	20.46	0.18
Harbrough Road (N)	Right In	1.2	14.83	0.53	0.2	9.07	0.15
Gallow Field Road	Left Out	0.2	9.64	0.20	1.3	17.34	0.57
	Right Out	0.4	20.89	0.27	0.7	25.32	0.42
Harbrough Road (S)	Right In	0.0	8.67	0.01	0.0	7.93	0.04
<b>2025 Opening Year Cumulative with Development (Sensitivity)</b>							
Leicester Lane	Left Out	0.1	12.88	0.07	0.1	12.06	0.08
	Right Out	0.2	20.67	0.18	0.2	20.74	0.18
Harbrough Road (N)	Right In	1.3	15.21	0.55	0.2	9.07	0.15
Gallow Field Road	Left Out	0.3	9.71	0.20	1.4	18.68	0.59
	Right Out	0.4	21.33	0.27	0.8	27.06	0.45
Harbrough Road (S)	Right In	0.0	8.72	0.01	0.0	7.93	0.04



The results from the standalone junction capacity modelling indicate that the B6047 Harborough Road / Leicester Lane / Gallow Field Road junction is forecast to operate within acceptable thresholds of capacity in all the assessment scenarios.

### 7.3.5.3. Development Impact Assessment

The B6047 Harborough Road / Leicester Lane / Gallow Field Road junction is forecast to operate within acceptable thresholds of capacity. During pre-application scoping discussions with LCC, the highway authority requested that Atkins give consideration of this junction as they have received feedback from local stakeholders regarding potential safety concerns at this location. Atkins have obtained the latest PIA data for the B6047 Harborough Road / Leicester Lane/ Gallow Field Road junction from LCC. The PIA data confirms that there has only been one 'slight' PIA recorded at this location within the latest five year period (2016 – 2020). The severity and frequency of the PIAs at this location is not considered to be a significant highway safety concern.

In addition, the proposed development peak occurs outside of the network peak at this location. The development proposals would generate an additional 69 vehicle trips during the AM network peak (a 5.1% increase) and an additional 57 vehicle trips during the PM network peak (a 4.1% increase) in the 2025 Opening Year with Development scenario. It is not considered that this would result in an unacceptable risk to the overall highway safety at this location.

## 7.3.6. A4304 / Foxtan Road

### 7.3.6.1. Assessment Flows

Table 7-10 provides a summary of the traffic flows (PCUs) for the A4304 / Foxtan Road junction, this junction has been modelled in Junctions 9 using a one-hour flow profile.

**Table 7-10 – A4304 / Foxtan Road Traffic Flow Summary (PCUs)**

Arm (From)	Arm (To)	2021 Baseline		2025 Opening Year without Development		2025 Opening Year with Development		2025 with Development Cumulative (Sensitivity Test)	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
A4304 (W)	Foxtan Road	93	68	100	73	140	73	142	73
	A4304 (E)	235	328	252	352	252	352	252	352
Foxtan Road	A4304 (W)	65	90	70	97	74	146	74	150
	A4304 (E)	74	116	79	124	84	188	85	193
A4304 (E)	A4304 (W)	275	243	295	261	295	261	295	261
	Foxtan Road	77	108	83	116	133	116	137	116

### 7.3.6.2. Standalone Junction Capacity Assessment

Table 7-11 presents the results of the standalone junction capacity assessment for the Gallow Field Road / Foxtan Road junction. The full outputs are provided in Appendix P.

**Table 7-11 - Model Outputs – A4304 / Foxtton Road Junction**

Approach Arm	AM Peak (07:00-08:00)			PM Peak (17:00-18:00)		
	Queue (PCU)	Delay (S)	RFC	Queue (PCU)	Delay (S)	RFC
<b>2021 Baseline</b>						
Foxtton Road	0.4	10.54	0.30	0.9	13.73	0.46
A4304 (E)	0.4	6.24	0.19	0.5	7.08	0.27
<b>2025 Opening Year without Development</b>						
Foxtton Road	0.5	11.20	0.33	1.0	15.40	0.51
A4304 (E)	0.4	6.33	0.21	0.6	7.29	0.30
<b>2025 Opening Year with Development</b>						
Foxtton Road	0.6	12.22	0.36	3.1	31.73	0.77
A4304 (E)	0.8	7.74	0.35	0.6	7.29	0.30
<b>2025 Opening Year Cumulative with Development (Sensitivity)</b>						
Foxtton Road	0.6	12.29	0.36	3.4	34.58	0.79
A4304 (E)	0.9	7.88	0.36	0.6	7.29	0.30

The results from the standalone junction capacity modelling indicate that the A4304/ Foxtton Road junction is forecast to operate within acceptable thresholds of capacity in all the assessment scenarios.

## 8. Mitigation

### 8.1. Introduction

This section of the report provides a summary of the proposed mitigation strategy.

### 8.2. Welland Avenue

During pre-application scoping discussions, HDC raised concerns regarding the additional vehicle trips generated by Gartree 2 travelling along the northern section of Welland Avenue via Gartree. As outlined, vehicular access to Gartree 2 will be taken from the southern section of Welland Avenue via Foxtan Road. All vehicular traffic associated with Gartree 2 will be managed through directional signage along Welland Avenue, whilst all staff will receive instructions on how to access Gartree 2 during the induction process and travel information for visitors will also be added to the prison's visitor information page on the Justice website.

In addition, it is proposed to introduce a highway improvement scheme along the southern section of Welland Avenue to further ensure that all traffic associated with the Prison arrives and departs via Foxtan Road. The proposed highway improvement scheme is shown in Appendix E (DWG: GART-ATK-HGN-WELL-DR-D-0003). The scheme will include new centre line carriageway markings, repeater speed limit signs, carriageway narrowing with a priority give way arrangement, speed cushions either side of the proposed road narrowing, and the construction of new pedestrian footways.

In addition to these measures, the MoJ will undertake monitoring surveys along Welland Avenue every 6 months and share the results with the Gartree residents to ensure that staff and visitors are accessing Gartree 2 via Foxtan Road. It will be the responsibility of the Travel Plan Coordinator (TPC) to manage the monitoring surveys.

### 8.3. Sustainable Transport Trips

Taking into consideration the existing mode share for Gartree, the development is forecast to generate a modest number of additional trips by sustainable transport modes. An additional 14 daily trips are forecast to arrive via bus. This number of additional trips is unlikely to require upgrades to the existing bus infrastructure. However, annual staff and visitor monitoring surveys will be undertaken, and a travel demand management approach will be used to inform whether additional public transport infrastructure is required.

## 9. Summary

### 9.1. Summary

Atkins has been commissioned to prepare a TA, OTP, and CTMP to support the OPA for the proposed development of Gartree 2, a Category B Adult Male Resettlement Prison with a capacity of up to 1,715 inmates on land to the south of the existing HMP Gartree, north west of Market Harborough. Pre-application scoping discussions were undertaken with LCC and HDC at the start of the project. As the project has developed, we have sought to engage in further discussions with LCC and HDC prior to the submission of the OPA.

The purpose of this TA is to evaluate the transportation aspects of the development proposals and consider the existing highway network and sustainable transport provision within the vicinity of the proposed development. The TA has been prepared in accordance with guidance from the Ministry of Housing, Communities & Local Government on 'Travel Plans, Transport Assessments and Statements.

This TA has provided a summary of the relevant local and national transport policy context, and review of the existing transport conditions within the vicinity of the proposed development.

Based on a prisoner to staff ration of 0.5, Gartree 2 will support up to 858 staff (uniformed and non-uniformed). It is proposed to take vehicular access via a new priority-controlled junction off Welland Avenue. This report has demonstrated that the majority of trips forecast to be generated by Gartree 2 would be undertaken by car. It is forecast that the proposed development would generate up to 226 and 257 two-way car trips during the development AM and PM peak hours. The trip generation has been estimated using operational information about staff numbers and shift patterns and takes into account the current travel characteristics for the area. The estimated traffic flows for the AM and PM peak trip generation hours were distributed onto the local network based on 2011 census Journey to Work data and online journey planning software.

The traffic impact assessment has demonstrated that:

- The Proposed Site Access / Welland Avenue priority junction is forecast to operate within acceptable thresholds of capacity across all scenarios and time periods assessed.
- The Gallow Field Road / Foxton Road junction is forecast to operate within acceptable thresholds of capacity. In addition, there has been zero PIAs recorded at this location within the latest five-year period (2016 – 2020) and there is an existing school safety zone in place which restricts vehicle speeds to 20mph during the AM and PM School Peaks. In addition, the proposed development peak occurs outside of the network peak hour and the Foxton Primary School operational hours. Therefore, it is not considered that the additional vehicle trips at this location would require any mitigation as a result of the development proposals.
- The B6047 Harborough Road / Leicester Lane / Gallow Field Road junction is forecast to operate within acceptable thresholds of capacity. However, during pre-application scoping discussions with LCC, the highway authority identified a perceived highway safety issue at this location. Therefore, Atkins have obtained the latest PIA data for the B6047 Harborough Road / Leicester Lane/ Gallow Field Road junction from LCC. The PIA data demonstrates that there has been one 'slight' accident recorded at this location within the latest five-year period (2016 – 2020). The severity and frequency of the PIAs at this location is not considered to be a significant highway safety concern.

### 9.2. Conclusion

This TA has assessed the impact of the proposed development on the local transport network. The evidence presented within this TA has demonstrated that safe and suitable access to the site can be achieved for all users, and that the predicted impacts from the development on the transport network can be mitigated. It is concluded that there would not be an unacceptable impact on highway safety, and that the residual cumulative impacts on the road network would not be severe.

# Appendices



# Appendix A. 2021 Traffic Survey Data

## A.1. CTC B6047 Harbourough Road / Leicester Lane / Gallow Field Road





**Gartee - Manual Traffic Survey: Wednesday, 16 June 2021**

Produced by Streetwise Services Ltd.

**Junction: A - (North) B6047 Harbrough Road / B - Leicester Lane / C - (South) B6047 Harbrough Road / D - Gallow Field Road**

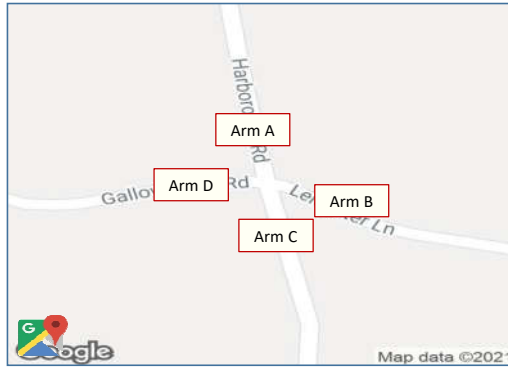


Table with 13 columns: CAR, SUV, MIN, BICY, BUS, PICKUP, MOTO, TRAI, and TOTAL. It contains a large grid of data for various time intervals and vehicle categories.

Table with 13 columns: CAR, SUV, MIN, BICY, BUS, PICKUP, MOTO, TRAI, and TOTAL. It contains a large grid of data for various time intervals and vehicle categories.





Gortie - Manual Traffic Survey Wednesday, 16 June 2021

Produced by Riverside Services Ltd

Location: A - (Shirley) B6047 Hetherington Road / E - Lakerston Lane / C - (Shirley) B6047 Hetherington Road / D - Guller Field Road

Appendix: C - (Shirley) B6047 Hetherington Road

Table with 29 columns (TIME, CAR, LRV, DVST, DVST, BUS, PICKUP, MOTOVA, TOTAL, CAR, LRV, DVST, DVST, BUS, PICKUP, MOTOVA, TOTAL, CAR, LRV, DVST, DVST, BUS, PICKUP, MOTOVA, TOTAL) and 100 rows of data.



Gortie - Manual Traffic Survey Wednesday, 16 June 2021

Produced by Riverside Services Ltd

Location: A - (Shirley) B6047 Hetherington Road / E - Lakerston Lane / C - (Shirley) B6047 Hetherington Road / D - Guller Field Road

Appendix: C - (Shirley) B6047 Hetherington Road

Table with 29 columns (TIME, CAR, LRV, DVST, DVST, BUS, PICKUP, MOTOVA, TOTAL, CAR, LRV, DVST, DVST, BUS, PICKUP, MOTOVA, TOTAL, CAR, LRV, DVST, DVST, BUS, PICKUP, MOTOVA, TOTAL) and 100 rows of data.



Table with 40 columns (Time, CAR, LRV, OVHT, OVSD, BUS, PICKUP, MOTOCY, PUS, TOTAL, etc.) and 100 rows of traffic data for Galton Field Road.



Table with 40 columns (Time, CAR, LRV, OVHT, OVSD, BUS, PICKUP, MOTOCY, PUS, TOTAL, etc.) and 100 rows of traffic data for Galton Field Road.

## A.2. CTC Gallow Field Road / Welland Avenue

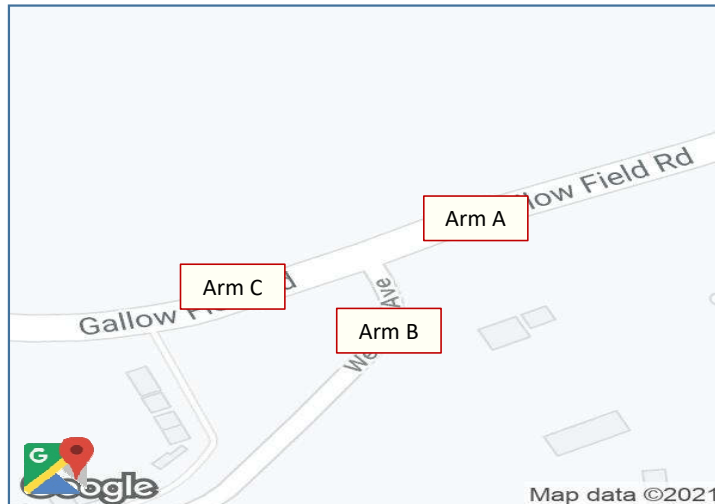




## ***Gartee - Manual Traffic Survey: Wednesday, 16 June 2021***

Produced by Streetwise Services Ltd.

**Junction: A - (East) Gallow Field Road / B - Welland Avenue / C - (West) Gallow Field Road**









### A.3. CTC Gallow Field Road / Foxton Road



## ***Gartee - Manual Traffic Survey: Wednesday, 16 June 2021***

Produced by Streetwise Services Ltd.

**Junction: A - (East) Gallow Field Road / B - Foxton Road / C - (West) Gallow Field Road**









Location: A - (East) Galton Field Road / B - Foston Road / C - (West) Galton Field Road

Approach: B - Foston Road

Table with columns: TIME, CAR, LOW, OVV1, OVV2, BUS, PICYCLE, MICYCLE, PCU, TOTAL, CAR, LOW, OVV1, OVV2, BUS, PICYCLE, MICYCLE, PCU, TOTAL. It contains 50 rows of traffic survey data for the B - Foston Road approach.

Table with columns: TIME, CAR, LOW, OVV1, OVV2, BUS, PICYCLE, MICYCLE, PCU, TOTAL, CAR, LOW, OVV1, OVV2, BUS, PICYCLE, MICYCLE, PCU, TOTAL. It contains 50 rows of traffic survey data for the B - Foston Road approach.



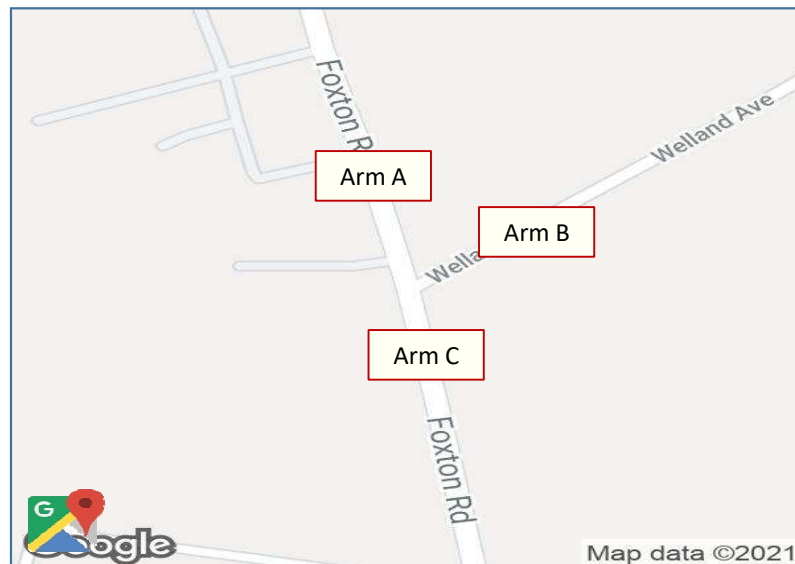
## A.4. CTC Foxtan Road / Welland Avenue



## ***Gartee - Manual Traffic Survey: Wednesday, 16 June 2021***

Produced by Streetwise Services Ltd.

**Junction: A - (North) Foxton Road / B - Welland Avenue / C - (South) Foxton Road**











## A.5. CTC A4304 / Foxton Road



## **Gartee - Manual Traffic Survey: Wednesday, 16 June 2021**

Produced by Streetwise Services Ltd.

**Junction: A - Foxtan Road / B - (East) A4304 Main Street / C - (West) A4304 Main Street**









## A.6. ATC Gallow Field Road



**15 mins Vehicle Classification-Speed Data**

**Globals**

Report Id CustomList-1063  
 Descriptor 15 mins Vehicle Classification-Speed Data  
 Created by MetroCount Traffic Executive  
 Creation Time (UTC) 2021-06-24T09:12:00  
 Legal Copyright (c)1997 - 2016 MetroCount  
 Graphic Header Lamp  
 Language English  
 Country United Kingdom  
 Time UTC + 60 min  
 Create Version 5.0.2.0  
 Metric Non metric  
 Speed Unit mph  
 Length Unit ft  
 Mass Unit ton

**Dataset**

Site Name 8773\_6  
 Site Attribute Gartree  
 File Name Z:\Projects\8773 - Gartree (WO - 15.06)\Raw data\8773\_6\_0 2021-06-23 2342.ECO  
 File Type Plus  
 Algorithm Factory default aale  
 Description Gallow Field Rd, 60mph  
 Lane 0  
 Direction 8  
 Direction Text 8 - East bound A/B, West bound B/A  
 Layout Text Aale sensors - Paired (Class/Speed/Count)  
 Setup Time 2021-06-15T09:39:12  
 Start Time 2021-06-15T09:39:12  
 Finish Time 2021-06-23T23:46:51  
 Operator SF  
 Configuration 40 MCS600 00 00 00 00 ? Y920GTBQ MCS6-L5 [MC55] (c)Microcom 190ct04

**Profile**

Name 90\_60  
 Title MetroCount Traffic Executive  
 Graphic Logo  
 Header  
 Footer  
 Percentile 1 85  
 Percentile 2 95  
 Pace 10  
 Filter Start 2021-06-16T00:00:00  
 Filter End 2021-06-23T00:00:00  
 Class Scheme Euro13  
 F C/A(1-12) D/A(B) Sp(6.66) Headway(0) Span(0 - 328.084) Lane(0-16)  
 Low Speed 6  
 High Speed 99  
 Posted Limit 60  
 Speed Limits 60 60 60 60 60 60 60 60 60  
 Separation 0.000  
 Separation Type Headway  
 Direction Eastbound  
 Encoded Direction 15

**Column**

Time	24-hour time (0000 - 2359)
Total	Number in time step
Cls 1	Class totals
Cls 2	Class totals
Cls 3	Class totals
Cls 4	Class totals
Cls 5	Class totals
Cls 6	Class totals
Cls 7	Class totals
Cls 8	Class totals
Cls 9	Class totals
Cls 10	Class totals
Cls 11	Class totals
Cls 12	Class totals
SpCls 1	Speed averages by class
SpCls 2	Speed averages by class
SpCls 3	Speed averages by class
SpCls 4	Speed averages by class
SpCls 5	Speed averages by class
SpCls 6	Speed averages by class
SpCls 7	Speed averages by class
SpCls 8	Speed averages by class
SpCls 9	Speed averages by class
SpCls 10	Speed averages by class
SpCls 11	Speed averages by class
SpCls 12	Speed averages by class
Vbin 0 10	Speed bin totals
Vbin 10 20	Speed bin totals
Vbin 20 30	Speed bin totals
Vbin 30 35	Speed bin totals
Vbin 35 40	Speed bin totals
Vbin 40 45	Speed bin totals
Vbin 45 50	Speed bin totals
Vbin 50 55	Speed bin totals
Vbin 55 60	Speed bin totals
Vbin 60 65	Speed bin totals
Vbin 65 70	Speed bin totals
Vbin 70 100	Speed bin totals

















Virtual Week (1)

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	SpCls 1	SpCls 2	SpCls 3	SpCls 4	SpCls 5	SpCls 6	SpCls 7	SpCls 8	SpCls 9	SpCls 10	SpCls 11	SpCls 12	Vbin 9	Vbin 10	Vbin 20	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 55	Vbin 60	Vbin 65	Vbin 70	Vbin 100			
Mon	1453	1243	147	25	0	8	0	1	1	1	1	3	3	49.7	47.0	49.5	0.0	45.5	0.0	44.1	37.6	45.2	42.7	43.0	41.4	1	1	4	14	85	259	420	594	178	56	14	7				
Tue	1453	1280	136	12	3	10	0	1	0	2	0	1	8	49.6	48.2	49.0	35.0	44.7	0.0	33.6	0.0	40.6	0.0	36.9	41.4	1	2	4	20	94	280	394	398	200	64	8	8				
Wed	1555	1345	167	6	7	9	0	1	3	2	0	1	14	49.7	49.0	45.9	42.4	39.8	0.0	29.7	48.8	46.1	0.0	47.9	39.3	1	5	10	22	108	245	463	371	215	84	21	10				
Thu	1429	1201	184	12	1	12	0	3	1	2	0	1	12	49.3	48.3	41.3	47.0	43.0	0.0	38.6	25.6	37.8	0.0	51.5	41.6	0	1	10	21	91	279	404	371	189	50	8	5				
Fri	1367	1150	159	33	0	14	0	0	0	2	0	2	7	48.2	47.5	44.7	0.0	45.3	0.0	0.0	0.0	42.9	0.0	39.2	39.2	0	0	7	14	123	293	451	309	121	35	11	3				
Sat	1090	971	36	22	1	2	0	1	0	1	0	0	4	48.9	48.9	47.7	25.5	41.3	0.0	41.1	0.0	33.2	0.0	0.0	42.4	0	1	7	13	70	232	310	225	159	41	16	6				
Sun	947	894	47	10	1	0	0	4	1	0	0	0	0	48.5	46.7	54.2	64.8	0.0	0.0	44.3	38.3	0.0	0.0	0.0	0.0	0	1	1	19	96	217	276	233	98	29	11	5				
==	9244	8074	898	120	13	65	0	11	6	10	1	8	48	48.2	48.0	47.2	41.4	43.7	0.0	39.6	40.3	41.3	42.7	43.0	40.6	3	11	43	123	627	1785	2720	2301	1140	358	89	44				

Vehicles = 15644  
 Posted speed limit = 60 mph, Exceeding = 491 (5.312%), Mean Exceeding = 64.30 mph  
 Maximum = 98.2 mph, Minimum = 7.2 mph, Mean = 48.9 mph  
 80% Speed = 55.70 mph, 95% Speed = 60.40 mph, Median = 48.77 mph  
 10 mph Pace = 41.52, Number in Pace = 5147 (55.68%)  
 Variance = 49.92, Standard Deviation = 7.07 mph

**15 mins Vehicle Classification-Speed Data**

**Globals**

ReportID CustomList-1063  
 Description 15 mins Vehicle Classification-Speed Data  
 Created by MetroCount Traffic Executive  
 Creation Time (UTC) 2021-06-24T09:13:55  
 Legal Copyright (c)1997 - 2016 MetroCount  
 Graphic header bmp  
 Language English  
 Country United Kingdom  
 Time UTC + 60 min  
 Create Version 5.0.2.0  
 Metric Non metric  
 Speed Unit mph  
 Length Unit ft  
 Mass Unit ton

**Dataset**

Site Name 8773\_6  
 Site Attribute Gantry  
 File Name Z:\Projects\8773 - Gantry (WO - 15.06)\Raw data\8773\_6\_0\_2021-06-23 2342.ECO  
 File Type Plus  
 Algorithm Factory default axle  
 Description Calow Field Rd, 60mph  
 Lane 0  
 Direction 8  
 Direction Text 8 - East bound A[B], West bound B[A]  
 Layout Text Axle sensors - Paired (Class/Speed/Count)  
 Setup Time 2021-06-15T09:39:12  
 Start Time 2021-06-15T09:39:12  
 Finish Time 2021-06-23T23:46:51  
 Operator SF  
 Configuration:40 MCS600 00 00 00 00 00 ? Y920GTBO MCS6-L5 (MCS5) (c)Microcom 19Oct04

**Profile**

Name 50\_60  
 Title MetroCount Traffic Executive  
 Graphic Logo  
 Header  
 Footer  
 Percentile 1 85  
 Percentile 2 95  
 Pace 10  
 Filter Start 2021-06-16T00:00:00  
 Filter End 2021-06-23T00:00:00  
 Class Scheme Euro13  
 F Class(1-12) Dir(BA) Sp(6,99) Headway(0) Span(0 - 328.084) Lane(0-16)  
 Low Speed 6  
 High Speed 99  
 Posted Limit 60  
 Speed Limits 60 60 60 60 60 60 60 60 60 60  
 Separation 0.000  
 Separation Type Headway  
 Direction Westbound  
 Encoded Direction 15

**Column**

Time 24-hour time (0000 - 2359)  
 Total Number in time step  
 Cts 1 Class totals  
 Cts 2 Class totals  
 Cts 3 Class totals  
 Cts 4 Class totals  
 Cts 5 Class totals  
 Cts 6 Class totals  
 Cts 7 Class totals  
 Cts 8 Class totals  
 Cts 9 Class totals  
 Cts 10 Class totals  
 Cts 11 Class totals  
 Cts 12 Class totals  
 SpCts 1 Speed averages by class  
 SpCts 2 Speed averages by class  
 SpCts 3 Speed averages by class  
 SpCts 4 Speed averages by class  
 SpCts 5 Speed averages by class  
 SpCts 6 Speed averages by class  
 SpCts 7 Speed averages by class  
 SpCts 8 Speed averages by class  
 SpCts 9 Speed averages by class  
 SpCts 10 Speed averages by class  
 SpCts 11 Speed averages by class  
 SpCts 12 Speed averages by class  
 Vbin 8 10 Speed bin totals  
 Vbin 10 20 Speed bin totals  
 Vbin 20 30 Speed bin totals  
 Vbin 30 35 Speed bin totals  
 Vbin 35 40 Speed bin totals  
 Vbin 40 45 Speed bin totals  
 Vbin 45 50 Speed bin totals  
 Vbin 50 55 Speed bin totals  
 Vbin 55 60 Speed bin totals  
 Vbin 60 65 Speed bin totals  
 Vbin 65 70 Speed bin totals  
 Vbin 70 100 Speed bin totals

















Virtual Week (1)

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	SpCis 1	SpCis 2	SpCis 3	SpCis 4	SpCis 5	SpCis 6	SpCis 7	SpCis 8	SpCis 9	SpCis 10	SpCis 11	SpCis 12	Vbin 0	Vbin 10	Vbin 20	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 55	Vbin 60	Vbin 65	Vbin 70	Vbin 100		
Mon	1572	1343	189	6	1	13	0	3	3	4	1	0	9	49.4	47.6	43.3	51.6	42.9	0.0	36.5	37.8	46.1	43.1	0.0	41.2	0	2	16	25	103	294	464	395	186	66	20	11			
Tue	1702	1476	193	2	2	11	0	1	3	2	0	4	8	49.1	46.7	41.4	35.2	43.2	0.0	39.6	33.3	47.8	0.0	35.5	41.5	0	2	9	23	111	340	525	404	195	68	20	5			
Wed	1720	1464	216	5	1	15	0	2	4	0	0	2	11	48.3	47.0	41.8	35.1	42.9	0.0	39.0	41.2	0.0	0.0	43.0	41.2	0	6	11	26	171	375	479	404	153	64	20	11			
Thu	1578	1327	216	8	0	10	0	4	1	2	0	1	11	46.4	47.1	42.1	0.0	42.3	0.0	38.8	29.4	33.0	0.0	36.9	41.0	0	1	13	27	140	319	485	378	147	40	18	10			
Fri	1403	1186	181	10	0	10	0	2	1	4	0	1	8	47.0	45.4	39.8	0.0	40.5	0.0	32.9	34.7	40.6	0.0	35.2	39.7	0	3	7	38	150	355	468	255	92	22	9	4			
Sat	1230	1103	114	1	0	5	0	0	0	4	0	1	2	49.0	48.8	43.6	0.0	42.8	0.0	0.0	0.0	40.2	0.0	30.7	42.7	1	1	3	12	83	268	378	284	120	47	17	16			
Sun	1135	1071	95	2	0	4	0	1	0	1	0	0	0	47.5	46.4	39.6	0.0	43.9	0.0	31.0	0.0	42.4	0.0	0.0	0.0	0	5	9	21	99	298	331	218	95	34	18	7			
...	<b>10340</b>	<b>8970</b>	<b>3165</b>	<b>32</b>	<b>4</b>	<b>68</b>	<b>0</b>	<b>13</b>	<b>12</b>	<b>17</b>	<b>1</b>	<b>9</b>	<b>49</b>	<b>48.4</b>	<b>47.0</b>	<b>41.3</b>	<b>39.3</b>	<b>42.6</b>	<b>0.0</b>	<b>36.9</b>	<b>36.5</b>	<b>41.9</b>	<b>43.1</b>	<b>36.7</b>	<b>41.0</b>	<b>1</b>	<b>20</b>	<b>68</b>	<b>172</b>	<b>857</b>	<b>2238</b>	<b>3130</b>	<b>2338</b>	<b>988</b>	<b>341</b>	<b>122</b>	<b>64</b>			

Vehicles = 10340  
 Posted speed limit = 60 mph, Exceeding = 527 (5.097%), Mean Exceeding = 64.71 mph  
 Maximum = 94.3 mph, Minimum = 8.1 mph, Mean = 48.1 mph  
 85% Speed = 54.02 mph, 95% Speed = 60.09 mph, Median = 47.87 mph  
 10 mph Pace = 42. - 52, Number in Pace = 5759 (55.70%)  
 Variance = 52.31, Standard Deviation = 7.23 mph

## A.7. ATC Foxtan Road

**15 mins Vehicle Classification-Speed Data**

**Globals**

ReportID CustomList-1056  
 Description 15 mins Vehicle Classification-Speed Data  
 Created by MetroCount Traffic Executive  
 Creation Time (UTC) 2021-06-24T09:23:58  
 Legal Copyright (c)1997 - 2016 MetroCount  
 Graphic header bmp  
 Language English  
 Country United Kingdom  
 Time UTC + 60 min  
 Create Version 5.0.2.0  
 Metric Non metric  
 Speed Unit mph  
 Length Unit ft  
 Mass Unit ton

**Dataset**

Site Name 8773\_9  
 Site Attribute Garteree  
 File Name Z:\Projects\8773 - Garteree (WO - 15.06)\Raw data\8773\_9\_0 2021-06-23 2325.ECO  
 File Type Plus  
 Algorithm Factory default axle  
 Description Foston Rd, 60 mph  
 Lane 0  
 Direction 7  
 Direction Text 7 - North bound A/B, South bound B/A  
 Layout Text Axle sensors - Paired (Class/Speed/Count)  
 Setup Time 2021-06-15T11:20:43  
 Start Time 2021-06-15T11:20:43  
 Finish Time 2021-06-23T23:28:43  
 Operator SF  
 Configuration: 40 MCS600 00 00 00 00 00 7 HP20778E MCS6-L6 [MCS5] (c:\Microcom 19Oct04

**Profile**

Name 50\_60  
 Title MetroCount Traffic Executive  
 Graphic Logo  
 Header  
 Footer  
 Percentile 1 85  
 Percentile 2 95  
 Pace 10  
 Filter Start 2021-06-16T00:00:00  
 Filter End 2021-06-23T00:00:00  
 Class Scheme Euro13  
 F Class(1-12) Dir(A/B) Sp(6,99) Headway(0) Span(0 - 328.084) Lane(0-16)  
 Low Speed 6  
 High Speed 99  
 Posted Limit 60  
 Speed Limits 60 60 60 60 60 60 60 60 60 60  
 Separation 0.000  
 Separation Type Headway  
 Direction Northbound  
 Encoded Direction 15

**Column**

Time 24-hour time (0000 - 2359)  
 Total Number in time step  
 Cts 1 Class totals  
 Cts 2 Class totals  
 Cts 3 Class totals  
 Cts 4 Class totals  
 Cts 5 Class totals  
 Cts 6 Class totals  
 Cts 7 Class totals  
 Cts 8 Class totals  
 Cts 9 Class totals  
 Cts 10 Class totals  
 Cts 11 Class totals  
 Cts 12 Class totals  
 SpCts 1 Speed averages by class  
 SpCts 2 Speed averages by class  
 SpCts 3 Speed averages by class  
 SpCts 4 Speed averages by class  
 SpCts 5 Speed averages by class  
 SpCts 6 Speed averages by class  
 SpCts 7 Speed averages by class  
 SpCts 8 Speed averages by class  
 SpCts 9 Speed averages by class  
 SpCts 10 Speed averages by class  
 SpCts 11 Speed averages by class  
 SpCts 12 Speed averages by class  
 Vbin 0 10 Speed bin totals  
 Vbin 10 20 Speed bin totals  
 Vbin 20 30 Speed bin totals  
 Vbin 30 35 Speed bin totals  
 Vbin 35 40 Speed bin totals  
 Vbin 40 45 Speed bin totals  
 Vbin 45 50 Speed bin totals  
 Vbin 50 55 Speed bin totals  
 Vbin 55 60 Speed bin totals  
 Vbin 60 65 Speed bin totals  
 Vbin 65 70 Speed bin totals  
 Vbin 70 100 Speed bin totals

















Virtual Week (1)

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	SpCis 1	SpCis 2	SpCis 3	SpCis 4	SpCis 5	SpCis 6	SpCis 7	SpCis 8	SpCis 9	SpCis 10	SpCis 11	SpCis 12	Vbin 0	Vbin 10	Vbin 20	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 55	Vbin 60	Vbin 65	Vbin 70	Vbin 100			
Mon	1134	901	204	4	0	11	0	1	1	4	1	0	7	52.5	52.0	49.0	0.0	47.1	0.0	43.0	33.3	47.6	43.0	0.0	41.8	0	4	5	16	58	133	239	293	197	104	47	38				
Tue	1226	990	237	5	3	9	0	1	1	2	0	1	7	50.8	52.6	49.9	34.0	46.1	0.0	40.9	43.9	46.6	0.0	38.3	46.2	0	6	5	14	71	219	278	272	226	103	38	24				
Wed	1343	1071	231	6	4	14	0	2	2	3	0	2	8	51.3	52.2	45.6	38.4	48.5	0.0	37.2	35.7	45.8	0.0	49.3	45.8	0	2	13	27	73	195	291	311	232	117	54	28				
Thu	1241	963	258	12	1	12	0	3	0	4	0	1	7	50.6	51.8	41.1	66.2	45.3	0.0	34.7	0.0	41.9	0.0	50.8	47.7	0	2	12	26	62	176	293	288	303	97	59	24				
Fri	1235	969	232	7	0	11	0	1	2	3	0	4	6	50.5	50.6	44.3	0.0	43.1	0.0	46.2	38.1	46.1	0.0	37.3	46.6	0	2	4	18	77	189	347	302	149	63	45	19				
Sat	1018	864	143	0	1	4	0	1	1	2	0	1	1	50.9	52.3	0.0	12.3	42.5	0.0	48.9	55.3	43.9	0.0	55.2	41.1	0	3	5	12	69	170	224	243	145	79	38	30				
Sun	824	730	96	1	0	0	0	3	0	0	0	0	2	51.0	51.6	44.3	0.0	0.0	0.0	44.2	0.0	0.0	0.0	27.3	0	3	2	15	55	136	210	162	121	66	38	26					
...	<b>8651</b>	<b>6488</b>	<b>3373</b>	<b>35</b>	<b>9</b>	<b>61</b>	<b>0</b>	<b>12</b>	<b>7</b>	<b>18</b>	<b>1</b>	<b>9</b>	<b>38</b>	<b>51.5</b>	<b>51.9</b>	<b>43.8</b>	<b>37.3</b>	<b>46.9</b>	<b>0.0</b>	<b>41.1</b>	<b>40.0</b>	<b>44.4</b>	<b>43.0</b>	<b>43.5</b>	<b>44.5</b>	<b>0</b>	<b>22</b>	<b>46</b>	<b>128</b>	<b>485</b>	<b>1217</b>	<b>1882</b>	<b>1871</b>	<b>1273</b>	<b>639</b>	<b>299</b>	<b>189</b>				

Vehicles = 8651  
 Posted speed limit = 60 mph, Exceeding = 1127 (14.00%), Mean Exceeding = 65.80 mph  
 Maximum = 96.4 mph, Minimum = 11.7 mph, Mean = 51.0 mph  
 85% Speed = 59.67 mph, 95% Speed = 66.29 mph, Median = 50.55 mph  
 10 mph Pace = 45 - 55, Number in Pace = 3762 (46.73%)  
 Variance = 79.27, Standard Deviation = 8.90 mph

**15 mins Vehicle Classification-Speed Data**

**Globals**

ReportID CustomList-1056  
 Description 15 mins Vehicle Classification-Speed Data  
 Created by MetroCount Traffic Executive  
 Creation Time (UTC) 2021-06-24T09:25:34  
 Legal Copyright (c)1997 - 2016 MetroCount  
 Graphic header bmp  
 Language English  
 Country United Kingdom  
 Time UTC + 60 min  
 Create Version 5.0.2.0  
 Metric Non metric  
 Speed Unit mph  
 Length Unit ft  
 Mass Unit ton

**Dataset**

Site Name 8773\_9  
 Site Attribute Gartree  
 File Name Z:\Projects\8773 - Gartree (WO - 15.06)\Raw data\8773\_9\_0 2021-06-23 2325.ECO  
 File Type Plus  
 Algorithm Factory default axle  
 Description Foston Rd, 60 mph  
 Lane 0  
 Direction 7  
 Direction Text 7 - North bound A/B, South bound B/A  
 Layout Text Axle sensors - Paired (Class/Speed/Count)  
 Setup Time 2021-06-15T11:20:43  
 Start Time 2021-06-15T11:20:43  
 Finish Time 2021-06-23T23:28:43  
 Operator SF  
 Configuration: 40 MCS600 00 00 00 00 00 7 HP20778E MCS6-L6 [MCS5] (c:\Microcom 19Oct04

**Profile**

Name 50\_60  
 Title MetroCount Traffic Executive  
 Graphic Logo  
 Header  
 Footer  
 Percentile 1 85  
 Percentile 2 95  
 Pace 10  
 Filter Start 2021-06-16T00:00:00  
 Filter End 2021-06-23T00:00:00  
 Class Scheme Euro13  
 F Class(1-12) Dir(BA) Sp(6,99) Headway(0) Span(0 - 328.084) Lane(0-16)  
 Low Speed 6  
 High Speed 99  
 Posted Limit 60  
 Speed Limits 60 60 60 60 60 60 60 60 60 60  
 Separation 0.000  
 Separation Type Headway  
 Direction Southbound  
 Encoded Direction 15

**Column**

Time 24-hour time (0000 - 2359)  
 Total Number in time step  
 Cts 1 Class totals  
 Cts 2 Class totals  
 Cts 3 Class totals  
 Cts 4 Class totals  
 Cts 5 Class totals  
 Cts 6 Class totals  
 Cts 7 Class totals  
 Cts 8 Class totals  
 Cts 9 Class totals  
 Cts 10 Class totals  
 Cts 11 Class totals  
 Cts 12 Class totals  
 SpCts 1 Speed averages by class  
 SpCts 2 Speed averages by class  
 SpCts 3 Speed averages by class  
 SpCts 4 Speed averages by class  
 SpCts 5 Speed averages by class  
 SpCts 6 Speed averages by class  
 SpCts 7 Speed averages by class  
 SpCts 8 Speed averages by class  
 SpCts 9 Speed averages by class  
 SpCts 10 Speed averages by class  
 SpCts 11 Speed averages by class  
 SpCts 12 Speed averages by class  
 Vbin 0 10 Speed bin totals  
 Vbin 10 20 Speed bin totals  
 Vbin 20 30 Speed bin totals  
 Vbin 30 35 Speed bin totals  
 Vbin 35 40 Speed bin totals  
 Vbin 40 45 Speed bin totals  
 Vbin 45 50 Speed bin totals  
 Vbin 50 55 Speed bin totals  
 Vbin 55 60 Speed bin totals  
 Vbin 60 65 Speed bin totals  
 Vbin 65 70 Speed bin totals  
 Vbin 70 100 Speed bin totals

















Virtual Week (1)

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	SpCis 1	SpCis 2	SpCis 3	SpCis 4	SpCis 5	SpCis 6	SpCis 7	SpCis 8	SpCis 9	SpCis 10	SpCis 11	SpCis 12	Vbin 0	Vbin 10	Vbin 20	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 55	Vbin 60	Vbin 65	Vbin 70	Vbin 100
Mon	1263	1062	172	2	0	14	0	3	2	2	0	0	0	6.50	49.8	46.9	0.0	44.3	0.0	42.5	37.5	49.1	0.0	0.0	44.5	0	2	4	21	62	188	342	347	186	68	28	15	
Tue	1334	1139	195	2	0	11	0	1	2	1	0	4	9.50	49.7	38.7	0.0	48.2	0.0	27.0	33.5	51.2	0.0	43.7	43.5	1	3	4	15	80	243	351	336	191	70	22	18		
Wed	1448	1232	178	7	1	11	0	4	2	3	0	3	7.49	47.9	43.2	22.7	46.3	0.0	37.0	47.9	42.1	0.0	45.4	43.5	1	3	14	31	124	286	369	337	175	66	22	20		
Thu	1377	1170	8	0	5	0	5	1	5	0	1	8.49	49.8	43.9	0.0	43.4	0.0	36.8	36.2	36.3	0.0	38.6	43.7	0	4	14	16	13	276	381	337	174	50	18	15			
Fri	1261	1063	164	9	0	9	0	0	2	0	3	11.49	47.7	41.1	0.0	41.8	0.0	0.0	0.0	46.2	0.0	38.6	45.9	0	3	7	15	92	261	368	288	145	51	19	12			
Sat	1010	904	95	0	0	3	0	0	0	2	1	1	4.49	50.3	50.0	0.0	39.4	0.0	0.0	0.0	45.7	43.8	39.3	43.0	2	2	1	6	23	64	186	252	253	137	52	19	15	
Sun	892	807	40	2	0	3	0	0	0	0	0	0	0.49	50.3	41.4	0.0	47.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2	0	6	26	70	174	231	162	114	39	13	16	
...	8546	7377	990	28	1	66	0	13	7	16	1	12	45.49	49.2	42.6	22.7	44.9	0.0	37.4	39.4	43.1	43.8	42.1	44.2	6	16	54	146	585	1614	2294	2068	1122	396	141	111		

Vehicles = 8546  
 Posted speed limit = 60 mph, Exceeding = 648 (7.583%), Mean Exceeding = 65.57 mph  
 Maximum = 97.7 mph, Minimum = 6.1 mph, Mean = 49.3 mph  
 85% Speed = 56.71 mph, 95% Speed = 62.11 mph, Median = 48.99 mph  
 10 mph Pace = 44 - 54, Number in Pace = 4479 (52.42%)  
 Variance = 63.56, Standard Deviation = 7.97 mph

## A.8. ATC Welland Avenue (North)



**15 mins Vehicle Classification-Speed Data**

**Globals**

ReportID CustomList-1054  
 Description 15 mins Vehicle Classification-Speed Data  
 Created by MetroCount Traffic Executive  
 Creation Time (UTC) 2021-06-24T09:27:24  
 Legal Copyright (c)1997 - 2016 MetroCount  
 Graphic header bmp  
 Language English  
 Country United Kingdom  
 Time UTC + 60 min  
 Create Version 5.0.2.0  
 Metric Non metric  
 Speed Unit mph  
 Length Unit ft  
 Mass Unit ton

**Dataset**

Site Name 8773\_7  
 Site Attribute Garfree  
 File Name Z:\Projects\8773 - Garfree (WO - 15.05)\Raw data\8773\_7\_0\_2021-06-23 2337.ECO  
 File Type Plus  
 Algorithm Factory default axle  
 Description Weiland Ave [30]  
 Lane 0  
 Direction 7  
 Direction Text 7 - North bound A/B, South bound B/A  
 Layout Text Axle sensors - Paired (Class/Speed/Count)  
 Setup Time 2021-06-16T11:56:36  
 Start Time 2021-06-16T11:56:36  
 Finish Time 2021-06-23T23:40:03  
 Operator SF  
 Configuration:40 MCS600 00 00 00 00 00 ? L975N9PC MCS6-L5 [MCS5] (c)Microcom 190x04d

**Profile**

Name 30\_40  
 Title MetroCount Traffic Executive  
 Graphic Logo  
 Header  
 Footer  
 Percentile 1 85  
 Percentile 2 95  
 Pace 10  
 Filter Start 2021-06-16T12:00:00  
 Filter End 2021-06-23T23:00:00  
 Class Scheme Euro13  
 F Class(1-12) Dir(A/B) Sp(6,99) Headway(30) Span(0 - 328.084) Lane(0-16)  
 Low Speed 6  
 High Speed 99  
 Posted Limit 30  
 Speed Limits 30 30 30 30 30 30 30 30 30 30  
 Separation 0.000  
 Separation Type Headway  
 Direction Northbound  
 Encoded Direction 15

**Column**

Time 24-hour time (0000 - 2359)  
 Total Number in time step  
 Cts 1 Class totals  
 Cts 2 Class totals  
 Cts 3 Class totals  
 Cts 4 Class totals  
 Cts 5 Class totals  
 Cts 6 Class totals  
 Cts 7 Class totals  
 Cts 8 Class totals  
 Cts 9 Class totals  
 Cts 10 Class totals  
 Cts 11 Class totals  
 Cts 12 Class totals  
 SpCts 1 Speed averages by class  
 SpCts 2 Speed averages by class  
 SpCts 3 Speed averages by class  
 SpCts 4 Speed averages by class  
 SpCts 5 Speed averages by class  
 SpCts 6 Speed averages by class  
 SpCts 7 Speed averages by class  
 SpCts 8 Speed averages by class  
 SpCts 9 Speed averages by class  
 SpCts 10 Speed averages by class  
 SpCts 11 Speed averages by class  
 SpCts 12 Speed averages by class  
 Vbin 8 10 Speed bin totals  
 Vbin 10 15 Speed bin totals  
 Vbin 15 20 Speed bin totals  
 Vbin 20 25 Speed bin totals  
 Vbin 25 30 Speed bin totals  
 Vbin 30 35 Speed bin totals  
 Vbin 35 40 Speed bin totals  
 Vbin 40 45 Speed bin totals  
 Vbin 45 50 Speed bin totals  
 Vbin 50 55 Speed bin totals  
 Vbin 55 60 Speed bin totals  
 Vbin 60 65 Speed bin totals  
 Vbin 65 70 Speed bin totals  
 Vbin 70 100 Speed bin totals



















Virtual Week (Partial weeks = 1.14286)

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	SpCis 1	SpCis 2	SpCis 3	SpCis 4	SpCis 5	SpCis 6	SpCis 7	SpCis 8	SpCis 9	SpCis 10	SpCis 11	SpCis 12	Vbin 10	Vbin 15	Vbin 20	Vbin 25	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 55	Vbin 60	Vbin 70	Vbin 100	
Mon	156	140	16	0	0	0	0	0	0	0	0	0	0	0.16.0	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	60	60	22	4	0	0	0	0	0	0	0	0
Tue	164	143	21	0	0	0	0	0	0	0	0	0	0	0.15.8	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9	61	61	28	5	0	0	0	0	0	0	0	0
Wed	135	116	19	0	0	0	0	0	0	0	0	0	0	0.15.4	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9	59	45	19	3	0	0	0	0	0	0	0	0
Thu	159	134	25	0	0	0	0	0	0	0	0	0	0	0.15.0	14.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13	70	62	13	1	0	0	0	0	0	0	0	0
Fri	162	159	23	0	0	0	0	0	0	0	0	0	0	0.15.5	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17	62	77	26	0	0	0	0	0	0	0	0	0
Sat	141	123	18	0	0	0	0	0	0	0	0	0	0	0.14.4	12.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15	74	45	7	0	0	0	0	0	0	0	0	0
Sun	108	105	3	0	0	0	0	0	0	0	0	0	0	0.15.4	16.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	45	44	13	0	0	0	0	0	0	0	0	0

Vehicles = 1179  
 Posted speed limit = 30 mph, Exceeding = 0 (0.000%), Mean Exceeding = 0.00 mph  
 Maximum = 29.3 mph, Minimum = 0.0 mph, Mean = 15.4 mph  
 85% Speed = 19.85 mph, 95% Speed = 22.31 mph, Median = 15.10 mph  
 10 mph Pace = 10 - 20, Number at Pace = 833 (70.13%)  
 Variance = 15.48, Standard Deviation = 3.94 mph

**15 mins Vehicle Classification-Speed Data**

**Globals**

ReportID CustomList-1054  
 Description 15 mins Vehicle Classification-Speed Data  
 Created by MetroCount Traffic Executive  
 Creation Time (UTC) 2021-06-24T09:26:20  
 Legal Copyright (c)1997 - 2016 MetroCount  
 Graphic header bmp  
 Language English  
 Country United Kingdom  
 Time UTC + 60 min  
 Create Version 5.0.2.0  
 Metric Non metric  
 Speed Unit mph  
 Length Unit ft  
 Mass Unit ton

**Dataset**

Site Name 8773\_7  
 Site Attribute Garflee  
 File Name Z:\Projects\8773 - Garflee (WO - 15.05)\Raw data\8773\_7\_0\_2021-06-23 2337.ECO  
 File Type Plus  
 Algorithm Factory default axle  
 Description Weiland Ave [30]  
 Lane 0  
 Direction 7  
 Direction Text 7 - North bound A/B, South bound B/A  
 Layout Text Axle sensors - Paired (Class/Speed/Count)  
 Setup Time 2021-06-16T11:56:36  
 Start Time 2021-06-16T11:56:36  
 Finish Time 2021-06-23T23:40:03  
 Operator SF  
 Configuration:40 MCS600 00 00 00 00 00 ? L975N9PC MCS6-L5 [MCS5] (c)Microcom 190xtd4

**Profile**

Name 30\_40  
 Title MetroCount Traffic Executive  
 Graphic Logo  
 Header  
 Footer  
 Percentile 1 85  
 Percentile 2 95  
 Pace 10  
 Filter Start 2021-06-16T12:00:00  
 Filter End 2021-06-23T23:00:00  
 Class Scheme Euro13  
 F Class(1-12) Dir(BA) Sp(6,99) Headway(30) Span(0 - 328.084) Lane(0-16)  
 Low Speed 6  
 High Speed 99  
 Posted Limit 30  
 Speed Limits 30 30 30 30 30 30 30 30 30 30  
 Separation 0.000  
 Separation Type Headway  
 Direction Southbound  
 Encoded Direction 15

**Column**

Time 24-hour time (0000 - 2359)  
 Total Number in time step  
 Cts 1 Class totals  
 Cts 2 Class totals  
 Cts 3 Class totals  
 Cts 4 Class totals  
 Cts 5 Class totals  
 Cts 6 Class totals  
 Cts 7 Class totals  
 Cts 8 Class totals  
 Cts 9 Class totals  
 Cts 10 Class totals  
 Cts 11 Class totals  
 Cts 12 Class totals  
 SpCts 1 Speed averages by class  
 SpCts 2 Speed averages by class  
 SpCts 3 Speed averages by class  
 SpCts 4 Speed averages by class  
 SpCts 5 Speed averages by class  
 SpCts 6 Speed averages by class  
 SpCts 7 Speed averages by class  
 SpCts 8 Speed averages by class  
 SpCts 9 Speed averages by class  
 SpCts 10 Speed averages by class  
 SpCts 11 Speed averages by class  
 SpCts 12 Speed averages by class  
 Vbin 8 10 Speed bin totals  
 Vbin 10 15 Speed bin totals  
 Vbin 15 20 Speed bin totals  
 Vbin 20 25 Speed bin totals  
 Vbin 25 30 Speed bin totals  
 Vbin 30 35 Speed bin totals  
 Vbin 35 40 Speed bin totals  
 Vbin 40 45 Speed bin totals  
 Vbin 45 50 Speed bin totals  
 Vbin 50 60 Speed bin totals  
 Vbin 60 70 Speed bin totals  
 Vbin 70 100 Speed bin totals



















Virtual Week (Partial weeks = 1.14286)

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	SpCis 1	SpCis 2	SpCis 3	SpCis 4	SpCis 5	SpCis 6	SpCis 7	SpCis 8	SpCis 9	SpCis 10	SpCis 11	SpCis 12	Vbin 9	Vbin 10	Vbin 15	Vbin 20	Vbin 25	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 60	Vbin 70	Vbin 100	
Mon	165	147	18	0	0	0	0	0	0	0	0	0	0	0.15.8	16.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11	62	69	22	1	0	0	0	0	0	0	0	0
Tue	172	153	19	0	0	0	0	0	0	0	0	0	0	0.15.3	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8	78	74	12	0	0	0	0	0	0	0	0	
Wed	152	133	19	0	0	0	0	0	0	0	0	0	0	0.15.5	15.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8	61	70	14	0	0	0	0	0	0	0	0	
Thu	188	164	24	0	0	0	0	0	0	0	0	0	0	0.14.7	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	86	77	10	1	0	0	0	0	0	0	0	
Fri	181	157	22	0	0	0	0	0	0	0	0	0	0	2.14.9	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3	16	81	67	16	1	0	0	0	0	0	0	0	0
Sat	142	118	23	0	0	1	0	0	0	0	0	0	0	0.14.9	14.8	0.0	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	73	51	11	0	0	0	0	0	0	0	0	0
Sun	113	106	7	0	0	0	0	0	0	0	0	0	0	0.15.1	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	45	48	10	0	0	0	0	0	0	0	0	

Vehicles = 1285  
 Posted speed limit = 30 mph, Exceeding = 0 (0.000%), Mean Exceeding = 0.00 mph  
 Maximum = 29.3 mph, Minimum = 6.1 mph, Mean = 15.2 mph  
 85% Speed = 18.57 mph, 95% Speed = 21.84 mph, Median = 15.04 mph  
 10 mph Pace = 10 - 20, Number at Pace = 1078 (85.22%)  
 Variance = 11.82, Standard Deviation = 3.44 mph

## A.9. ATC Welland Avenue (South)

**15 mins Vehicle Classification-Speed Data**

**Globals**

ReportID CustomList-1065  
 Description 15 mins Vehicle Classification-Speed Data  
 Created by MetroCount Traffic Executive  
 Creation Time (UTC) 2021-06-24T09:20:21  
 Legal Copyright (c)1997 - 2016 MetroCount  
 Graphic header bmp  
 Language English  
 Country United Kingdom  
 Time UTC +60 min  
 Create Version 5.0.2.0  
 Metric Non metric  
 Speed Unit mph  
 Length Unit ft  
 Mass Unit ton

**Dataset**

Site Name 8773\_B  
 Site Attribute Gortree  
 File Name Z:\Projects\8773 - Gortee (WO - 15.06)\Raw data\8773\_B\_0\_2021-06-23 2332.ECO  
 File Type Plus  
 Algorithm Factory default axle  
 Description Weiland Ave [30]  
 Lane 0  
 Direction 7  
 Direction Text 7 - North bound A/B, South bound B/A  
 Layout Text Axle sensors - Paired (Class/Speed/Count)  
 Setup Time 2021-06-15T10:57:50  
 Start Time 2021-06-15T10:57:50  
 Finish Time 2021-06-23T23:35:04  
 Operator SF  
 Configuration:40 MCS600 00 00 00 00 00 ? K891NKYR MCS6-6 [MCS5] (c)Microcom 020301

**Profile**

Name 30\_40  
 Title MetroCount Traffic Executive  
 Graphic Logo  
 Header  
 Footer  
 Percentile 1 85  
 Percentile 2 95  
 Pace 10  
 Filter Start 2021-06-16T00:00:00  
 Filter End 2021-06-23T00:00:00  
 Class Scheme Euro13  
 F Class(1-12) Dir(A/B) Sp(6,99) Headway(30) Span(0 - 328.084) Lane(0-16)  
 Low Speed 6  
 High Speed 99  
 Posted Limit 30  
 Speed Limits 30 30 30 30 30 30 30 30 30 30  
 Separation 0.000  
 Separation Type Headway  
 Direction Northbound  
 Encoded Direction 15

**Column**

Time 24-hour time (0000 - 2359)  
 Total Number in time step  
 Cts 1 Class totals  
 Cts 2 Class totals  
 Cts 3 Class totals  
 Cts 4 Class totals  
 Cts 5 Class totals  
 Cts 6 Class totals  
 Cts 7 Class totals  
 Cts 8 Class totals  
 Cts 9 Class totals  
 Cts 10 Class totals  
 Cts 11 Class totals  
 Cts 12 Class totals  
 SpCts 1 Speed averages by class  
 SpCts 2 Speed averages by class  
 SpCts 3 Speed averages by class  
 SpCts 4 Speed averages by class  
 SpCts 5 Speed averages by class  
 SpCts 6 Speed averages by class  
 SpCts 7 Speed averages by class  
 SpCts 8 Speed averages by class  
 SpCts 9 Speed averages by class  
 SpCts 10 Speed averages by class  
 SpCts 11 Speed averages by class  
 SpCts 12 Speed averages by class  
 Vbin 8 10 Speed bin totals  
 Vbin 10 15 Speed bin totals  
 Vbin 15 20 Speed bin totals  
 Vbin 20 25 Speed bin totals  
 Vbin 25 30 Speed bin totals  
 Vbin 30 35 Speed bin totals  
 Vbin 35 40 Speed bin totals  
 Vbin 40 45 Speed bin totals  
 Vbin 45 50 Speed bin totals  
 Vbin 50 60 Speed bin totals  
 Vbin 60 70 Speed bin totals  
 Vbin 70 100 Speed bin totals















22 June 2021

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	SpCls 1	SpCls 2	SpCls 3	SpCls 4	SpCls 5	SpCls 6	SpCls 7	SpCls 8	SpCls 9	SpCls 10	SpCls 11	SpCls 12	Vbin 1	Vbin 10	Vbin 15	Vbin 20	Vbin 25	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 60	Vbin 70	Vbin 100		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97-99	96	78	17	0	0	0	0	0	0	0	0	0	0	0	34.3	34.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	1	3	4	17	26	22	10	12	0	0	0			
98-00	116	96	19	0	0	0	0	0	0	0	0	0	0	0	33.6	34.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	1	6	6	22	29	25	13	12	0	0	0			
00-00	119	100	19	0	0	0	0	0	0	0	0	0	0	0	33.4	34.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	1	6	7	23	30	26	13	12	0	0	0			

Vehicles = 119  
 Posted speed limit = 30 mph, Exceeding = 81 (68.07%), Mean Exceeding = 37.71 mph  
 Maximum = 49.2 mph, Minimum = 9.6 mph, Mean = 33.6 mph  
 90% Speed = 43.31 mph, 95% Speed = 46.59 mph, Median = 33.44 mph  
 10 mph Pace = 28 - .38, Number in Pace = 71 (59.66%)  
 Variance = 65.52, Standard Deviation = 8.09 mph

Virtual Week (1)

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	SpCis 1	SpCis 2	SpCis 3	SpCis 4	SpCis 5	SpCis 6	SpCis 7	SpCis 8	SpCis 9	SpCis 10	SpCis 11	SpCis 12	Vbin 0	Vbin 10	Vbin 15	Vbin 20	Vbin 25	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 60	Vbin 70	Vbin 100	
Mon	127	109	16	0	0	0	0	0	0	0	0	0	0	2.355	35.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	4	7	15	33	37	17	11	2	1	0	0
Tue	119	100	19	0	0	0	0	0	0	0	0	0	0	0.334	34.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	1	6	7	23	30	26	13	12	0	0	0	0
Wed	130	100	26	0	0	3	0	0	0	0	0	0	0	1.353	38.5	0.0	0.0	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	1	1	6	18	37	38	22	4	1	2	0	0
Thu	110	90	20	0	0	0	0	0	0	0	0	0	0	0.318	28.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	5	13	24	33	19	14	0	0	0	0	0
Fri	132	108	20	2	0	0	0	0	1	0	0	0	0	1.331	33.8	20.8	0.0	0.0	0.0	0.0	0.0	0.0	25.5	0.0	0.0	0.0	0	0	3	11	31	35	32	12	3	1	0	0	0
Sat	90	79	10	0	0	0	0	1	0	0	0	0	0	0.332	33.5	0.0	0.0	0.0	0.0	0.0	34.5	0.0	0.0	0.0	0.0	0.0	0	1	2	11	15	25	20	11	4	1	0	0	0
Sun	89	82	7	0	0	0	0	0	0	0	0	0	0	0.327	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	3	2	9	11	30	22	8	4	0	0	0	0
...	797	668	118	2	0	3	0	1	0	1	0	0	0	4.336	33.8	20.8	0.0	31.1	0.0	34.5	0.0	25.5	0.0	0.0	0.0	0.0	3	6	23	64	137	227	184	97	38	6	3	0	0

Vehicles = 797  
 Posted speed limit = 30 mph, Exceeding = 564 (70.77%), Mean Exceeding = 37.12 mph  
 Maximum = 68.6 mph, Minimum = 7.2 mph, Mean = 33.6 mph  
 85% Speed = 40.34 mph, 95% Speed = 43.59 mph, Median = 33.50 mph  
 10 mph Pace = 29 - 36, Number in Pace = 434 (54.45%)  
 Variance = 55.66, Standard Deviation = 7.48 mph

**15 mins Vehicle Classification-Speed Data**

**Globals**  
**Report ID** CustomList-1065  
**Description** 15 mins Vehicle Classification-Speed Data  
**Created by** MetroCount Traffic Executive  
**Creation Time (UTC)** 2021-06-24T09:22:24  
**Legal** Copyright (c)1997 - 2016 MetroCount  
**Graphic header bmp**  
**Language** English  
**Country** United Kingdom  
**Time** UTC + 60 min  
**Create Version** 5.0.2.0  
**Metric** Non metric  
**Speed Unit** mph  
**Length Unit** ft  
**Mass Unit** ton

**Dataset**  
**Site Name** 8773\_B  
**Site Attribute** Gortree  
**File Name** Z:\Projects\8773 - Gortree (WO - 15.06)\Raw data\8773\_B\_0\_2021-06-23 2332.ECO  
**File Type** Plus  
**Algorithm** Factory default axle  
**Description** Weiland Ave [30]  
**Lane** 0  
**Direction** 7  
**Direction Text** 7 - North bound A/B, South bound B/A  
**Layout Text** Axle sensors - Paired (Class/Speed/Count)  
**Setup Time** 2021-06-15T10:57:50  
**Start Time** 2021-06-15T10:57:50  
**Finish Time** 2021-06-23T23:35:04  
**Operator** SF  
**Configuration** 40 MCS600 00 00 00 00 00 ? K891NKYR MCS6-6 [MC55] (c)Microcom 020301

**Profile**  
**Name** 30\_40  
**Title** MetroCount Traffic Executive  
**Graphic Logo**  
**Header**  
**Footer**  
**Percentile 1** 85  
**Percentile 2** 95  
**Pace** 10  
**Filter Start** 2021-06-16T00:00:00  
**Filter End** 2021-06-23T00:00:00  
**Class Scheme** Euro13  
**F Class** (1-12) Dir(BA) Sp(6,99) Headway(30) Span(0 - 328.084) Lane(0-16)  
**Low Speed** 6  
**High Speed** 99  
**Posted Limit** 30  
**Speed Limits** 30 30 30 30 30 30 30 30 30 30  
**Separation** 0.000  
**Separation Type** Headway  
**Direction** Southbound  
**Encoded Direction** 15

**Column**  
**Time** 24-hour time (0000 - 2359)  
**Total** Number in time step  
**Cls 1** Class totals  
**Cls 2** Class totals  
**Cls 3** Class totals  
**Cls 4** Class totals  
**Cls 5** Class totals  
**Cls 6** Class totals  
**Cls 7** Class totals  
**Cls 8** Class totals  
**Cls 9** Class totals  
**Cls 10** Class totals  
**Cls 11** Class totals  
**Cls 12** Class totals  
**SpCls 1** Speed averages by class  
**SpCls 2** Speed averages by class  
**SpCls 3** Speed averages by class  
**SpCls 4** Speed averages by class  
**SpCls 5** Speed averages by class  
**SpCls 6** Speed averages by class  
**SpCls 7** Speed averages by class  
**SpCls 8** Speed averages by class  
**SpCls 9** Speed averages by class  
**SpCls 10** Speed averages by class  
**SpCls 11** Speed averages by class  
**SpCls 12** Speed averages by class  
**Vbin 0 10** Speed bin totals  
**Vbin 10 15** Speed bin totals  
**Vbin 15 20** Speed bin totals  
**Vbin 20 25** Speed bin totals  
**Vbin 25 30** Speed bin totals  
**Vbin 30 35** Speed bin totals  
**Vbin 35 40** Speed bin totals  
**Vbin 40 45** Speed bin totals  
**Vbin 45 50** Speed bin totals  
**Vbin 50 60** Speed bin totals  
**Vbin 60 70** Speed bin totals  
**Vbin 70 100** Speed bin totals

















Virtual Week (1)

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	SpCis 1	SpCis 2	SpCis 3	SpCis 4	SpCis 5	SpCis 6	SpCis 7	SpCis 8	SpCis 9	SpCis 10	SpCis 11	SpCis 12	Vbin 0	Vbin 10	Vbin 15	Vbin 20	Vbin 25	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 60	Vbin 70	Vbin 100
Mon	131	117	13	0	0	0	0	0	0	0	0	0	0	1.365	32.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.2	0	2	0	10	11	25	49	21	9	4	0	0
Tue	127	111	16	0	0	0	0	0	0	0	0	0	0	0.365	32.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	1	2	5	20	34	38	21	6	0	0	
Wed	125	111	12	0	0	1	0	0	0	0	0	0	0	1.366	31.8	0.0	0.0	24.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4	0	1	0	7	20	28	30	28	6	5	0	0
Thu	137	116	20	0	0	0	0	0	0	0	0	0	0	1.340	31.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.2	1	0	3	7	32	36	40	12	3	2	1	0
Fri	134	113	16	2	0	0	0	0	0	1	0	1	1	1.357	32.2	26.5	0.0	0.0	0.0	0.0	0.0	0.0	28.1	0.0	24.1	16.9	0	0	3	8	22	29	40	26	5	1	0	0
Sat	91	83	8	0	0	0	0	0	0	0	0	0	0	0.357	38.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	2	4	16	18	26	15	6	4	0	0	
Sun	90	84	6	0	0	0	0	0	0	0	0	0	0	0.335	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	2	2	6	19	25	16	11	6	2	0	0
...	<b>835</b>	<b>735</b>	<b>91</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>4.354</b>	<b>32.5</b>	<b>26.5</b>	<b>0.0</b>	<b>24.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>28.1</b>	<b>0.8</b>	<b>2</b>	<b>6</b>	<b>12</b>	<b>47</b>	<b>140</b>	<b>195</b>	<b>239</b>	<b>134</b>	<b>41</b>	<b>18</b>	<b>1</b>	<b>0</b>

Vehicles = 835  
 Posted speed limit = 30 mph, Exceeding = 628 (75.21%), Mean Exceeding = 38.03 mph  
 Maximum = 63.9 mph, Minimum = 6.7 mph, Mean = 35.0 mph  
 85% Speed = 42.05 mph, 95% Speed = 46.20 mph, Median = 35.29 mph  
 10 mph Pace = 29 - 36, Number in Pace = 447 (53.53%)  
 Variance = 53.57, Standard Deviation = 7.32 mph

# Appendix B. B6047 / Leicester Lane / Gallow Field Road PIA Data



Accidents between dates **01/01/2015** and **28/12/2020** (72) months

**Selection:**

; Refined using Accidents within selected Polygons (All polygons from table Atkins Market Harborough 24.02.2021)

**Notes:****Selected Polygon:Gallow Field Road/B6047**

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201701268	03/10/2017	472135	289474	Fine without high winds	Dry	Daylight	Slight

**Location:** B6047 HARBOROUGH ROAD FOXTON CROSSROADS JW GALLOW FIELD ROAD

**Vehicles:**

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	SE	N
Car	Mid Junction - on roundabout or main road	Going ahead other	W	SE

**Casualties:**

Class	Severity
Driver / Rider	Slight

**Number of records in selection: 1**

Accidents between dates 01/01/2015 and 28/12/2020 (72) months

Selection: Notes:

; Refined using Accidents within selected Polygons (All polygons from table Atkins Market Harborough 24.02.2021)

Police Ref.	Date	Cas.	Sev.	Cycs	Peds	Ch	OAPs	Vis.	Manv.	Road Cond.	Time	Location
<b>Selected Polygon:Gallow Field Road/B6047</b>												
201701268	03/10/2017	1	Slight	0	0	0	0	Light	No turn	Dry	1616	B6047 HARBOROUGH ROAD FOXTON CROSSROADS JW GALLOW FIE
Column Totals		1		0	0	0	0					
No. of Accidents				0	0	0	0					
Total number of accidents listed:		1										

Accidents between dates **01/01/2015** and **28/12/2020** (72) months

**Selection:** **Notes:**

; Refined using Accidents within selected Polygons (All polygons from table Atkins Market Harborough 24.02.2021)

Table 1 - Accidents by Month

	2015	2016	2017	2018	2019	2020	Total
January	-	-	-	-	-	-	0
February	-	-	-	-	-	-	0
March	-	-	-	-	-	-	0
April	-	-	-	-	-	-	0
May	-	-	-	-	-	-	0
June	-	-	-	-	-	-	0
July	-	-	-	-	-	-	0
August	-	-	-	-	-	-	0
September	-	-	-	-	-	-	0
October	-	-	1	-	-	-	1
November	-	-	-	-	-	-	0
December	-	-	-	-	-	-	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

Table 2 - Casualties by Month

	2015	2016	2017	2018	2019	2020	Total
January	-	-	-	-	-	-	0
February	-	-	-	-	-	-	0
March	-	-	-	-	-	-	0
April	-	-	-	-	-	-	0
May	-	-	-	-	-	-	0
June	-	-	-	-	-	-	0
July	-	-	-	-	-	-	0
August	-	-	-	-	-	-	0
September	-	-	-	-	-	-	0
October	-	-	1	-	-	-	1
November	-	-	-	-	-	-	0
December	-	-	-	-	-	-	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

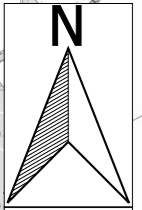
Table 3 - All Accidents by Severity

	2015	2016	2017	2018	2019	2020	Total
Fatal	0	0	0	0	0	0	0
Serious	0	0	0	0	0	0	0
Slight	0	0	1	0	0	0	1
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

Table 4 - Casualties by Severity

	2015	2016	2017	2018	2019	2020	Total
Fatal	0	0	0	0	0	0	0
Serious	0	0	0	0	0	0	0
Slight	0	0	1	0	0	0	1
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>





Not To Scale



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# Appendix C. Illustrative Masterplan





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- Building Footprint
- Existing Vegetation Retained
- Exercise Area
- Proposed Vegetation (refer to landscape plan for details)
- All Weather Surface Area
- Horticultural Area
- Clearance Zone
- Proposed Woodland Screening
- Community Area
- Proposed Ponds
- Existing Ponds
- Application Red Line Boundary
- MOJ Ownership Boundary
- Existing Gas Main
- Security Fence Zonal Fencing 5.2m
- Zonal Low Level Timber Fence
- Security Fence - Internal Fence 5.2m
- Security Fence - Outer Fence 5.2m
- Badger Set and Exclusion Zone

Rev	Date	Description
P06	03.08.21	Existing gas main line type on legend revised to show class 22
P05	30.07.21	New ponds west of site indicated, with footpath route. New footpaths along Welland Avenue added. Existing Gas Main to south shown.
P04	26.07.21	Proposed bus stop note removed.
P03	13.07.21	Updated ownership and site line boundaries
P02	14.06.21	Updated to Mace TA Comments
P01	30.04.21	First Issue

This document references the following linked files

File Reference	Status	Revision
661277-0000-PEV-GTX0000-XX-M3-A-0001-D0200	S1	P 00
661277-0000-CEN-GTX0000-XX-SU-G-0001-A0700	S2	P03

**Project Status**  
 RIBA Stage 2

**Client** **Project**  
**Ministry of Justice** **New Prisons Programme**  
 Ministry of Justice, 102 Petty France, London, SW1H 9AJ

**Project Description / Site**  
 New Prisons Programme  
 Gartree 2

**Project Address**  
 Site Adjacent to HMP Gartree

**Building Type**  
 SITE INFRASTRUCTURE

**Drawing Title**  
 Site-Block Plan-Proposed-Planning

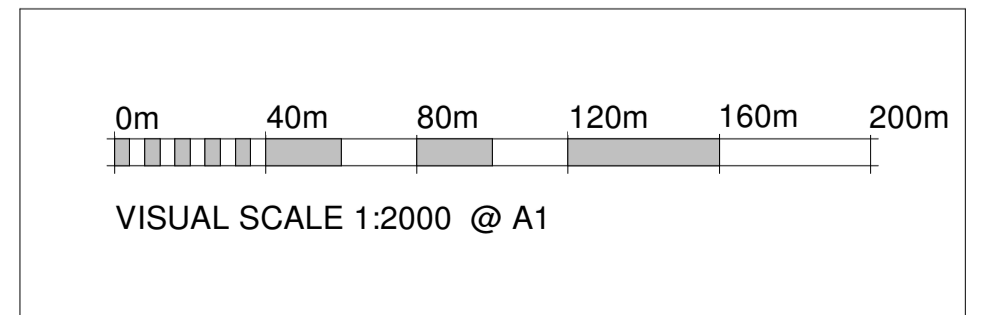
	Drawn By	HKM	Date	08-04-2021
	Checked By	CGI	Date	08-04-2021
	Approved By	CGI	Date	08-04-2021

**Drawing Number**  
 661277-0000-PEV-GTX0011-ZZ-DR-A-9002 Delref B0700

**Sheet No.** 1 of 1 Rev. P06

**Data Security Classification**  
 OFFICIAL Suitability S3

1 Plan-Site-Block-Proposed - Planning  
 9002 1 : 2000

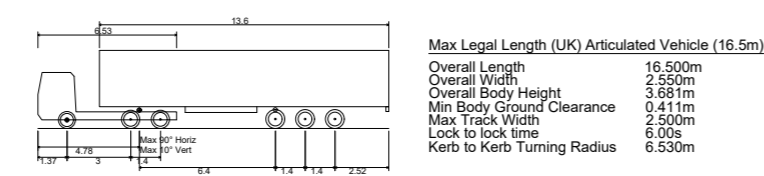
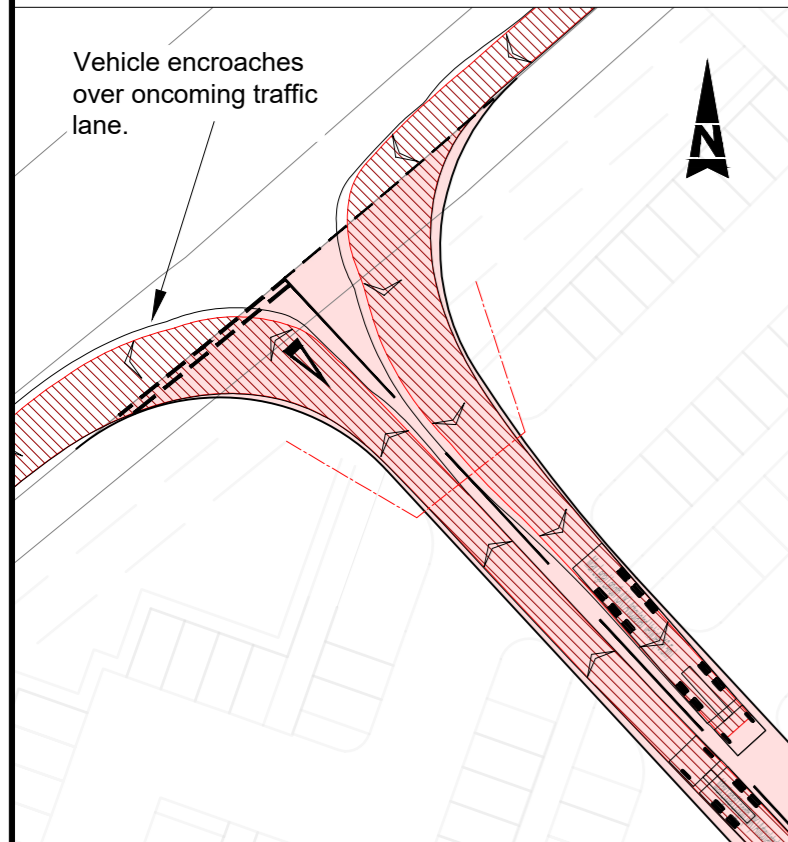




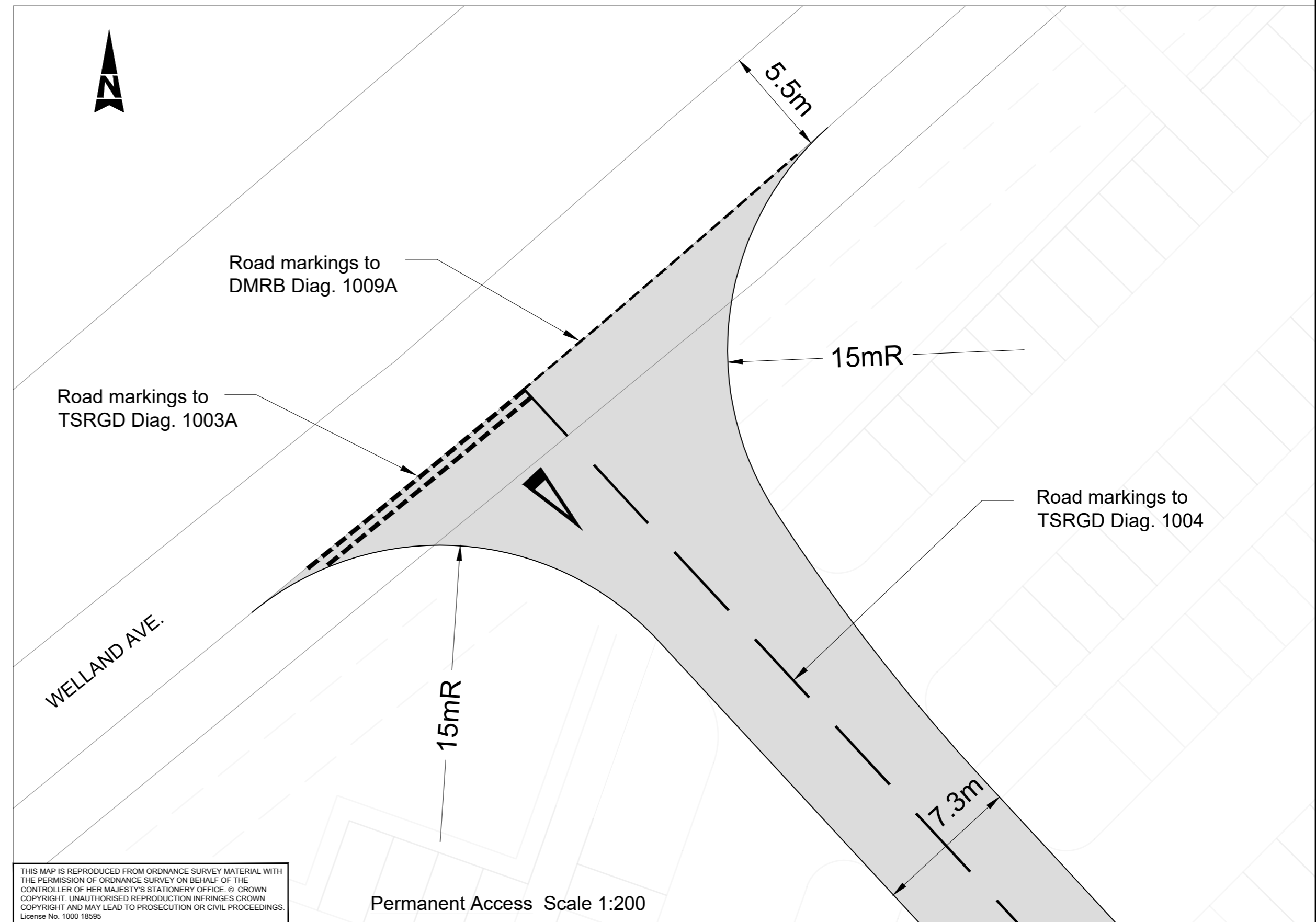
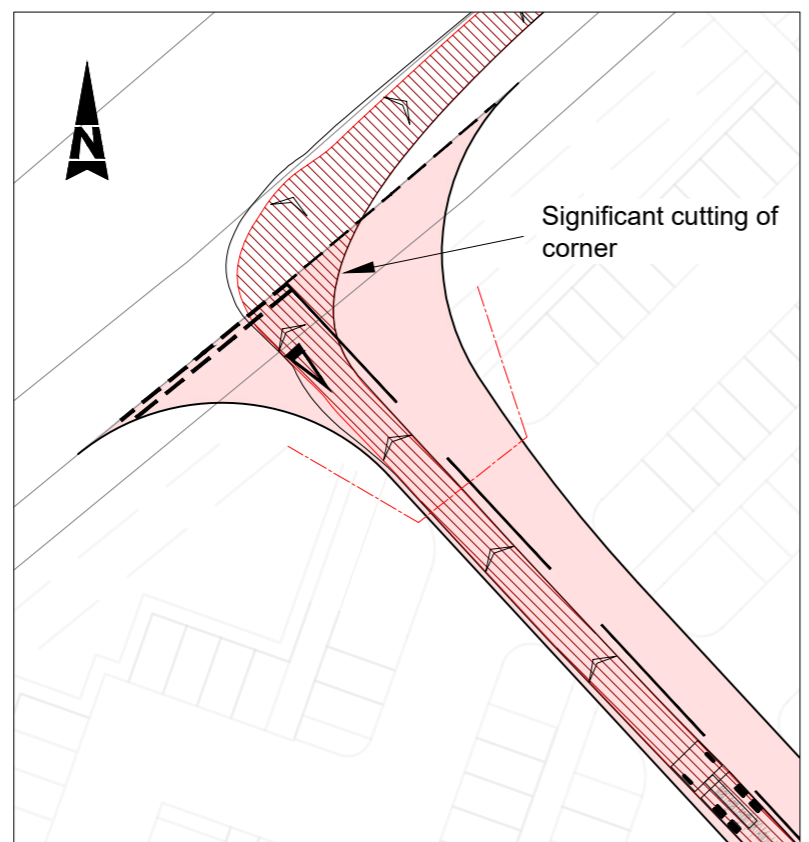
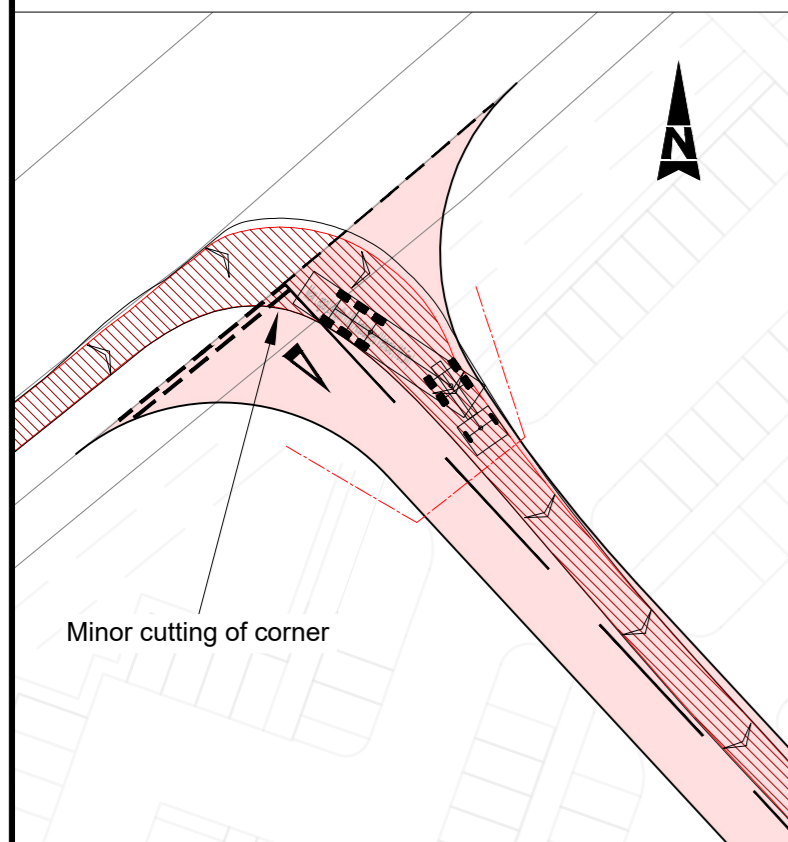
# Appendix D. Site Access Preliminary Design

100  
10  
0  
Millimetres

DO NOT SCALE



Construction Access Scale 1:500



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Key:

- Temporary construction surfacing
- Permanent carriageway surfacing
- Vehicle Swept Path

- Notes:
- Layout is preliminary design 'for information' only and subject to approval from Highway Authority.
  - Layout is based on Ordnance Survey. Subject to detailed design on Topographical Survey base.
  - Proposed junction visibility splays to be checked against topographical survey information to confirm minimum standards are achieved.
  - All proposed road markings and temporary signage to be in accordance with the 'Traffic Signs Regulations and General Directions 2016'.
  - On completion of works all affected infrastructure including hedging, fencing, ditches, footways, kerbing, verges and road surfacing shall be reinstated in accordance with the Overseeing Organisation's requirements.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following:	
CONSTRUCTION NONE	
MAINTENANCE/CLEANING NONE	
DECOMMISSIONING/DEMOLITION NONE	
It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement	

Rev	Date	Description	By	Chkd	App'd
P1	20.04.21	DRAWING CREATED		AE	PDE

Drawing Status: **FIT FOR INFORMATION**

Suitability: **S2**

**ATKINS**

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Client: **MINISTRY OF JUSTICE**

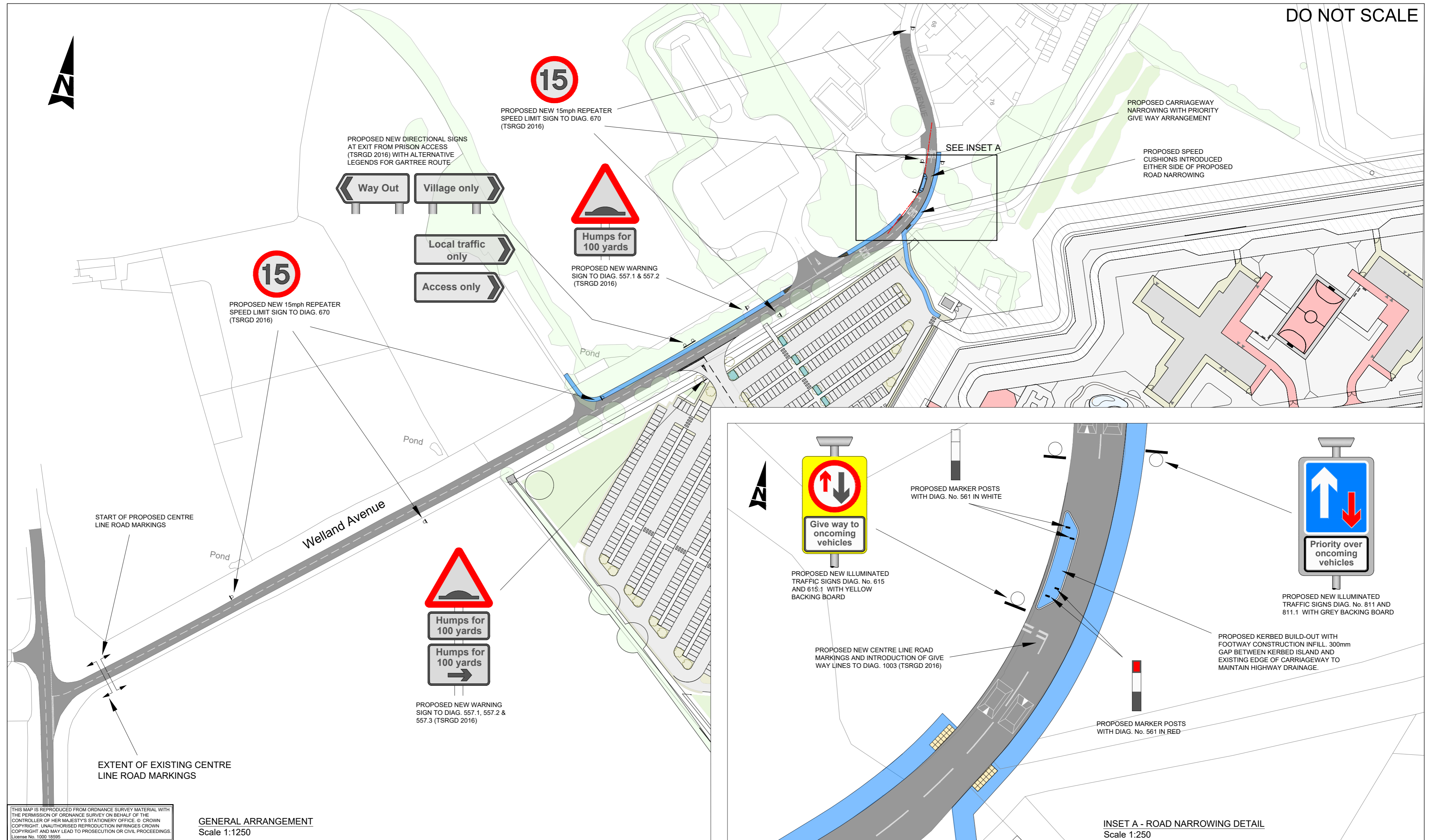
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Drawing Title: <b>PROPOSED NEW ACCESS</b>				
Scale: AS SHOWN	Designed: AE	Drawn: AE	Checked: PDE	Authorised:
Original Size: A2	Date: 20.04.21	Date: 20.04.21	Date: 20.04.21	Date:
Drawing Number: GART	Originator: - ATK -	Volume: - HGN -	Project Ref. No. 5200124	
HA PIN: WELL	- DR - D -	0001	Revision: P1	
Location:	Type:	Role:	Number:	



# Appendix E. Proposed Highway Mitigation Welland Avenue

DO NOT SCALE

100  
10  
0  
Millimetres



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GENERAL ARRANGEMENT  
Scale 1:1250

INSET A - ROAD NARROWING DETAIL  
Scale 1:250

<b>Key:</b> 25m Visibility distance to traffic calming feature Proposed new footway / island Existing carriageway with proposed centre line markings Proposed Tactile Paving Proposed speed cushion 1.8m x 3.5m	<b>Notes:</b> 1. Layout is preliminary design 'for information' only. Based on Ordnance Survey data. 2. Spacing of proposed repeater speed limit signs to be 100m 3. Spacing of proposed speed cushions to be 60m	<b>SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION</b> In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following:	It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement	Drawing Status: <b>FIT FOR INFORMATION</b> Suitability: <b>S2</b>	Project Title: <b>HMP GARTREE</b> Drawing Title: <b>PROPOSED HIGHWAY MITIGATION WELLAND AVENUE</b>																																				
		<b>CONSTRUCTION</b> Live traffic Live utilities, Presence of soil contamination, asbestos, Hazardous tar and breaking of concrete not known	<b>MAINTENANCE/CLEANING</b> NONE	<b>DECOMMISSIONING/DEMOLITION</b> NONE	<b>ATKINS</b> The Axis 10 Holliday Street Birmingham West Midlands B1 1TF Tel: +44 (0)1214 835000 Fax: +44 (0)1214 835252 Copyright © Atkins Limited (2021) www.atkinsglobal.com	Client: <b>MINISTRY OF JUSTICE</b>	<table border="1"> <tr> <th>Scale</th> <th>Designed</th> <th>Drawn</th> <th>Checked</th> <th>Authorised</th> </tr> <tr> <td>AS SHOWN</td> <td>AE</td> <td>AE</td> <td>PDE</td> <td></td> </tr> <tr> <th>Original Size</th> <th>Date</th> <th>Date</th> <th>Date</th> <th>Date</th> </tr> <tr> <td>A2</td> <td>05.08.21</td> <td>05.08.21</td> <td>05.08.21</td> <td></td> </tr> </table> <table border="1"> <tr> <th>Drawing Number</th> <th>Originator</th> <th>Volume</th> <th>Project Ref. No.</th> </tr> <tr> <td>GART</td> <td>ATK</td> <td>HGN</td> <td>5200124</td> </tr> <tr> <th>HA PIN</th> <th>-DR - D</th> <th>- 0003</th> <th>Revision</th> </tr> <tr> <td></td> <td></td> <td></td> <td>P1</td> </tr> </table>	Scale	Designed	Drawn	Checked	Authorised	AS SHOWN	AE	AE	PDE		Original Size	Date	Date	Date	Date	A2	05.08.21	05.08.21	05.08.21		Drawing Number	Originator	Volume	Project Ref. No.	GART	ATK	HGN	5200124	HA PIN	-DR - D	- 0003	Revision		
Scale	Designed	Drawn	Checked	Authorised																																					
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HA PIN	-DR - D	- 0003	Revision																																						
			P1																																						

# Appendix F. Trip Generation Assumptions

# Technical Note

Project:	Prison Sites	
Subject:	Trip Generation Assumptions – Category B Prisons	
Author:	Atkins	
Date:	21/08/2020	

Given the nature of the land use, there is limited publicly available information about trip generation at prison sites. This technical note summarises the proposed trip generation assumptions for Category B prisons. It is based on the information previously used for planning applications at HMP Berwyn in Wrexham, HMP Full Sutton in York and HMP Glen Parva in Leicester.

## Staff Numbers

- The prisoner to staff ratio is assumed to be 0.50.
- It is understood that 74% of the staff will be on site.
- Staff types would be split using the following proportions:
  - Uniform / Operational 60%; and
  - Non-uniform 40%.

Table1 presents the proposed staff patterns.

**Table 1 - Staff Shift Patterns**

Title	Time Period	Proportion of Staff (%)
<b>Uniformed Staff</b>		
Early Shift	07:00 to 12:30	22%
Main Shift	08:00 to 17:30	48%
Late Shift	13:30 to 20:30	23%
Nights	20:00 to 07:00	6%
<b>Non-uniformed Staff (Flexible Working)</b>		
Early Shift	08:30 to 16:30	48%
Main Shift	09:30 to 17:00	52%

- It is assumed that staff arrive throughout the hour prior to the start of their shift and leave throughout the hour after a shift finishing.
- Due to operational processes, staff usually have a longer lead in time to allow them to go through security and hand-over shifts.
- Therefore, it is estimated that staff will arrive between 07:00-08:00 and leave between 17:30-18:30 for 'Main' uniform shift, and arrive between 07:30-08:30, and leave between 16:30-17:30 for the 'Early' non-uniform shift.

### Staff Modal Split

- Journey to Work data from the 2011 Census for the area within which the prison development is proposed is used to understand likely travel modes of staff.
- Journey to Work modal splits from the 2011 Census can be applied to daytime staff but are amended for those working late shifts as it is considered that these staff are not likely to walk, cycle, or use public transport.

### Visitor Numbers

The following sets out the methodology used to estimate the visitor numbers at the proposed prison.

- Assume prisoners receive two visits per month- this has been determined from prison visitation rates from other similar prisons.
- Assume visits are spread evenly across the month.
- There are morning visiting periods Monday to Thursday, 09:30-12:30 (2 x 90 minute slots), one afternoon period 14:30-16:30, and one visiting period on Friday and Saturday between the hours of 09:30-12:30.
- Evening visits take place twice a week between the hours of 17:00-19:00.
- For a typical weekday, this results in four visiting periods each day.
- It is assumed daily visits are spread evenly across these visiting periods.
- Each prisoner can be visited by a maximum of three people. It is assumed that the visitors of each individual prisoner will all travel together. Therefore, each prisoner will only generate a single 'Visiting Trip'.
- We have assumed visitors will arrive in the hour before the start time of the visiting period.
- In addition to the social visits, there will also be ad-hoc legal visits utilising five legal visit rooms. In reality, these trips are unlikely to generate material traffic volumes or occur during the peak hour. For robustness these trips have been added to the social visits.

### Visitor Modal Split

- It is considered that all visitor trips and legal visits will be made by private car, given the limited choices for other transport modes.
- If sites are located in areas of good existing sustainable transport provision, there might be a case to include a proportion of sustainable travel for visitor trips.
- However, legal visits are always assumed to be undertaken by private car.

**Table 2 - Modal Split for Visitors and Legal Visits**

Mode	Visitor Trips	Legal Visits
Car	100%	100%
Taxi/ Public Transport	0%	0%

# Appendix G. Gartree 2 Trip Generation Calculations





Introduction sheet

<b>Client name</b>	Ministry of Justice
<b>Project / purpose</b>	Gartree 2
<b>Date of issue</b>	20/07/2021
<b>File Name</b>	Gartree 2 Trip Distribution and Trip Generation
<b>Primary contact name</b>	
<b>Primary contact email</b>	
<b>Project number</b>	5200124

<b>Date</b>	<b>Contents/Changes</b>	<b>Version</b>	<b>Modeller</b>
20/07/2021	First Issue	1	CR

<b>Sheet Name</b>	<b>Description</b>
Staff Generation	Details the staff trip generation and mode splits
Shift Operation and Parking Accumulation	Staff Parking Accumulation by car and person trips
Visitor Generation	Visitor trip generation
Traffic Generation	Summary of traffic generation during peak hours, staff and visitors.

**Notes:**

MSOA Middle Super Output Area - the lowest geographical scale at which journey to work data is available

# Staff Generation

## Staff Numbers

It is anticipated that the prison will accommodate 1,715 prisoners. The prisoner to staff ratio is assumed to be 0.50\*. On this basis the number of staff at the prison will be 858. It is understood that 74% of staff will be on site 635.

1,715	prisoners
0.50	*
858	
635	

The MoJ have provided advice indicating that the staff types would be split using the following proportions:

Uniform/Operational	60%
Non-uniform	40%

The following tables provide a summary of the staff numbers:

Uniform Staff	381
Non-Uniform Support Staff	254
<b>Total Staff</b>	<b>635</b>

## Existing Modal Splits

The 2011 census data has been interrogated for the modal splits of **Harborough**. It is considered appropriate that this data is applied to the daytime staff. However, the splits have been amended for those working evening shifts as they are less likely to walk, cycle, or use public transport.

	Census Data	Day Shift	Late Shift
Car Driver	75.3%	-	-
Taxi	0.2%	-	-
Motorcycle	0.7%	-	-
Car Passenger	7.3%	-	-
Bus**	2.5%	-	-
Train**	0.8%	-	-
Cycle**	2.5%	-	-
Walk**	10.6%	-	-
<b>Total</b>	<b>100%</b>	<b>0</b>	<b>0%</b>

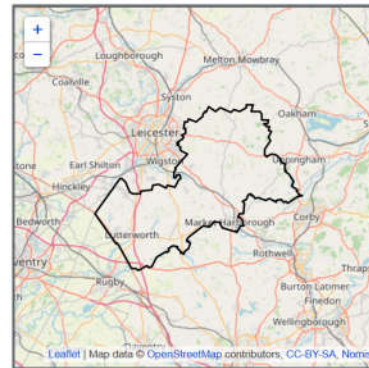
	Amended Census Data	Day Shift	Late Shift
Car Driver	84.3%	84.3%	90.1%
Taxi	0.3%	0.3%	0.3%
Motorcycle	0.8%	0.8%	0.9%
Car Passenger	8.2%	8.2%	8.8%
Bus**	2.8%	2.8%	-
Train**	0.9%	0.9%	-
Cycle**	2.8%	2.8%	-
Walk**	0.0%	0.0%	-
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

\* based on existing study into the staff and prisoner ratio.

\*\* modes excluded from late/night shift due to being undesirable or unavailable

Key:

- To fill in
- Calculated Value



Harborough



# Shift Operation and Parking Accumulation - Car Driver

Key:  Arrival  Departure  Shift

PERSON TRIPS																											
Uniformed Staff																											
Shift Title	Period	Shift (%)		00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Early Shift	07:00 to 12:30	22%	84							84																	
Main Shift	08:00 to 17:30	48%	183								183										183						
Late Shift	13:30 to 20:30	23%	88													88											
Nights	20:00 to 07:00	6%	23								23												23				
<b>Total</b>		99%	377																								
Non-Uniformed Staff																											
Early Shift	08:30 to 16:30	48%	122																		122						
Main Shift	09:30 to 17:00	52%	132									132										132					
<b>Total</b>		100%	254																								

Note: Shifts based on Table 3.1 HMP Oakwood Travel Plan (Atkins) 2009

<b>Total</b>	631
--------------	-----

CAR TRIPS																											
Uniformed Staff																											
Shift Title	Period	Single Car Occupancy (%)		00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Early Shift	07:00 to 12:30	84%	71							71																	
Main Shift	08:00 to 17:30	84%	154								154											154					
Late Shift	13:30 to 20:30	90%	79													79											
Nights	20:00 to 07:00	90%	21								21													21			
<b>Total</b>			324																								
Non-Uniformed Staff																											
Early Shift	08:30 to 16:30	84%	103									103										103					
Main Shift	09:30 to 17:00	84%	111										111														
<b>Total</b>			103																								

<b>Total</b>	427
--------------	-----

## Shift Operation and Parking Accumulation - Car Driver

			00:00	00:30	01:00	01:30	02:00	02:30	03:00	03:30	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	19:00	19:30	20:00	20:30	21:00	21:30	22:00	22:30	23:00	23:30	TOTAL			
Uniformed	Arrivals														35	35	77	77											39	39												10	10									324		
	Departures																10	10											35	35									77	77												324		
	Parking Accumulation		21	21	21	21	21	21	21	21	21	21	21	21	56	91	158	225	225	225	225	225	225	225	225	225	225	225	229	233	233	233	233	233	233	233	233	233	156	79	79	89	99	99	60	21	21	21	21	21	21			
Non - Uniformed	Arrivals																	51	51	56	56																																214	
	Departures																		51	107	56																	51	107	56												214		
	Parking Accumulation		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	103	158	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	163	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	214	
Total	Arrivals		0	0	0	0	0	0	0	0	0	0	0	0	35	35	77	128	51	56	56	0	0	0	0	0	0	0	39	39	0	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	538
	Departures		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	35	35	0	0	0	0	0	0	0	51	107	133	77	0	0	0	0	0	39	39	0	0	0	0	0	538
	Parking Accumulation		21	21	21	21	21	21	21	21	21	21	21	21	56	91	158	276	327	383	438	438	438	438	438	438	438	438	443	447	447	447	447	447	447	447	395	288	156	79	79	89	99	99	60	21	21	21	21	21	21			

# Visitor Generation

The visits will be 2 visits a day Monday to Thursday, Saturday: 9.30am-12.30pm; 2.30-4.30pm, 1 visit a day Friday and Sunday: 9.30am-12.30pm, Evening visits twice a week: 5-7pm

### Methodology

The following sets out the methodology used to estimate the visitor numbers at the proposed prison:

- Prison visits have to be pre-booked
- Prison visitation rates from other similar prison examples are assumed to be **2** visits per prisoner per month.
- Assuming visits are spread evenly across the month, this equates to **114** visits per day.
- The visiting periods are 2 visits a day Monday to Thursday & Saturday: 9.30am-12.30pm (2 x 90 minute slots); 2.30-4.30pm, 1 visit a day Friday and Sunday: 9.30am-12.30pm, Evening visits twice a week: 5-7pm
- For a typical weekday, this results in **4** visiting periods each day. It is assumed daily visits are spread evenly across these visiting periods.
- Each prisoner can be visited by a maximum of three people
- It is assumed that the visitors of each individual prisoner will all travel together. Therefore, each prisoner will only generate a single 'Visiting Trip'
- We have assumed visitors will arrive in the hour before the start time of the visiting period.
- In addition to the social visits, there will also be adhoc legal visits utilising **5** legal visit rooms. In reality, these trips are unlikely to generate material traffic volumes or occur during the peak hour. For robustness these have been added to the social visits.

### Visiting Trips

Key:  Arrival  Departure  Visit

VISITING TRIPS - SOCIAL TRIPS																												
Visiting Period	Social Visits	Legal Visits	Total	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
1	29	5	34										34		34													
2	29	5	34											34			34											
3	29	5	34														34				34							
4	29	5	34																	34			34					
<b>Total</b>	114	20	134																		34							

For the purposes of this assessment, a mode split is adopted as follows:

Car Trips	100%
Public Transport	0%

All legal visits will be made by car

VISITING TRIPS - SOCIAL TRIPS - PRIVATE CAR TRIPS																												
Visiting Period	Social Visits	Legal Visits	Total	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
1	29	5	34										34		34													
2	29	5	34											34			34											
3	29	5	34														34				34							
4	29	5	34																	34			34					
<b>Total</b>	86	20	134																		34							

Visitors	Arrivals	Departures	Parking Accumulation	00:00	00:30	01:00	01:30	02:00	02:30	03:00	03:30	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	19:00	19:30	20:00	20:30	21:00	21:30	22:00	22:30	23:00	23:30	TOTAL								
				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	34	34	50	67	50	34	34	17	17	16.8	17	34	34	34	34	50	50	34	34	34	34	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0

# Traffic Generation

Vehicle Trips per hour						
	AM Peak (07:00-08:00)		PM Peak (17:00 to 18:00)		Daily	
	IN	OUT	IN	OUT	IN	OUT
Staff	205	21	0	240	538	538
Visitors	0	0	0	17	134	134
<b>Total</b>	205	21	0	257	672	672

\*Visiting start/end times do not coincide with peak hours

Route	Distribution	AM		PM		Daily	
		IN	OUT	IN	OUT	IN	OUT
<b>A</b>	19%	40	4	0	50	131	131
<b>B</b>	25%	51	5	0	63	166	166
<b>C</b>	17%	36	4	0	45	117	117
<b>D</b>	38%	79	8	0	99	258	258
<b>Total</b>	100%	205	21	0	257	672	672

# Appendix H. Gartree 2 Distribution Plan and Calculations

# Trip Distribution

MSOA		Number of Car Drivers	Routes			
			A4304 (West)	A4304 (East)	B6047 (South)	B6047 (North)
			A	B	C	D
E02005373 : Harborough 007	14.6%	191		50%	50%	
E02005375 : Harborough 009	11.0%	143		50%	50%	
E02005374 : Harborough 008	8.6%	112		50%	50%	
E02005369 : Harborough 003	5.8%	75				100%
E02005640 : Kettering 002	5.1%	66		50%		50%
E02005371 : Harborough 005	3.8%	49	50%			50%
E02005619 : Daventry 001	2.4%	31	50%	50%		
E02005368 : Harborough 002	1.6%	21				100%
E02005416 : Oadby and Wigston 007	1.6%	21	50%			50%
E02006816 : Harborough 011	1.5%	20		50%		50%
E02005639 : Kettering 001	1.5%	19				100%
E02005641 : Kettering 003	1.5%	19		50%		50%
E02005372 : Harborough 006	1.4%	18	100%			
E02005376 : Harborough 010	1.2%	15	100%			
E02006863 : Corby 009	1.2%	15				100%
E02005370 : Harborough 004	1.1%	14	100%			
E02002856 : Leicester 030	1.0%	13	50%			50%
E02005612 : Corby 001	0.9%	12				100%
E02002867 : Rutland 005	0.8%	11				100%
E02006911 : Oadby and Wigston 009	0.8%	11				100%
E02005645 : Kettering 007	0.8%	11				100%
E02002865 : Rutland 003	0.6%	8				100%
E02005412 : Oadby and Wigston 003	0.6%	8				100%
E02005415 : Oadby and Wigston 006	0.6%	8	50%			50%
E02005613 : Corby 002	0.6%	8				100%
E02002849 : Leicester 023	0.5%	7	50%			50%
E02005338 : Blaby 006	0.5%	7	70%			30%
E02005340 : Blaby 008	0.5%	7	70%			30%
E02005414 : Oadby and Wigston 005	0.5%	7	50%			50%
E02006818 : Oadby and Wigston 008	0.5%	7	50%			50%
E02005614 : Corby 003	0.5%	7				100%
E02005620 : Daventry 002	0.5%	7	20%		60%	20%
E02005343 : Blaby 011	0.5%	6	30%			70%
E02005394 : Melton 004	0.5%	6				100%
E02005617 : Corby 006	0.5%	6		50%		50%
E02005622 : Daventry 004	0.5%	6	25%	50%		25%
E02005649 : Kettering 011	0.5%	6	20%	20%		60%
E02006493 : Rugby 002	0.5%	6	100%			
E02002834 : Leicester 008	0.4%	5	30%			70%
E02006817 : Leicester 038	0.4%	5	30%			70%
E02005377 : Hinckley and Bosworth 001	0.4%	5	70%			30%
E02005381 : Hinckley and Bosworth 005	0.4%	5	70%			30%
E02005388 : Hinckley and Bosworth 012	0.4%	5	100%			
E02005392 : Melton 002	0.4%	5				100%
E02005491 : South Kesteven 016	0.4%	5				100%
E02005623 : Daventry 005	0.4%	5		70%		30%
E02005646 : Kettering 008	0.4%	5		40%		60%
E02005647 : Kettering 009	0.4%	5		40%		60%
E02005692 : Wellingborough 001	0.4%	5		30%		70%
E02002858 : Leicester 032	0.3%	4	50%			50%
E02002861 : Leicester 035	0.3%	4	50%			50%
E02002864 : Rutland 002	0.3%	4				100%
E02005335 : Blaby 003	0.3%	4	50%			50%
E02005337 : Blaby 005	0.3%	4	50%			50%
E02005341 : Blaby 009	0.3%	4	50%			50%
E02005407 : North West Leicestershire 011	0.3%	4	80%			20%
E02005615 : Corby 004	0.3%	4				100%
E02006862 : Corby 008	0.3%	4				100%
E02005642 : Kettering 004	0.3%	4		50%		50%
E02006492 : Rugby 001	0.3%	4	100%			
E02002845 : Leicester 019	0.2%	3				100%
E02002855 : Leicester 029	0.2%	3	50%			50%
E02002860 : Leicester 034	0.2%	3	50%			50%
E02006815 : Leicester 037	0.2%	3				100%
E02005334 : Blaby 002	0.2%	3	100%			

# Trip Distribution

MSOA		Number of Car Drivers	Routes			
			A4304 (West)	A4304 (East)	B6047 (South)	B6047 (North)
			A	B	C	D
E02005342 : Blaby 010	0.2%	3	80%			20%
E02005352 : Charnwood 008	0.2%	3				100%
E02005362 : Charnwood 018	0.2%	3				100%
E02005379 : Hinckley and Bosworth 003	0.2%	3	40%			60%
E02005382 : Hinckley and Bosworth 006	0.2%	3	100%			
E02005616 : Corby 005	0.2%	3				100%
E02005629 : East Northamptonshire 001	0.2%	3				100%
E02005644 : Kettering 006	0.2%	3		50%		50%
E02005648 : Kettering 010	0.2%	3		50%		50%
E02005673 : Northampton 024	0.2%	3	25%	50%		25%
E02006497 : Rugby 006	0.2%	3	100%			
E02004200 : South Hams 012	0.2%	3	100%			
E02002808 : Derby 013	0.2%	2	80%			20%
E02002828 : Leicester 002	0.2%	2				100%
E02002832 : Leicester 006	0.2%	2				100%
E02002835 : Leicester 009	0.2%	2				100%
E02002846 : Leicester 020	0.2%	2	50%			50%
E02002848 : Leicester 022	0.2%	2				100%
E02002862 : Leicester 036	0.2%	2	50%			50%
E02006851 : Leicester 041	0.2%	2				100%
E02002863 : Rutland 001	0.2%	2				100%
E02005339 : Blaby 007	0.2%	2	70%			30%
E02005355 : Charnwood 011	0.2%	2				100%
E02005361 : Charnwood 017	0.2%	2				100%
E02005364 : Charnwood 020	0.2%	2				100%
E02005366 : Charnwood 022	0.2%	2	80%			20%
E02005380 : Hinckley and Bosworth 004	0.2%	2	100%			
E02005391 : Melton 001	0.2%	2				100%
E02005393 : Melton 003	0.2%	2				100%
E02005395 : Melton 005	0.2%	2				100%
E02005396 : Melton 006	0.2%	2				100%
E02005403 : North West Leicestershire 007	0.2%	2	80%			20%
E02005490 : South Kesteven 015	0.2%	2				100%
E02005633 : East Northamptonshire 005	0.2%	2				100%
E02005657 : Northampton 008	0.2%	2	25%	50%		25%
E02005671 : Northampton 022	0.2%	2	25%	50%		25%
E02005674 : Northampton 025	0.2%	2	25%	50%		25%
E02005697 : Wellingborough 006	0.2%	2				100%
E02005699 : Wellingborough 008	0.2%	2				100%
E02005910 : Rushcliffe 005	0.2%	2	50%			50%
E02002946 : Telford and Wrekin 019	0.2%	2	100%			
E02001071 : Manchester 027	0.1%	1	50%			50%
E02001422 : St. Helens 017	0.1%	1	100%			
E02005789 : Ryedale 002	0.1%	1	50%			50%
E02002223 : Bradford 041	0.1%	1	80%			20%
E02002831 : Leicester 005	0.1%	1				100%
E02002833 : Leicester 007	0.1%	1				100%
E02002838 : Leicester 012	0.1%	1	50%			50%
E02002839 : Leicester 013	0.1%	1				100%
E02002851 : Leicester 025	0.1%	1				100%
E02002853 : Leicester 027	0.1%	1				100%
E02002866 : Rutland 004	0.1%	1				100%
E02004036 : Amber Valley 008	0.1%	1				100%
E02004090 : Erewash 013	0.1%	1				100%
E02004119 : South Derbyshire 002	0.1%	1	60%			40%
E02004124 : South Derbyshire 007	0.1%	1	60%			40%
E02004126 : South Derbyshire 009	0.1%	1	60%			40%
E02005344 : Blaby 012	0.1%	1	100%			
E02006820 : Blaby 013	0.1%	1	100%			
E02005346 : Charnwood 002	0.1%	1	50%			50%
E02005353 : Charnwood 009	0.1%	1	50%			50%
E02005357 : Charnwood 013	0.1%	1				100%
E02005358 : Charnwood 014	0.1%	1	30%			70%
E02005359 : Charnwood 015	0.1%	1				100%
E02005363 : Charnwood 019	0.1%	1				100%
E02005378 : Hinckley and Bosworth 002	0.1%	1	70%			30%

# Trip Distribution

MSOA		Number of Car Drivers	Routes			
			A4304 (West)	A4304 (East)	B6047 (South)	B6047 (North)
			A	B	C	D
E02005386 : Hinckley and Bosworth 010	0.1%	1	100%			
E02005387 : Hinckley and Bosworth 011	0.1%	1	100%			
E02005389 : Hinckley and Bosworth 013	0.1%	1	100%			
E02005390 : Hinckley and Bosworth 014	0.1%	1	100%			
E02005401 : North West Leicestershire 005	0.1%	1	60%			40%
E02005409 : North West Leicestershire 013	0.1%	1	60%			40%
E02005458 : North Kesteven 006	0.1%	1				100%
E02005463 : North Kesteven 011	0.1%	1				100%
E02005481 : South Kesteven 006	0.1%	1				100%
E02005484 : South Kesteven 009	0.1%	1				100%
E02005487 : South Kesteven 012	0.1%	1				100%
E02005621 : Daventry 003	0.1%	1	100%			
E02005626 : Daventry 008	0.1%	1	100%			
E02005627 : Daventry 009	0.1%	1	100%			
E02005630 : East Northamptonshire 002	0.1%	1				100%
E02005631 : East Northamptonshire 003	0.1%	1				100%
E02005632 : East Northamptonshire 004	0.1%	1				100%
E02005643 : Kettering 005	0.1%	1		50%		50%
E02005654 : Northampton 005	0.1%	1	25%	50%		25%
E02005659 : Northampton 010	0.1%	1	25%	50%		25%
E02005668 : Northampton 019	0.1%	1	25%	50%		25%
E02005669 : Northampton 020	0.1%	1	25%	50%		25%
E02005672 : Northampton 023	0.1%	1	25%	50%		25%
E02005677 : Northampton 028	0.1%	1	25%	50%		25%
E02005679 : Northampton 030	0.1%	1	25%	50%		25%
E02005694 : Wellingborough 003	0.1%	1				100%
E02005696 : Wellingborough 005	0.1%	1				100%
E02005701 : Wellingborough 010	0.1%	1				100%
E02006906 : Broxtowe 016	0.1%	1	60%			40%
E02006835 : Gedling 016	0.1%	1	60%			40%
E02005895 : Newark and Sherwood 003	0.1%	1				100%
E02005909 : Rushcliffe 004	0.1%	1	50%			50%
E02006140 : East Staffordshire 010	0.1%	1	70%			30%
E02006226 : Tamworth 010	0.1%	1	100%			
E02006468 : North Warwickshire 001	0.1%	1	100%			
E02006475 : Nuneaton and Bedworth 001	0.1%	1	100%			
E02006479 : Nuneaton and Bedworth 005	0.1%	1	100%			
E02006480 : Nuneaton and Bedworth 006	0.1%	1	100%			
E02006482 : Nuneaton and Bedworth 008	0.1%	1	100%			
E02006486 : Nuneaton and Bedworth 012	0.1%	1	100%			
E02006494 : Rugby 003	0.1%	1	100%			
E02006496 : Rugby 005	0.1%	1	100%			
E02006498 : Rugby 007	0.1%	1	100%			
E02006501 : Rugby 010	0.1%	1	100%			
E02006507 : Stratford-on-Avon 004	0.1%	1	100%			
E02006522 : Warwick 004	0.1%	1	100%			
E02006529 : Warwick 011	0.1%	1	100%			
E02006533 : Warwick 015	0.1%	1	100%			
E02001975 : Coventry 018	0.1%	1	100%			
E02001976 : Coventry 019	0.1%	1	100%			
E02001991 : Coventry 034	0.1%	1	100%			
E02002023 : Dudley 024	0.1%	1	100%			
E02003240 : Peterborough 004	0.1%	1				100%
E02003257 : Peterborough 021	0.1%	1				100%
E02003737 : East Cambridgeshire 006	0.1%	1				100%
E02003754 : Huntingdonshire 002	0.1%	1				100%
E02004980 : Welwyn Hatfield 001	0.1%	1				100%
E02005562 : King's Lynn and West Norfolk 0	0.1%	1				100%
E02000398 : Haringey 002	0.1%	1	70%			30%
E02000737 : Newham 024	0.1%	1	70%			30%
E02000214 : Croydon 021	0.1%	1	50%			50%
E02000499 : Hillingdon 006	0.1%	1	50%	50%		
E02003465 : Milton Keynes 007	0.1%	1	60%	40%		
E02003483 : Milton Keynes 025	0.1%	1	60%	40%		
E02005940 : Oxford 001	0.1%	1	100%			
E02003178 : Bournemouth 007	0.1%	1	100%			



# Trip Distribution

			Routes			
			A4304 (West)	A4304 (East)	B6047 (South)	B6047 (North)
MSOA		Number of Car Drivers	A	B	C	D
E02004660 : Stroud 010	0.1%	1	100%			
	100.0%	1304.00				

# Trip Distribution

MSOA		Number of Car Drivers	Routes			
			A4304 (West)	A4304 (East)	B6047 (South)	B6047 (North)
			A	B	C	D
E02005373 : Harborough 007	14.6%	191	0	96	96	0
E02005375 : Harborough 009	11.0%	143	0	72	72	0
E02005374 : Harborough 008	8.6%	112	0	56	56	0
E02005369 : Harborough 003	5.8%	75	0	0	0	75
E02005640 : Kettering 002	5.1%	66	0	33	0	33
E02005371 : Harborough 005	3.8%	49	25	0	0	25
E02005619 : Daventry 001	2.4%	31	16	16	0	0
E02005368 : Harborough 002	1.6%	21	0	0	0	21
E02005416 : Oadby and Wigston 007	1.6%	21	11	0	0	11
E02006816 : Harborough 011	1.5%	20	0	10	0	10
E02005639 : Kettering 001	1.5%	19	0	0	0	19
E02005641 : Kettering 003	1.5%	19	0	10	0	10
E02005372 : Harborough 006	1.4%	18	18	0	0	0
E02005376 : Harborough 010	1.2%	15	15	0	0	0
E02006863 : Corby 009	1.2%	15	0	0	0	15
E02005370 : Harborough 004	1.1%	14	14	0	0	0
E02002856 : Leicester 030	1.0%	13	7	0	0	7
E02005612 : Corby 001	0.9%	12	0	0	0	12
E02002867 : Rutland 005	0.8%	11	0	0	0	11
E02006911 : Oadby and Wigston 009	0.8%	11	0	0	0	11
E02005645 : Kettering 007	0.8%	11	0	0	0	11
E02002865 : Rutland 003	0.6%	8	0	0	0	8
E02005412 : Oadby and Wigston 003	0.6%	8	0	0	0	8
E02005415 : Oadby and Wigston 006	0.6%	8	4	0	0	4
E02005613 : Corby 002	0.6%	8	0	0	0	8
E02002849 : Leicester 023	0.5%	7	4	0	0	4
E02005338 : Blaby 006	0.5%	7	5	0	0	2
E02005340 : Blaby 008	0.5%	7	5	0	0	2
E02005414 : Oadby and Wigston 005	0.5%	7	4	0	0	4
E02006818 : Oadby and Wigston 008	0.5%	7	4	0	0	4
E02005614 : Corby 003	0.5%	7	0	0	0	7
E02005620 : Daventry 002	0.5%	7	1	0	4	1
E02005343 : Blaby 011	0.5%	6	2	0	0	4
E02005394 : Melton 004	0.5%	6	0	0	0	6
E02005617 : Corby 006	0.5%	6	0	3	0	3
E02005622 : Daventry 004	0.5%	6	2	3	0	2
E02005649 : Kettering 011	0.5%	6	1	1	0	4
E02006493 : Rugby 002	0.5%	6	6	0	0	0
E02002834 : Leicester 008	0.4%	5	2	0	0	4
E02006817 : Leicester 038	0.4%	5	2	0	0	4
E02005377 : Hinckley and Bosworth 001	0.4%	5	4	0	0	2
E02005381 : Hinckley and Bosworth 005	0.4%	5	4	0	0	2
E02005388 : Hinckley and Bosworth 012	0.4%	5	5	0	0	0
E02005392 : Melton 002	0.4%	5	0	0	0	5
E02005491 : South Kesteven 016	0.4%	5	0	0	0	5
E02005623 : Daventry 005	0.4%	5	0	4	0	2
E02005646 : Kettering 008	0.4%	5	0	2	0	3
E02005647 : Kettering 009	0.4%	5	0	2	0	3
E02005692 : Wellingborough 001	0.4%	5	0	2	0	4
E02002858 : Leicester 032	0.3%	4	2	0	0	2
E02002861 : Leicester 035	0.3%	4	2	0	0	2
E02002864 : Rutland 002	0.3%	4	0	0	0	4
E02005335 : Blaby 003	0.3%	4	2	0	0	2
E02005337 : Blaby 005	0.3%	4	2	0	0	2
E02005341 : Blaby 009	0.3%	4	2	0	0	2
E02005407 : North West Leicestershire 011	0.3%	4	3	0	0	1
E02005615 : Corby 004	0.3%	4	0	0	0	4
E02006862 : Corby 008	0.3%	4	0	0	0	4
E02005642 : Kettering 004	0.3%	4	0	2	0	2
E02006492 : Rugby 001	0.3%	4	4	0	0	0
E02002845 : Leicester 019	0.2%	3	0	0	0	3
E02002855 : Leicester 029	0.2%	3	2	0	0	2
E02002860 : Leicester 034	0.2%	3	2	0	0	2
E02006815 : Leicester 037	0.2%	3	0	0	0	3
E02005334 : Blaby 002	0.2%	3	3	0	0	0
E02005342 : Blaby 010	0.2%	3	2	0	0	1
E02005352 : Charnwood 008	0.2%	3	0	0	0	3
E02005362 : Charnwood 018	0.2%	3	0	0	0	3
E02005379 : Hinckley and Bosworth 003	0.2%	3	1	0	0	2

# Trip Distribution

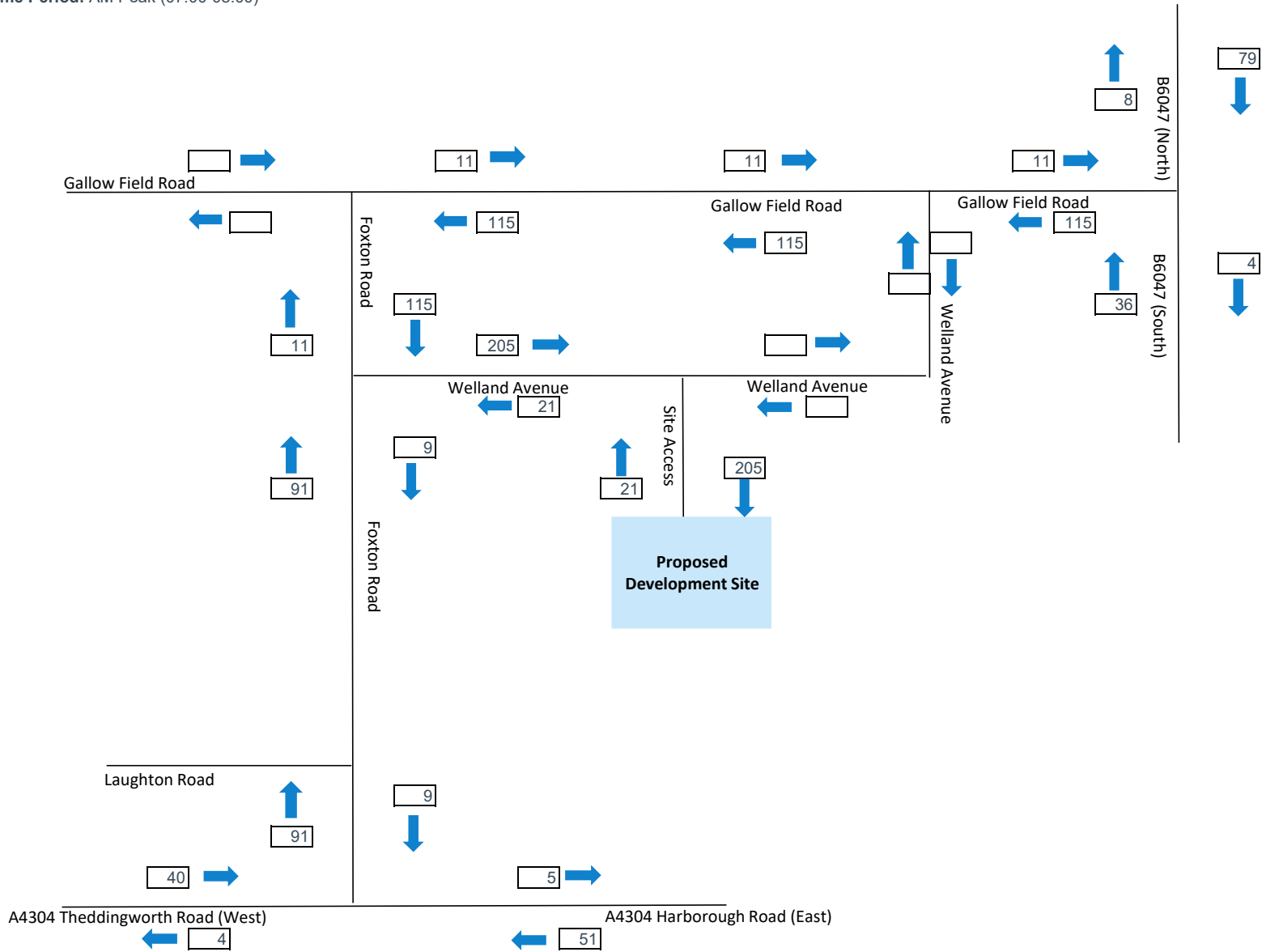
MSOA		Number of Car Drivers	Routes				
			A4304 (West)	A4304 (East)	B6047 (South)	B6047 (North)	
			A	B	C	D	
E02005382	: Hinckley and Bosworth 006	0.2%	3	3	0	0	0
E02005616	: Corby 005	0.2%	3	0	0	0	3
E02005629	: East Northamptonshire 001	0.2%	3	0	0	0	3
E02005644	: Kettering 006	0.2%	3	0	2	0	2
E02005648	: Kettering 010	0.2%	3	0	2	0	2
E02005673	: Northampton 024	0.2%	3	1	2	0	1
E02006497	: Rugby 006	0.2%	3	3	0	0	0
E02004200	: South Hams 012	0.2%	3	3	0	0	0
E02002808	: Derby 013	0.2%	2	2	0	0	0
E02002828	: Leicester 002	0.2%	2	0	0	0	2
E02002832	: Leicester 006	0.2%	2	0	0	0	2
E02002835	: Leicester 009	0.2%	2	0	0	0	2
E02002846	: Leicester 020	0.2%	2	1	0	0	1
E02002848	: Leicester 022	0.2%	2	0	0	0	2
E02002862	: Leicester 036	0.2%	2	1	0	0	1
E02006851	: Leicester 041	0.2%	2	0	0	0	2
E02002863	: Rutland 001	0.2%	2	0	0	0	2
E02005339	: Blaby 007	0.2%	2	1	0	0	1
E02005355	: Charnwood 011	0.2%	2	0	0	0	2
E02005361	: Charnwood 017	0.2%	2	0	0	0	2
E02005364	: Charnwood 020	0.2%	2	0	0	0	2
E02005366	: Charnwood 022	0.2%	2	2	0	0	0
E02005380	: Hinckley and Bosworth 004	0.2%	2	2	0	0	0
E02005391	: Melton 001	0.2%	2	0	0	0	2
E02005393	: Melton 003	0.2%	2	0	0	0	2
E02005395	: Melton 005	0.2%	2	0	0	0	2
E02005396	: Melton 006	0.2%	2	0	0	0	2
E02005403	: North West Leicestershire 007	0.2%	2	2	0	0	0
E02005490	: South Kesteven 015	0.2%	2	0	0	0	2
E02005633	: East Northamptonshire 005	0.2%	2	0	0	0	2
E02005657	: Northampton 008	0.2%	2	1	1	0	1
E02005671	: Northampton 022	0.2%	2	1	1	0	1
E02005674	: Northampton 025	0.2%	2	1	1	0	1
E02005697	: Wellingborough 006	0.2%	2	0	0	0	2
E02005699	: Wellingborough 008	0.2%	2	0	0	0	2
E02005910	: Rushcliffe 005	0.2%	2	1	0	0	1
E02002946	: Telford and Wrekin 019	0.2%	2	2	0	0	0
E02001071	: Manchester 027	0.1%	1	1	0	0	1
E02001422	: St. Helens 017	0.1%	1	1	0	0	0
E02005789	: Ryedale 002	0.1%	1	1	0	0	1
E02002223	: Bradford 041	0.1%	1	1	0	0	0
E02002831	: Leicester 005	0.1%	1	0	0	0	1
E02002833	: Leicester 007	0.1%	1	0	0	0	1
E02002838	: Leicester 012	0.1%	1	1	0	0	1
E02002839	: Leicester 013	0.1%	1	0	0	0	1
E02002851	: Leicester 025	0.1%	1	0	0	0	1
E02002853	: Leicester 027	0.1%	1	0	0	0	1
E02002866	: Rutland 004	0.1%	1	0	0	0	1
E02004036	: Amber Valley 008	0.1%	1	0	0	0	1
E02004090	: Erewash 013	0.1%	1	0	0	0	1
E02004119	: South Derbyshire 002	0.1%	1	1	0	0	0
E02004124	: South Derbyshire 007	0.1%	1	1	0	0	0
E02004126	: South Derbyshire 009	0.1%	1	1	0	0	0
E02005344	: Blaby 012	0.1%	1	1	0	0	0
E02006820	: Blaby 013	0.1%	1	1	0	0	0
E02005346	: Charnwood 002	0.1%	1	1	0	0	1
E02005353	: Charnwood 009	0.1%	1	1	0	0	1
E02005357	: Charnwood 013	0.1%	1	0	0	0	1
E02005358	: Charnwood 014	0.1%	1	0	0	0	1
E02005359	: Charnwood 015	0.1%	1	0	0	0	1
E02005363	: Charnwood 019	0.1%	1	0	0	0	1
E02005378	: Hinckley and Bosworth 002	0.1%	1	1	0	0	0
E02005386	: Hinckley and Bosworth 010	0.1%	1	1	0	0	0
E02005387	: Hinckley and Bosworth 011	0.1%	1	1	0	0	0
E02005389	: Hinckley and Bosworth 013	0.1%	1	1	0	0	0
E02005390	: Hinckley and Bosworth 014	0.1%	1	1	0	0	0
E02005401	: North West Leicestershire 005	0.1%	1	1	0	0	0
E02005409	: North West Leicestershire 013	0.1%	1	1	0	0	0
E02005458	: North Kesteven 006	0.1%	1	0	0	0	1
E02005463	: North Kesteven 011	0.1%	1	0	0	0	1

# Trip Distribution

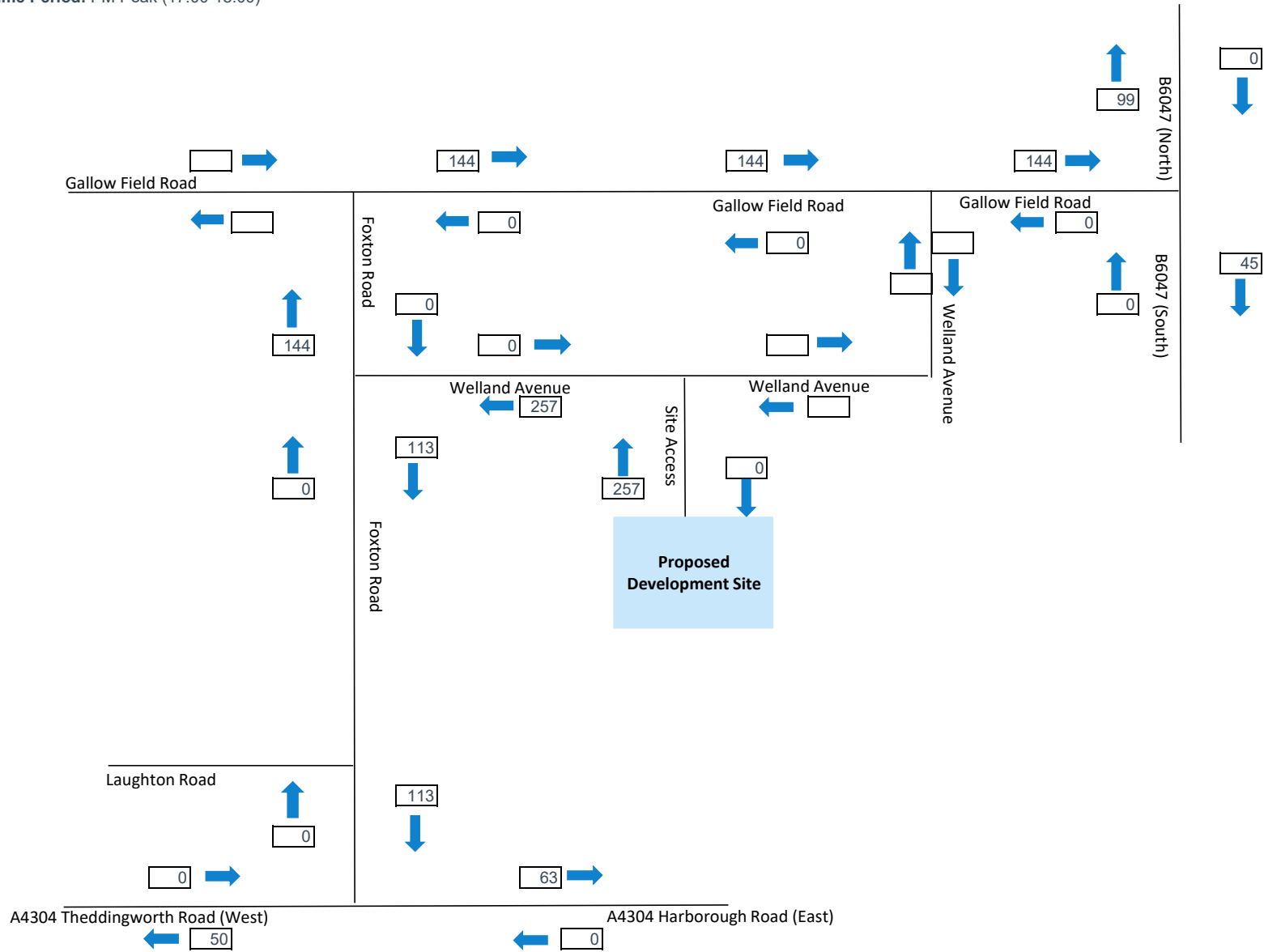
MSOA		Number of Car Drivers	Routes			
			A4304 (West)	A4304 (East)	B6047 (South)	B6047 (North)
			A	B	C	D
E02005481 : South Kesteven 006	0.1%	1	0	0	0	1
E02005484 : South Kesteven 009	0.1%	1	0	0	0	1
E02005487 : South Kesteven 012	0.1%	1	0	0	0	1
E02005621 : Daventry 003	0.1%	1	1	0	0	0
E02005626 : Daventry 008	0.1%	1	1	0	0	0
E02005627 : Daventry 009	0.1%	1	1	0	0	0
E02005630 : East Northamptonshire 002	0.1%	1	0	0	0	1
E02005631 : East Northamptonshire 003	0.1%	1	0	0	0	1
E02005632 : East Northamptonshire 004	0.1%	1	0	0	0	1
E02005643 : Kettering 005	0.1%	1	0	1	0	1
E02005654 : Northampton 005	0.1%	1	0	1	0	0
E02005659 : Northampton 010	0.1%	1	0	1	0	0
E02005668 : Northampton 019	0.1%	1	0	1	0	0
E02005669 : Northampton 020	0.1%	1	0	1	0	0
E02005672 : Northampton 023	0.1%	1	0	1	0	0
E02005677 : Northampton 028	0.1%	1	0	1	0	0
E02005679 : Northampton 030	0.1%	1	0	1	0	0
E02005694 : Wellingborough 003	0.1%	1	0	0	0	1
E02005696 : Wellingborough 005	0.1%	1	0	0	0	1
E02005701 : Wellingborough 010	0.1%	1	0	0	0	1
E02006906 : Broxtowe 016	0.1%	1	1	0	0	0
E02006835 : Gedling 016	0.1%	1	1	0	0	0
E02005895 : Newark and Sherwood 003	0.1%	1	0	0	0	1
E02005909 : Rushcliffe 004	0.1%	1	1	0	0	1
E02006140 : East Staffordshire 010	0.1%	1	1	0	0	0
E02006226 : Tamworth 010	0.1%	1	1	0	0	0
E02006468 : North Warwickshire 001	0.1%	1	1	0	0	0
E02006475 : Nuneaton and Bedworth 001	0.1%	1	1	0	0	0
E02006479 : Nuneaton and Bedworth 005	0.1%	1	1	0	0	0
E02006480 : Nuneaton and Bedworth 006	0.1%	1	1	0	0	0
E02006482 : Nuneaton and Bedworth 008	0.1%	1	1	0	0	0
E02006486 : Nuneaton and Bedworth 012	0.1%	1	1	0	0	0
E02006494 : Rugby 003	0.1%	1	1	0	0	0
E02006496 : Rugby 005	0.1%	1	1	0	0	0
E02006498 : Rugby 007	0.1%	1	1	0	0	0
E02006501 : Rugby 010	0.1%	1	1	0	0	0
E02006507 : Stratford-on-Avon 004	0.1%	1	1	0	0	0
E02006522 : Warwick 004	0.1%	1	1	0	0	0
E02006529 : Warwick 011	0.1%	1	1	0	0	0
E02006533 : Warwick 015	0.1%	1	1	0	0	0
E02001975 : Coventry 018	0.1%	1	1	0	0	0
E02001976 : Coventry 019	0.1%	1	1	0	0	0
E02001991 : Coventry 034	0.1%	1	1	0	0	0
E02002023 : Dudley 024	0.1%	1	1	0	0	0
E02003240 : Peterborough 004	0.1%	1	0	0	0	1
E02003257 : Peterborough 021	0.1%	1	0	0	0	1
E02003737 : East Cambridgeshire 006	0.1%	1	0	0	0	1
E02003754 : Huntingdonshire 002	0.1%	1	0	0	0	1
E02004980 : Welwyn Hatfield 001	0.1%	1	0	0	0	1
E02005562 : King's Lynn and West Norfolk 0	0.1%	1	0	0	0	1
E02000398 : Haringey 002	0.1%	1	1	0	0	0
E02000737 : Newham 024	0.1%	1	1	0	0	0
E02000214 : Croydon 021	0.1%	1	1	0	0	1
E02000499 : Hillingdon 006	0.1%	1	1	1	0	0
E02003465 : Milton Keynes 007	0.1%	1	1	0	0	0
E02003483 : Milton Keynes 025	0.1%	1	1	0	0	0
E02005940 : Oxford 001	0.1%	1	1	0	0	0
E02003178 : Bournemouth 007	0.1%	1	1	0	0	0
E02004660 : Stroud 010	0.1%	1	1	0	0	0
			254	322	227	501
	100%	1304	19%	25%	17%	38%

# Appendix I. Gartree 2 Traffic Flow Diagrams

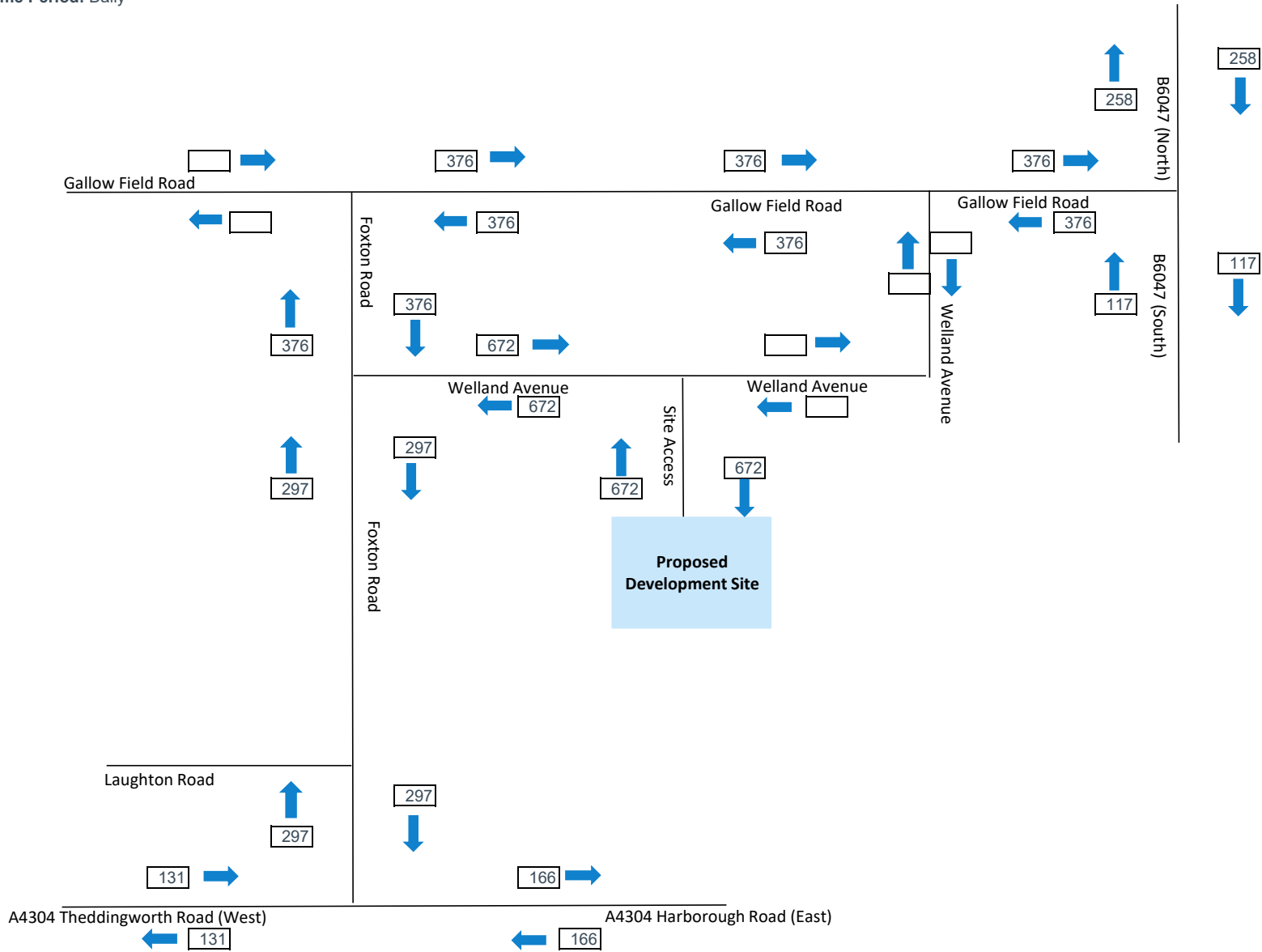
**Project:** Gartree 2  
**Scenario:** Development Trips  
**Time Period:** AM Peak (07:00-08:00)



**Project:** Gartree 2  
**Scenario:** Development Trips  
**Time Period:** PM Peak (17:00-18:00)



**Project:** Gartree 2  
**Scenario:** Development Trips  
**Time Period:** Daily



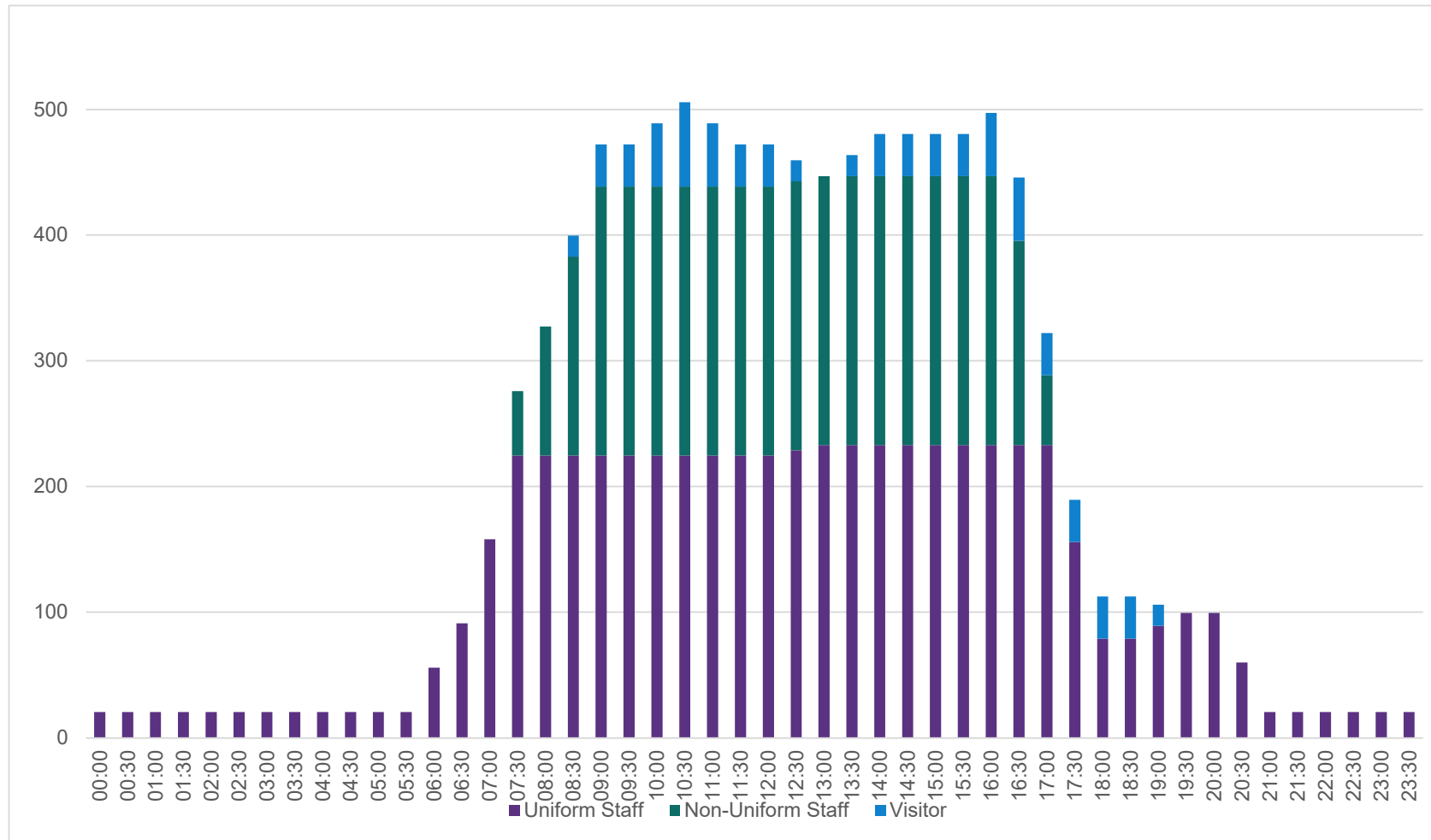


# Appendix J. Gartree 2 Parking Accumulation

## Gartree 2 Parking Accumulation

		00:00	00:30	01:00	01:30	02:00	02:30	03:00	03:30	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	19:00	19:30	20:00	20:30	21:00	21:30	22:00	22:30	23:00	23:30	TOTAL									
Uniform Staff Parking	Arrivals	0	0	0	0	0	0	0	0	0	0	0	0	0	35	35	77	77	0	0	0	0	0	0	0	0	0	39	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	324					
	Departures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	35	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	324		
	Uniform Staff	21	21	21	21	21	21	21	21	21	21	21	21	21	56	91	158	225	225	225	225	225	225	225	225	225	225	229	233	233	233	233	233	233	233	233	233	233	156	79	79	89	99	99	60	21	21	21	21	21	21	21	21	21					
Non-Uniform Parking	Arrivals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	51	56	56	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	214				
	Departures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	214			
	Non-Uniform Staff	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	103	158	214	214	214	214	214	214	214	214	214	214	214	214	214	163	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Visitor Parking	Arrivals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	134		
	Departures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	134
	Visitor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	34	34	50	67	50	34	34	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	Arrivals	0	0	0	0	0	0	0	0	0	0	0	0	0	35	35	77	128	51	72	72	0	17	17	0	0	0	39	39	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Departures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	52	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Parking Accumulation	21	21	21	21	21	21	21	21	21	21	21	21	21	56	91	158	276	327	400	472	472	489	506	489	472	472	459	447	464	480	480	480	480	480	497	446	322	189	112	112	106	99	99	60	21	21	21	21	21	21	21	21	21					

Bar Chart Showing Parking Accumulation for Gartree 2 (up to 1,715 inmate provision)



# Appendix K. LCC Historic Traffic Data

## K.1. ATC Gallow Field Road

**Multi-Day Volume Report LEICESTERSHIRE\_TEMP 00008027903 2018-09-18 to 2018-09-25**

Site Name 00008027903  
 Site ID 00008027903  
 Grid 471059289479  
 Description Gallowfield Road Foxton

Setup LEICS\_TUBES  
 Lanes Each Lane  
 Time Period 1 hour  
 Class Any  
 Exclude data: None

All directions											
	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Average	Total	
	2018-09-18	2018-09-19	2018-09-20	2018-09-21	2018-09-22	2018-09-23	2018-09-24	2018-09-25	Workday	7 Day	Count
00:00:00		10	8	8	7	19	5	5	7	9	62
01:00:00		0	2	2	8	8	1	1	1	3	22
02:00:00		1	1	1	5	4	2	4	2	3	18
03:00:00		3	2	3	7	1	3	0	2	3	19
04:00:00		2	2	5	5	5	3	1	3	3	23
05:00:00		17	19	14	6	3	23	12	17	13	94
06:00:00		70	80	75	43	19	71	81	75	63	439
07:00:00		314	293	312	78	65	265	274	292	229	1601
08:00:00		297	251	270	115	81	255	304	275	225	1573
09:00:00		181	155	176	111	72	138	186	167	146	1019
10:00:00		165	117	139	175	99	123	140	137	137	958
11:00:00	15	175	163	145	163	155	145	34	157	158	946
12:00:00	212	201	196	242	213	187	179		206	204	1430
13:00:00	193	209	183	203	176	182	186		195	190	1332
14:00:00	168	168	155	191	135	164	159		168	163	1140
15:00:00	226	218	210	208	138	165	189		210	193	1354
16:00:00	288	265	251	238	129	158	260		260	227	1589
17:00:00	260	282	314	249	146	132	261		273	235	1644
18:00:00	186	172	158	142	93	99	157		163	144	1007
19:00:00	120	145	126	98	74	82	112		120	108	757
20:00:00	78	74	71	63	34	46	68		71	62	434
21:00:00	35	57	36	34	26	23	32		39	35	243
22:00:00	34	34	23	33	36	19	25		30	29	204
23:00:00	10	9	12	19	34	6	7		11	14	97
07-19		2647	2446	2515	1672	1559	2317		2504	2250	15593
06-22		2993	2759	2785	1849	1729	2600		2809	2518	17466
06-24		3036	2794	2837	1919	1754	2632		2850	2561	17767
00-24		3069	2828	2870	1957	1794	2669		2882	2595	18005
am Peak		07:00:00	07:00:00	07:00:00	10:00:00	11:00:00	07:00:00	08:00:00	07:00:00	07:00:00	
Peak Volume		314	293	312	175	155	265	304	292	229	
pm Peak	16:00:00	17:00:00	17:00:00	17:00:00	12:00:00	12:00:00	17:00:00		17:00:00	17:00:00	
Peak Volume	288	282	314	249	213	187	261		273	235	

<b>Gallow Field Road east bound</b>											
	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Average	Total	
	2018-09-18	2018-09-19	2018-09-20	2018-09-21	2018-09-22	2018-09-23	2018-09-24	2018-09-25	Workday	7 Day	Count
00:00:00		5	5	3	6	10	4	4	4	5	37
01:00:00		0	2	1	3	4	1	1	1	2	12
02:00:00		1	1	0	2	2	1	2	1	1	9
03:00:00		2	1	2	2	0	2	0	1	1	9
04:00:00		0	0	3	5	2	3	0	1	2	13
05:00:00		10	12	11	3	2	13	8	11	8	59
06:00:00		31	41	31	15	9	33	38	35	28	198
07:00:00		119	113	122	37	30	100	110	113	90	631
08:00:00		133	131	142	52	20	123	150	136	107	751
09:00:00		84	78	89	59	42	73	90	83	74	515
10:00:00		73	60	63	96	48	66	63	65	67	469
11:00:00	7	76	77	72	77	74	63	17	72	73	439
12:00:00	100	98	100	112	87	69	87		99	93	653
13:00:00	82	97	79	97	72	85	82		87	85	594
14:00:00	82	92	67	90	54	69	74		81	75	528
15:00:00	113	117	112	112	78	81	88		108	100	701
16:00:00	160	132	133	111	53	80	128		133	114	797
17:00:00	120	159	155	130	81	83	140		141	124	868
18:00:00	99	88	91	61	44	51	83		84	74	517
19:00:00	71	82	63	41	34	42	66		65	57	399
20:00:00	27	31	36	29	21	27	31		31	29	202
21:00:00	15	27	19	17	16	14	15		19	18	123
22:00:00	13	17	12	18	16	10	11		14	14	97
23:00:00	4	6	4	7	20	3	2		5	7	46
07-19		1268	1196	1201	790	732	1107		1203	1076	7463
06-22		1439	1355	1319	876	824	1252		1351	1208	8385
06-24		1462	1371	1344	912	837	1265		1370	1229	8528
00-24		1480	1392	1364	933	857	1289		1390	1248	8667
am Peak		08:00:00	08:00:00	08:00:00	10:00:00	11:00:00	08:00:00	08:00:00	08:00:00	08:00:00	
Peak Volume		133	131	142	96	74	123	150	136	107	
pm Peak	16:00:00	17:00:00	17:00:00	17:00:00	12:00:00	13:00:00	17:00:00		17:00:00	17:00:00	
Peak Volume	160	159	155	130	87	85	140		141	124	

**Gallow Field Road west bound**

	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Average	Total	
	2018-09-18	2018-09-19	2018-09-20	2018-09-21	2018-09-22	2018-09-23	2018-09-24	2018-09-25	Workday	7 Day	Count
00:00:00		5	3	5	1	9	1	1	3	4	25
01:00:00		0	0	1	5	4	0	0	0	1	10
02:00:00		0	0	1	3	2	1	2	1	1	9
03:00:00		1	1	1	5	1	1	0	1	1	10
04:00:00		2	2	2	0	3	0	1	1	1	10
05:00:00		7	7	3	3	1	10	4	6	5	35
06:00:00		39	39	44	28	10	38	43	41	34	241
07:00:00		195	180	190	41	35	165	164	179	139	970
08:00:00		164	120	128	63	61	132	154	140	117	822
09:00:00		97	77	87	52	30	65	96	84	72	504
10:00:00		92	57	76	79	51	57	77	72	70	489
11:00:00	8	99	86	73	86	81	82	17	85	85	507
12:00:00	112	103	96	130	126	118	92		107	111	777
13:00:00	111	112	104	106	104	97	104		107	105	738
14:00:00	86	76	88	101	81	95	85		87	87	612
15:00:00	113	101	98	96	60	84	101		102	93	653
16:00:00	128	133	118	127	76	78	132		128	113	792
17:00:00	140	123	159	119	65	49	121		132	111	776
18:00:00	87	84	67	81	49	48	74		79	70	490
19:00:00	49	63	63	57	40	40	46		56	51	358
20:00:00	51	43	35	34	13	19	37		40	33	232
21:00:00	20	30	17	17	10	9	17		20	17	120
22:00:00	21	17	11	15	20	9	14		16	15	107
23:00:00	6	3	8	12	14	3	5		7	7	51
07-19		1379	1250	1314	882	827	1210		1301	1174	8130
06-22		1554	1404	1466	973	905	1348		1458	1309	9081
06-24		1574	1423	1493	1007	917	1367		1480	1332	9239
00-24		1589	1436	1506	1024	937	1380		1492	1346	9338
am Peak		07:00:00	07:00:00	07:00:00	11:00:00	11:00:00	07:00:00	07:00:00	07:00:00	07:00:00	
Peak Volume		195	180	190	86	81	165	164	179	139	
pm Peak	17:00:00	16:00:00	17:00:00	12:00:00	12:00:00	12:00:00	16:00:00		17:00:00	16:00:00	
Peak Volume	140	133	159	130	126	118	132		132	113	

Event key: Weekends and defined holidays QC failure Atypical (QC) Events Special Holiday Offline

Greyed values indicate time periods in which data are incomplete (less than 40 minutes' data per 60-minute period). Greyed values are included in totals but excluded from averages.

Notes on data:

Weekly (7-day) averages are calculated as the average of workday values and weekend values, weighted in the proportion 5:2.

Holidays & Events:

None

**Speed Statistics Report LEICESTERSHIRE\_TEMP 000008027903 2018-09-18 to 2018-09-25**

Site Name 000008027903  
 Site ID 000008027903  
 Grid 471059289479  
 Description Gallowfield Road Foxton

Setup LEICS\_TUBES  
 Lanes Each Lane  
 Time Period 1 hour  
 Class Any  
 Speed units mph  
 Exclude data: None

	Total Flow	Mean Speed	Std Dev	Percentile bins										% over limit (60mph) by:					% > ACPO
				<-- 5th	15th	25th	50th	75th	85th	90th	95th	-->	0%	5%	10%	15%			
00:00:00	62	54.7	9.1	42.7	45.8	48.3	52.9	58.8	64.1	68.3	71.5	22.6	19.4	12.9	6.5	11.3			
01:00:00	22	51.8	6.3	40.2	45.4	46.3	51.6	55.9	60.1	62.1	64.2	13.6	4.5	0	0	0			
02:00:00	18	49.7	9	31.3	40.8	42.7	49.6	55.3	60.4	62.4	70.9	16.7	5.6	5.6	5.6	5.6			
03:00:00	19	52.5	7.6	36.6	45.5	45.8	54.8	58.7	60.2	62.3	68.8	15.8	5.3	5.3	0	5.3			
04:00:00	23	55.9	10.9	30.2	45.4	50.8	56.1	62.3	68.1	72.2	73.1	30.4	21.7	13	13	13			
05:00:00	94	51.6	7.3	38.2	45.9	46.8	51.4	55.1	58.7	63.6	68.4	11.7	10.6	5.3	1.1	5.3			
06:00:00	439	51.4	8.5	37.8	42.8	46.4	51.4	56.5	59	61	64.9	12.3	6.4	3.9	2.5	2.7			
07:00:00	1601	51.5	7.2	39.6	44.2	47.2	51.7	55.8	58.3	59.8	63.1	9.7	5.3	2.4	1.1	1.6			
08:00:00	1573	51.8	7.1	40.7	45.1	47.2	51.7	56.1	59	60.6	63.6	11.7	5.5	2.8	1.5	2			
09:00:00	1019	50.9	7.9	38.1	43.4	46	50.9	55.8	58.3	60.6	63.6	11.4	5.7	3	1.6	2.1			
10:00:00	958	50.4	8	38.2	42.8	45.7	50.3	55.1	57.5	59.8	62.7	9.7	4.9	3	1	1.1			
11:00:00	946	49.8	8.6	37.3	42.3	44.9	49.4	54.8	57.6	59.4	63.1	9.2	5.2	2.5	1.6	1.8			
12:00:00	1430	49.7	7.3	38.5	42.4	45.1	49.7	54.1	56.5	58.7	61.4	7.1	3.4	1.7	0.7	1			
13:00:00	1332	50.3	8	38.8	42.8	44.9	49.7	55.1	58.3	60.9	64.5	11.3	6.3	3.6	1.9	2.4			
14:00:00	1140	50.4	8.4	38.8	42.6	45.1	49.7	55.4	58.7	60.6	64.5	11.5	6.1	3.5	2	2.5			
15:00:00	1354	50.6	8	38.4	42.8	45.4	50	55.1	58.3	59.8	63.6	9.7	5.8	3.2	1.7	2.1			
16:00:00	1589	51.5	7.3	40.1	44.4	46.7	51.4	56.1	58.7	60.2	63.1	11	5.3	2.3	1.3	1.7			
17:00:00	1644	52.7	7.3	41.8	45.8	48.2	52.6	56.8	59.4	61	64.4	13.1	6.5	3.4	1.9	2.3			
18:00:00	1007	52.1	8.2	39.9	44.2	46.9	51.7	56.5	59.8	62.3	65.6	14.3	8.6	4.6	2.9	3.1			
19:00:00	757	51	7.9	39.1	43.2	45.9	50.9	55.4	58.3	60.6	64.5	11	6.7	4.1	2.2	2.6			
20:00:00	434	52	8.5	38.9	44.2	46.7	51.3	56.8	60.2	62.9	67.3	15.2	9.9	6	3.5	4.1			
21:00:00	243	50	8.2	37.5	41.2	43.8	49.7	55.1	57.9	59.9	64.5	9.9	6.2	3.3	1.6	2.9			
22:00:00	204	52.9	8.7	39	45.3	47.9	51.4	58.2	61.4	64	67.4	17.2	11.8	6.9	2.9	3.4			
23:00:00	97	51.2	8.9	37.5	41.9	46.1	50.6	55.8	59	63.6	69.9	12.4	10.3	8.2	5.2	6.2			
07-19	15593	51	7.8	39.2	43.6	46	50.9	55.8	58.3	60.2	63.6	10.8	5.7	3	1.6	1.9			
06-22	17466	51.1	7.8	39.1	43.6	46	50.9	55.8	58.3	60.4	63.6	10.9	5.9	3.1	1.7	2.1			
06-24	17767	51.1	7.8	39.1	43.6	46.2	50.9	55.8	58.3	60.6	64	11	5.9	3.2	1.7	2.1			
00-24	18005	51.1	7.8	39.1	43.6	46.2	50.9	55.8	58.6	60.6	64	11.1	6	3.2	1.7	2.2			
am Peak	07:00:00	04:00:00	04:00:00	00:00:00	05:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00			
Peak Value	1601	55.9	10.9	42.7	45.9	50.8	56.1	62.3	68.1	72.2	73.1	30.4	21.7	13	13	13			
pm Peak	17:00:00	22:00:00	23:00:00	17:00:00	17:00:00	17:00:00	17:00:00	22:00:00	22:00:00	22:00:00	23:00:00	22:00:00	22:00:00	23:00:00	23:00:00	23:00:00			
Peak Value	1644	52.9	8.9	41.8	45.8	48.2	52.6	58.2	61.4	64	69.9	17.2	11.8	8.2	5.2	6.2			



**Gallow Field Road east bound**

	Total Flow	Mean Speed	Std Dev	<-- 5th	Percentile bins							--> 95th	% over limit (60mph) by:				% > ACPO
					15th	25th	50th	75th	85th	90th	0%		5%	10%	15%		
00:00:00	37	55.9	9.7	43.5	45.8	48.2	54.5	63.4	68.5	70.3	75.4	27	27	16.2	10.8	16.2	
01:00:00	12	50.2	6.3	39.6	43.6	45.4	49.9	52.6	60.7	62.1	62.7	16.7	0	0	0	0	
02:00:00	9	48.4	9	39.9	40.4	41.6	44.9	51.8	61.6	70.9	70.9	11.1	11.1	11.1	11.1	11.1	
03:00:00	9	50.6	6.4	44.2	44.8	45.6	48.2	57.7	60.9	62.3	62.3	11.1	0	0	0	0	
04:00:00	13	55.6	9.6	30.4	47.3	52.5	55.5	61.1	65.4	69.9	72.7	23.1	15.4	7.7	7.7	7.7	
05:00:00	59	51.2	7.9	37.6	43.8	46.7	49.7	54.4	60.2	64.5	68.8	15.3	13.6	6.8	1.7	6.8	
06:00:00	198	50.8	8	37.6	42.6	46	50.7	56.2	58.7	59.9	61.9	9.6	4	3	2.5	3	
07:00:00	631	50.5	7.6	37.9	42.8	45.8	50.9	55.4	57.5	59	62.5	7.3	4.8	2.2	0.8	1.4	
08:00:00	751	51.6	7.4	39.7	44	46.9	51.7	55.8	58.6	60.6	63.6	11.3	5.5	3.1	1.6	2.4	
09:00:00	515	50.6	7.7	37.8	43.5	45.8	50.6	55.1	57.6	59.6	63.7	9.1	5.6	3.5	1.4	2.1	
10:00:00	469	50.7	7.8	39.2	43.4	46.2	50.9	55.4	57.9	60.3	62.7	10.9	4.7	2.6	0.4	0.6	
11:00:00	439	50	9	36.7	42.5	44.6	50	55.4	57.6	59.4	62.3	8.7	4.6	1.6	0.9	0.9	
12:00:00	653	50.3	7.4	38.8	42.8	45.5	50	54.5	57.5	59.4	62.3	9	4.1	2.1	0.6	0.9	
13:00:00	594	50	7.9	38.7	42.2	44.6	49.2	55.1	58.2	60.9	63.6	10.9	5.4	2.5	1	1.2	
14:00:00	528	50.9	8.4	39.1	43	45.3	50.3	55.8	59	61	64.5	12.5	6.6	3.4	1.9	2.5	
15:00:00	701	49.9	7.8	37.8	42.4	45.1	49.2	55	57.9	59.4	62.7	8.7	4.6	2.4	1	1.4	
16:00:00	797	51.7	6.9	40.3	44.9	47.2	51.7	56.1	58.3	60.2	62.7	10.3	4.8	1.9	1.4	1.8	
17:00:00	868	53	7.2	42.1	46.2	48.7	52.9	56.8	59.3	61	64.7	12.6	6.7	3.7	1.8	2.4	
18:00:00	517	52.3	8.1	40.5	44	47.2	51.7	56.8	60.4	63.1	66.3	15.3	10.1	5	2.9	3.3	
19:00:00	399	50.8	8	39.2	43.2	45.3	50.6	55.4	58.3	59.8	65.9	9.8	7.5	4.8	2.5	3	
20:00:00	202	51.9	8.9	37.3	43	46.8	51.6	56.9	59.6	63	67.2	14.4	9.9	5.4	3.5	3.5	
21:00:00	123	49.9	8.7	35.3	41.2	43.4	50	55.1	57.9	59.5	64.8	8.9	5.7	3.3	2.4	3.3	
22:00:00	97	53.1	8.7	37.7	45.9	48.4	52	57.6	62.4	64.7	67.4	21.6	13.4	8.2	2.1	3.1	
23:00:00	46	50.4	8.4	37.8	41.4	43.4	51	55	57.9	59.7	69.7	8.7	6.5	6.5	4.3	6.5	
07-19	7463	51	7.8	39.1	43.6	46.2	50.9	55.8	58.3	60.2	63.6	10.6	5.6	2.8	1.3	1.8	
06-22	8385	51	7.8	39.1	43.4	46	50.9	55.8	58.3	60.2	63.6	10.6	5.7	3	1.5	1.9	
06-24	8528	51	7.8	39.1	43.4	46	50.9	55.8	58.3	60.3	63.6	10.7	5.8	3.1	1.5	2	
00-24	8667	51.1	7.9	39.1	43.4	46.2	50.9	55.8	58.3	60.3	63.8	10.8	6	3.2	1.6	2.1	
am Peak	08:00:00	00:00:00	00:00:00	03:00:00	04:00:00	04:00:00	04:00:00	00:00:00	00:00:00	02:00:00	00:00:00	00:00:00	00:00:00	00:00:00	02:00:00	00:00:00	
Peak Value	751	55.9	9.7	44.2	47.3	52.5	55.5	63.4	68.5	70.9	75.4	27	27	16.2	11.1	16.2	
pm Peak	17:00:00	22:00:00	20:00:00	17:00:00	17:00:00	17:00:00	17:00:00	22:00:00	22:00:00	22:00:00	23:00:00	22:00:00	22:00:00	22:00:00	23:00:00	23:00:00	
Peak Value	868	53.1	8.9	42.1	46.2	48.7	52.9	57.6	62.4	64.7	69.7	21.6	13.4	8.2	4.3	6.5	

**Gallow Field Road west bound**

	Total Flow	Mean Speed	Std Dev	Percentile bins										% over limit (60mph) by:					% > ACPO
				<-- 5th	15th	25th	50th	75th	85th	90th	95th	95th	0%	5%	10%	15%			
00:00:00	25	52.9	7.7	36.9	44.3	47.9	51.4	58.1	60.8	64.1	67.9	16	8	8	0	4			
01:00:00	10	53.7	5.9	45.5	46.1	46.6	54	58.6	61.2	64	64.5	10	10	0	0	0			
02:00:00	9	51	8.8	31.3	37	46.1	52.3	58.5	60.9	61.5	61.5	22.2	0	0	0	0			
03:00:00	10	54.3	8.1	36.6	43.3	49.4	55.4	59.1	63.2	67.9	68.8	20	10	10	0	10			
04:00:00	10	56.3	12.3	30.1	38.6	48.1	57	66.5	72.1	73	73.2	40	30	20	20	20			
05:00:00	35	52.5	6.2	42.7	46.2	46.9	51.7	56.5	58.5	58.7	65.7	5.7	5.7	2.9	0	2.9			
06:00:00	241	51.9	8.9	37.8	43.6	46.9	51.7	56.8	59.8	61.9	65.8	14.5	8.3	4.6	2.5	2.5			
07:00:00	970	52.1	6.8	41.5	45.3	47.7	52	56.1	58.7	60.2	63.6	11.3	5.7	2.5	1.2	1.6			
08:00:00	822	52.1	6.9	41.4	45.5	47.4	51.7	56.5	59	60.6	63.6	12	5.6	2.6	1.5	1.6			
09:00:00	504	51.3	8.2	38.2	43	46.2	51.4	56.8	59	61	63.6	13.7	5.8	2.6	1.8	2			
10:00:00	489	50.1	8.2	37.8	42.6	45	49.7	55.1	57.5	59.4	63.8	8.6	5.1	3.5	1.6	1.6			
11:00:00	507	49.6	8.2	37.4	42	44.9	48.9	54.1	57.5	59.4	63.6	9.7	5.7	3.4	2.2	2.6			
12:00:00	777	49.2	7.2	37.9	42.2	44.6	49.4	53.8	56.1	57.5	60.2	5.4	2.8	1.4	0.8	1			
13:00:00	738	50.6	8.1	38.8	43.2	45.1	50	55.1	58.6	61	65.8	11.7	7	4.5	2.6	3.4			
14:00:00	612	50	8.3	38.6	42.6	44.6	49.4	54.8	58.3	60.3	64	10.6	5.7	3.6	2.1	2.6			
15:00:00	653	51.3	8.2	39.4	43.4	46.2	50.8	55.6	58.7	60.6	65.4	10.9	7	4.1	2.5	2.8			
16:00:00	792	51.2	7.6	39.9	44	46	50.9	55.8	59	60.6	63.6	11.7	5.8	2.8	1.3	1.6			
17:00:00	776	52.3	7.4	41	45.3	47.4	52	57.2	59.4	61.1	64	13.7	6.3	3.1	2.1	2.1			
18:00:00	490	51.9	8.2	39.3	44.2	46.7	51.4	56.5	59.4	61.4	65.1	13.3	7.1	4.1	2.9	2.9			
19:00:00	358	51.2	7.9	38.8	43.2	46.4	50.9	55.5	58.3	61	63.6	12.3	5.9	3.4	2	2.2			
20:00:00	232	52.2	8.2	41	44.4	46.7	50.9	56.5	60.6	63.3	67.7	15.9	9.9	6.5	3.4	4.7			
21:00:00	120	50.1	7.7	37.9	41.5	45	49.6	55.7	57.9	60.2	64.5	10.8	6.7	3.3	0.8	2.5			
22:00:00	107	52.8	8.6	39.6	44.9	47.4	51.1	58.7	59.8	63.2	67.4	13.1	10.3	5.6	3.7	3.7			
23:00:00	51	51.9	9.3	36.8	44.1	46.7	50	57.2	62.8	66.1	70.8	15.7	13.7	9.8	5.9	5.9			
07-19	8130	51	7.8	39.4	43.6	46	50.9	55.8	58.6	60.2	63.6	11	5.8	3.1	1.8	2.1			
06-22	9081	51.1	7.8	39.4	43.6	46.2	50.9	55.8	58.6	60.6	64	11.3	6	3.2	1.9	2.2			
06-24	9239	51.1	7.8	39.4	43.6	46.2	50.9	55.8	58.7	60.6	64	11.3	6.1	3.3	1.9	2.2			
00-24	9338	51.1	7.8	39.4	43.6	46.2	50.9	55.8	58.7	60.6	64	11.4	6.1	3.3	1.9	2.2			
am Peak	07:00:00	04:00:00	04:00:00	01:00:00	05:00:00	03:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00	04:00:00			
Peak Value	970	56.3	12.3	45.5	46.2	49.4	57	66.5	72.1	73	73.2	40	30	20	20	20			
pm Peak	16:00:00	22:00:00	23:00:00	20:00:00	17:00:00	17:00:00	17:00:00	22:00:00	23:00:00	23:00:00	23:00:00	20:00:00	23:00:00	23:00:00	23:00:00	23:00:00			
Peak Value	792	52.8	9.3	41	45.3	47.4	52	58.7	62.8	66.1	70.8	15.9	13.7	9.8	5.9	5.9			

Event key: QC failure Atypical (QC) Events Special Holiday Offline  
Weekends and defined holidays

Holidays & Events:  
**None**

K.2. CTC B6047 Harborough Road / Leicester Lane / Gallow Field Road

Multi-Day Volume Report LEICESTERSHIRE\_MCC 000008026481 2017-10-26

Site Name Harborough Rd/Leicester Ln/Gallow Field Rd  
 Site ID 000008026481  
 Grid 472140289467  
 Description Harborough Rd/Leicester Ln/Gallow Field Rd

Setup Setup17443 (7CLS)  
 Lanes Each Lane  
 Bins Total  
 Time Period 15 minutes  
 Exclude data: None

All directions	Thu 2017-10-26	Average Workday	7 Day	Total Count
00:00:00				
00:15:00				
00:30:00				
00:45:00				
01:00:00				
01:15:00				
01:30:00				
01:45:00				
02:00:00				
02:15:00				
02:30:00				
02:45:00				
03:00:00				
03:15:00				
03:30:00				
03:45:00				
04:00:00				
04:15:00				
04:30:00				
04:45:00				
05:00:00				
05:15:00				
05:30:00				
05:45:00				
06:00:00				
06:15:00				
06:30:00				
06:45:00				
07:00:00	208	208		208
07:15:00	259	259		259
07:30:00	350	350		350
07:45:00	385	385		385
08:00:00	333	333		333
08:15:00	379	379		379
08:30:00	351	351		351
08:45:00	350	350		350
09:00:00	302	302		302
09:15:00	271	271		271
09:30:00	212	212		212
09:45:00	248	248		248
10:00:00	244	244		244
10:15:00	212	212		212
10:30:00	218	218		218
10:45:00	234	234		234
11:00:00	233	233		233
11:15:00	227	227		227
11:30:00	228	228		228
11:45:00	224	224		224
12:00:00	285	285		285
12:15:00	275	275		275
12:30:00	260	260		260
12:45:00	238	238		238
13:00:00	255	255		255
13:15:00	265	265		265
13:30:00	255	255		255
13:45:00	251	251		251
14:00:00	243	243		243
14:15:00	261	261		261
14:30:00	284	284		284
14:45:00	262	262		262
15:00:00	284	284		284
15:15:00	265	265		265
15:30:00	310	310		310
15:45:00	280	280		280
16:00:00	331	331		331
16:15:00	324	324		324
16:30:00	332	332		332
16:45:00	326	326		326
17:00:00	400	400		400
17:15:00	353	353		353
17:30:00	378	378		378
17:45:00	288	288		288
18:00:00	281	281		281
18:15:00	268	268		268
18:30:00	245	245		245
18:45:00	198	198		198
19:00:00				
19:15:00				
19:30:00				
19:45:00				
20:00:00				
20:15:00				
20:30:00				
20:45:00				
21:00:00				
21:15:00				
21:30:00				
21:45:00				
22:00:00				
22:15:00				
22:30:00				
22:45:00				
23:00:00				
23:15:00				
23:30:00				
23:45:00				
07-19	13465	13465		13465
06-22				
06-24				
00-24				
am Peak				
Peak Volume				
pm Peak				
Peak Volume				

Harborough Rd north to Leicester Lane				
	Thu	Average		Total
	2017-10-26	Workday	7 Day	Count
00:00:00				
00:15:00				
00:30:00				
00:45:00				
01:00:00				
01:15:00				
01:30:00				
01:45:00				
02:00:00				
02:15:00				
02:30:00				
02:45:00				
03:00:00				
03:15:00				
03:30:00				
03:45:00				
04:00:00				
04:15:00				
04:30:00				
04:45:00				
05:00:00				
05:15:00				
05:30:00				
05:45:00				
06:00:00				
06:15:00				
06:30:00				
06:45:00				
07:00:00	2	2		2
07:15:00	3	3		3
07:30:00	3	3		3
07:45:00	12	12		12
08:00:00	14	14		14
08:15:00	14	14		14
08:30:00	19	19		19
08:45:00	13	13		13
09:00:00	15	15		15
09:15:00	8	8		8
09:30:00	9	9		9
09:45:00	8	8		8
10:00:00	7	7		7
10:15:00	6	6		6
10:30:00	9	9		9
10:45:00	11	11		11
11:00:00	8	8		8
11:15:00	6	6		6
11:30:00	6	6		6
11:45:00	11	11		11
12:00:00	9	9		9
12:15:00	6	6		6
12:30:00	4	4		4
12:45:00	7	7		7
13:00:00	7	7		7
13:15:00	12	12		12
13:30:00	6	6		6
13:45:00	7	7		7
14:00:00	7	7		7
14:15:00	6	6		6
14:30:00	9	9		9
14:45:00	10	10		10
15:00:00	11	11		11
15:15:00	7	7		7
15:30:00	12	12		12
15:45:00	4	4		4
16:00:00	10	10		10
16:15:00	15	15		15
16:30:00	6	6		6
16:45:00	9	9		9
17:00:00	14	14		14
17:15:00	13	13		13
17:30:00	15	15		15
17:45:00	14	14		14
18:00:00	8	8		8
18:15:00	6	6		6
18:30:00	13	13		13
18:45:00	3	3		3
19:00:00				
19:15:00				
19:30:00				
19:45:00				
20:00:00				
20:15:00				
20:30:00				
20:45:00				
21:00:00				
21:15:00				
21:30:00				
21:45:00				
22:00:00				
22:15:00				
22:30:00				
22:45:00				
23:00:00				
23:15:00				
23:30:00				
23:45:00				
07-19	434	434		434
06-22				
06-24				
00-24				
am Peak				
Peak Volume				
pm Peak				
Peak Volume				

Harborough Rd north to Harborough Rd se			
	Thu 2017-10-26	Average Workday	7 Day Total Count
00:00:00			
00:15:00			
00:30:00			
00:45:00			
01:00:00			
01:15:00			
01:30:00			
01:45:00			
02:00:00			
02:15:00			
02:30:00			
02:45:00			
03:00:00			
03:15:00			
03:30:00			
03:45:00			
04:00:00			
04:15:00			
04:30:00			
04:45:00			
05:00:00			
05:15:00			
05:30:00			
05:45:00			
06:00:00			
06:15:00			
06:30:00			
06:45:00			
07:00:00	73	73	73
07:15:00	84	84	84
07:30:00	99	99	99
07:45:00	125	125	125
08:00:00	130	130	130
08:15:00	167	167	167
08:30:00	130	130	130
08:45:00	153	153	153
09:00:00	133	133	133
09:15:00	118	118	118
09:30:00	85	85	85
09:45:00	109	109	109
10:00:00	83	83	83
10:15:00	81	81	81
10:30:00	99	99	99
10:45:00	87	87	87
11:00:00	88	88	88
11:15:00	76	76	76
11:30:00	87	87	87
11:45:00	86	86	86
12:00:00	93	93	93
12:15:00	113	113	113
12:30:00	91	91	91
12:45:00	92	92	92
13:00:00	85	85	85
13:15:00	87	87	87
13:30:00	99	99	99
13:45:00	85	85	85
14:00:00	85	85	85
14:15:00	95	95	95
14:30:00	97	97	97
14:45:00	86	86	86
15:00:00	93	93	93
15:15:00	95	95	95
15:30:00	111	111	111
15:45:00	114	114	114
16:00:00	108	108	108
16:15:00	105	105	105
16:30:00	113	113	113
16:45:00	105	105	105
17:00:00	102	102	102
17:15:00	120	120	120
17:30:00	114	114	114
17:45:00	103	103	103
18:00:00	94	94	94
18:15:00	104	104	104
18:30:00	90	90	90
18:45:00	95	95	95
19:00:00			
19:15:00			
19:30:00			
19:45:00			
20:00:00			
20:15:00			
20:30:00			
20:45:00			
21:00:00			
21:15:00			
21:30:00			
21:45:00			
22:00:00			
22:15:00			
22:30:00			
22:45:00			
23:00:00			
23:15:00			
23:30:00			
23:45:00			
07-19	4867	4867	4867
06-22			
06-24			
00-24			
am Peak			
Peak Volume			
pm Peak			
Peak Volume			

Harborough Rd north to Gallow Field Rd				
	Thu	Average		Total
	2017-10-26	Workday	7 Day	Count
00:00:00				
00:15:00				
00:30:00				
00:45:00				
01:00:00				
01:15:00				
01:30:00				
01:45:00				
02:00:00				
02:15:00				
02:30:00				
02:45:00				
03:00:00				
03:15:00				
03:30:00				
03:45:00				
04:00:00				
04:15:00				
04:30:00				
04:45:00				
05:00:00				
05:15:00				
05:30:00				
05:45:00				
06:00:00				
06:15:00				
06:30:00				
06:45:00				
07:00:00	15	15		15
07:15:00	24	24		24
07:30:00	46	46		46
07:45:00	35	35		35
08:00:00	30	30		30
08:15:00	24	24		24
08:30:00	17	17		17
08:45:00	16	16		16
09:00:00	12	12		12
09:15:00	11	11		11
09:30:00	8	8		8
09:45:00	10	10		10
10:00:00	11	11		11
10:15:00	8	8		8
10:30:00	11	11		11
10:45:00	11	11		11
11:00:00	9	9		9
11:15:00	12	12		12
11:30:00	13	13		13
11:45:00	14	14		14
12:00:00	10	10		10
12:15:00	13	13		13
12:30:00	18	18		18
12:45:00	15	15		15
13:00:00	12	12		12
13:15:00	13	13		13
13:30:00	14	14		14
13:45:00	11	11		11
14:00:00	9	9		9
14:15:00	5	5		5
14:30:00	8	8		8
14:45:00	19	19		19
15:00:00	14	14		14
15:15:00	9	9		9
15:30:00	12	12		12
15:45:00	6	6		6
16:00:00	8	8		8
16:15:00	14	14		14
16:30:00	16	16		16
16:45:00	22	22		22
17:00:00	18	18		18
17:15:00	15	15		15
17:30:00	15	15		15
17:45:00	9	9		9
18:00:00	9	9		9
18:15:00	11	11		11
18:30:00	5	5		5
18:45:00	6	6		6
19:00:00				
19:15:00				
19:30:00				
19:45:00				
20:00:00				
20:15:00				
20:30:00				
20:45:00				
21:00:00				
21:15:00				
21:30:00				
21:45:00				
22:00:00				
22:15:00				
22:30:00				
22:45:00				
23:00:00				
23:15:00				
23:30:00				
23:45:00				
07-19	673	673		673
06-22				
06-24				
00-24				
am Peak				
Peak Volume				
pm Peak				
Peak Volume				

Leicester Lane to Harborough Rd se				
	Thu 2017-10-26	Average Workday	7 Day	Total Count
00:00:00				
00:15:00				
00:30:00				
00:45:00				
01:00:00				
01:15:00				
01:30:00				
01:45:00				
02:00:00				
02:15:00				
02:30:00				
02:45:00				
03:00:00				
03:15:00				
03:30:00				
03:45:00				
04:00:00				
04:15:00				
04:30:00				
04:45:00				
05:00:00				
05:15:00				
05:30:00				
05:45:00				
06:00:00				
06:15:00				
06:30:00				
06:45:00				
07:00:00	2	2		2
07:15:00	3	3		3
07:30:00	1	1		1
07:45:00	2	2		2
08:00:00	5	5		5
08:15:00	9	9		9
08:30:00	2	2		2
08:45:00	3	3		3
09:00:00	5	5		5
09:15:00	3	3		3
09:30:00	1	1		1
09:45:00	3	3		3
10:00:00	0	0		0
10:15:00	1	1		1
10:30:00	4	4		4
10:45:00	0	0		0
11:00:00	3	3		3
11:15:00	2	2		2
11:30:00	1	1		1
11:45:00	1	1		1
12:00:00	2	2		2
12:15:00	2	2		2
12:30:00	1	1		1
12:45:00	3	3		3
13:00:00	1	1		1
13:15:00	1	1		1
13:30:00	2	2		2
13:45:00	3	3		3
14:00:00	5	5		5
14:15:00	4	4		4
14:30:00	4	4		4
14:45:00	2	2		2
15:00:00	2	2		2
15:15:00	2	2		2
15:30:00	3	3		3
15:45:00	2	2		2
16:00:00	2	2		2
16:15:00	0	0		0
16:30:00	3	3		3
16:45:00	2	2		2
17:00:00	6	6		6
17:15:00	3	3		3
17:30:00	1	1		1
17:45:00	1	1		1
18:00:00	3	3		3
18:15:00	0	0		0
18:30:00	0	0		0
18:45:00	0	0		0
19:00:00				
19:15:00				
19:30:00				
19:45:00				
20:00:00				
20:15:00				
20:30:00				
20:45:00				
21:00:00				
21:15:00				
21:30:00				
21:45:00				
22:00:00				
22:15:00				
22:30:00				
22:45:00				
23:00:00				
23:15:00				
23:30:00				
23:45:00				
07-19	111	111		111
06-22				
06-24				
00-24				
am Peak				
Peak Volume				
pm Peak				
Peak Volume				



Leicester Lane to Gallow Field Rd				
	Thu	Average		Total
	2017-10-26	Workday	7 Day	Count
00:00:00				
00:15:00				
00:30:00				
00:45:00				
01:00:00				
01:15:00				
01:30:00				
01:45:00				
02:00:00				
02:15:00				
02:30:00				
02:45:00				
03:00:00				
03:15:00				
03:30:00				
03:45:00				
04:00:00				
04:15:00				
04:30:00				
04:45:00				
05:00:00				
05:15:00				
05:30:00				
05:45:00				
06:00:00				
06:15:00				
06:30:00				
06:45:00				
07:00:00	5	5		5
07:15:00	1	1		1
07:30:00	3	3		3
07:45:00	9	9		9
08:00:00	7	7		7
08:15:00	4	4		4
08:30:00	6	6		6
08:45:00	7	7		7
09:00:00	6	6		6
09:15:00	5	5		5
09:30:00	1	1		1
09:45:00	4	4		4
10:00:00	8	8		8
10:15:00	3	3		3
10:30:00	6	6		6
10:45:00	1	1		1
11:00:00	7	7		7
11:15:00	5	5		5
11:30:00	2	2		2
11:45:00	1	1		1
12:00:00	5	5		5
12:15:00	5	5		5
12:30:00	10	10		10
12:45:00	3	3		3
13:00:00	5	5		5
13:15:00	7	7		7
13:30:00	2	2		2
13:45:00	6	6		6
14:00:00	1	1		1
14:15:00	6	6		6
14:30:00	5	5		5
14:45:00	9	9		9
15:00:00	4	4		4
15:15:00	4	4		4
15:30:00	9	9		9
15:45:00	8	8		8
16:00:00	7	7		7
16:15:00	4	4		4
16:30:00	10	10		10
16:45:00	9	9		9
17:00:00	10	10		10
17:15:00	5	5		5
17:30:00	7	7		7
17:45:00	7	7		7
18:00:00	1	1		1
18:15:00	5	5		5
18:30:00	4	4		4
18:45:00	4	4		4
19:00:00				
19:15:00				
19:30:00				
19:45:00				
20:00:00				
20:15:00				
20:30:00				
20:45:00				
21:00:00				
21:15:00				
21:30:00				
21:45:00				
22:00:00				
22:15:00				
22:30:00				
22:45:00				
23:00:00				
23:15:00				
23:30:00				
23:45:00				
07-19	253	253		253
06-22				
06-24				
00-24				
am Peak				
Peak Volume				
pm Peak				
Peak Volume				

Leicester Lane to Harborough Rd north				
	Thu	Average		Total
	2017-10-26	Workday	7 Day	Count
00:00:00				
00:15:00				
00:30:00				
00:45:00				
01:00:00				
01:15:00				
01:30:00				
01:45:00				
02:00:00				
02:15:00				
02:30:00				
02:45:00				
03:00:00				
03:15:00				
03:30:00				
03:45:00				
04:00:00				
04:15:00				
04:30:00				
04:45:00				
05:00:00				
05:15:00				
05:30:00				
05:45:00				
06:00:00				
06:15:00				
06:30:00				
06:45:00				
07:00:00	3	3		3
07:15:00	7	7		7
07:30:00	8	8		8
07:45:00	2	2		2
08:00:00	2	2		2
08:15:00	2	2		2
08:30:00	9	9		9
08:45:00	9	9		9
09:00:00	9	9		9
09:15:00	9	9		9
09:30:00	4	4		4
09:45:00	10	10		10
10:00:00	6	6		6
10:15:00	7	7		7
10:30:00	7	7		7
10:45:00	9	9		9
11:00:00	8	8		8
11:15:00	8	8		8
11:30:00	6	6		6
11:45:00	5	5		5
12:00:00	8	8		8
12:15:00	8	8		8
12:30:00	2	2		2
12:45:00	4	4		4
13:00:00	9	9		9
13:15:00	3	3		3
13:30:00	4	4		4
13:45:00	6	6		6
14:00:00	3	3		3
14:15:00	6	6		6
14:30:00	10	10		10
14:45:00	5	5		5
15:00:00	9	9		9
15:15:00	8	8		8
15:30:00	11	11		11
15:45:00	6	6		6
16:00:00	7	7		7
16:15:00	8	8		8
16:30:00	8	8		8
16:45:00	10	10		10
17:00:00	9	9		9
17:15:00	8	8		8
17:30:00	5	5		5
17:45:00	5	5		5
18:00:00	3	3		3
18:15:00	3	3		3
18:30:00	5	5		5
18:45:00	3	3		3
19:00:00				
19:15:00				
19:30:00				
19:45:00				
20:00:00				
20:15:00				
20:30:00				
20:45:00				
21:00:00				
21:15:00				
21:30:00				
21:45:00				
22:00:00				
22:15:00				
22:30:00				
22:45:00				
23:00:00				
23:15:00				
23:30:00				
23:45:00				
07-19	306	306		306
06-22				
06-24				
00-24				
am Peak				
Peak Volume				
pm Peak				
Peak Volume				

Harborough Rd se to Gallow Field Rd				
	Thu	Average		Total
	2017-10-26	Workday	7 Day	Count
00:00:00				
00:15:00				
00:30:00				
00:45:00				
01:00:00				
01:15:00				
01:30:00				
01:45:00				
02:00:00				
02:15:00				
02:30:00				
02:45:00				
03:00:00				
03:15:00				
03:30:00				
03:45:00				
04:00:00				
04:15:00				
04:30:00				
04:45:00				
05:00:00				
05:15:00				
05:30:00				
05:45:00				
06:00:00				
06:15:00				
06:30:00				
06:45:00				
07:00:00	10	10		10
07:15:00	12	12		12
07:30:00	10	10		10
07:45:00	21	21		21
08:00:00	11	11		11
08:15:00	10	10		10
08:30:00	14	14		14
08:45:00	12	12		12
09:00:00	6	6		6
09:15:00	10	10		10
09:30:00	7	7		7
09:45:00	10	10		10
10:00:00	9	9		9
10:15:00	7	7		7
10:30:00	5	5		5
10:45:00	7	7		7
11:00:00	7	7		7
11:15:00	7	7		7
11:30:00	13	13		13
11:45:00	9	9		9
12:00:00	8	8		8
12:15:00	12	12		12
12:30:00	15	15		15
12:45:00	8	8		8
13:00:00	9	9		9
13:15:00	9	9		9
13:30:00	8	8		8
13:45:00	11	11		11
14:00:00	13	13		13
14:15:00	7	7		7
14:30:00	8	8		8
14:45:00	12	12		12
15:00:00	9	9		9
15:15:00	15	15		15
15:30:00	7	7		7
15:45:00	9	9		9
16:00:00	9	9		9
16:15:00	16	16		16
16:30:00	9	9		9
16:45:00	13	13		13
17:00:00	22	22		22
17:15:00	14	14		14
17:30:00	16	16		16
17:45:00	9	9		9
18:00:00	4	4		4
18:15:00	12	12		12
18:30:00	4	4		4
18:45:00	5	5		5
19:00:00				
19:15:00				
19:30:00				
19:45:00				
20:00:00				
20:15:00				
20:30:00				
20:45:00				
21:00:00				
21:15:00				
21:30:00				
21:45:00				
22:00:00				
22:15:00				
22:30:00				
22:45:00				
23:00:00				
23:15:00				
23:30:00				
23:45:00				
07-19	490	490		490
06-22				
06-24				
00-24				
am Peak				
Peak Volume				
pm Peak				
Peak Volume				

Harborough Rd se to Harborough Rd north			
	Thu	Average	Total
	2017-10-26	Workday	7 Day
			Count
00:00:00			
00:15:00			
00:30:00			
00:45:00			
01:00:00			
01:15:00			
01:30:00			
01:45:00			
02:00:00			
02:15:00			
02:30:00			
02:45:00			
03:00:00			
03:15:00			
03:30:00			
03:45:00			
04:00:00			
04:15:00			
04:30:00			
04:45:00			
05:00:00			
05:15:00			
05:30:00			
05:45:00			
06:00:00			
06:15:00			
06:30:00			
06:45:00			
07:00:00	85	85	85
07:15:00	107	107	107
07:30:00	151	151	151
07:45:00	143	143	143
08:00:00	100	100	100
08:15:00	102	102	102
08:30:00	108	108	108
08:45:00	96	96	96
09:00:00	84	84	84
09:15:00	77	77	77
09:30:00	72	72	72
09:45:00	68	68	68
10:00:00	96	96	96
10:15:00	77	77	77
10:30:00	58	58	58
10:45:00	84	84	84
11:00:00	83	83	83
11:15:00	90	90	90
11:30:00	83	83	83
11:45:00	76	76	76
12:00:00	117	117	117
12:15:00	80	80	80
12:30:00	93	93	93
12:45:00	88	88	88
13:00:00	90	90	90
13:15:00	105	105	105
13:30:00	97	97	97
13:45:00	97	97	97
14:00:00	103	103	103
14:15:00	100	100	100
14:30:00	103	103	103
14:45:00	94	94	94
15:00:00	124	124	124
15:15:00	93	93	93
15:30:00	118	118	118
15:45:00	110	110	110
16:00:00	147	147	147
16:15:00	120	120	120
16:30:00	123	123	123
16:45:00	126	126	126
17:00:00	162	162	162
17:15:00	136	136	136
17:30:00	155	155	155
17:45:00	108	108	108
18:00:00	136	136	136
18:15:00	98	98	98
18:30:00	94	94	94
18:45:00	61	61	61
19:00:00			
19:15:00			
19:30:00			
19:45:00			
20:00:00			
20:15:00			
20:30:00			
20:45:00			
21:00:00			
21:15:00			
21:30:00			
21:45:00			
22:00:00			
22:15:00			
22:30:00			
22:45:00			
23:00:00			
23:15:00			
23:30:00			
23:45:00			
07-19	4918	4918	4918
06-22			
06-24			
00-24			
am Peak			
Peak Volume			
pm Peak			
Peak Volume			

Harborough Rd se to Leicester Lane			
	Thu	Average	Total
	2017-10-26	Workday	7 Day
			Count
00:00:00			
00:15:00			
00:30:00			
00:45:00			
01:00:00			
01:15:00			
01:30:00			
01:45:00			
02:00:00			
02:15:00			
02:30:00			
02:45:00			
03:00:00			
03:15:00			
03:30:00			
03:45:00			
04:00:00			
04:15:00			
04:30:00			
04:45:00			
05:00:00			
05:15:00			
05:30:00			
05:45:00			
06:00:00			
06:15:00			
06:30:00			
06:45:00			
07:00:00	0	0	0
07:15:00	1	1	1
07:30:00	0	0	0
07:45:00	3	3	3
08:00:00	1	1	1
08:15:00	1	1	1
08:30:00	0	0	0
08:45:00	5	5	5
09:00:00	3	3	3
09:15:00	1	1	1
09:30:00	1	1	1
09:45:00	0	0	0
10:00:00	2	2	2
10:15:00	3	3	3
10:30:00	2	2	2
10:45:00	5	5	5
11:00:00	2	2	2
11:15:00	2	2	2
11:30:00	2	2	2
11:45:00	2	2	2
12:00:00	3	3	3
12:15:00	3	3	3
12:30:00	2	2	2
12:45:00	3	3	3
13:00:00	1	1	1
13:15:00	0	0	0
13:30:00	2	2	2
13:45:00	1	1	1
14:00:00	2	2	2
14:15:00	5	5	5
14:30:00	3	3	3
14:45:00	3	3	3
15:00:00	0	0	0
15:15:00	3	3	3
15:30:00	3	3	3
15:45:00	3	3	3
16:00:00	5	5	5
16:15:00	0	0	0
16:30:00	5	5	5
16:45:00	2	2	2
17:00:00	12	12	12
17:15:00	1	1	1
17:30:00	8	8	8
17:45:00	1	1	1
18:00:00	2	2	2
18:15:00	0	0	0
18:30:00	3	3	3
18:45:00	1	1	1
19:00:00			
19:15:00			
19:30:00			
19:45:00			
20:00:00			
20:15:00			
20:30:00			
20:45:00			
21:00:00			
21:15:00			
21:30:00			
21:45:00			
22:00:00			
22:15:00			
22:30:00			
22:45:00			
23:00:00			
23:15:00			
23:30:00			
23:45:00			
07-19	113	113	113
06-22			
06-24			
00-24			
am Peak			
Peak Volume			
pm Peak			
Peak Volume			

Gallow Field Rd to Harborough Rd north			
	Thu	Average	Total
	2017-10-26	Workday	7 Day
			Count
00:00:00			
00:15:00			
00:30:00			
00:45:00			
01:00:00			
01:15:00			
01:30:00			
01:45:00			
02:00:00			
02:15:00			
02:30:00			
02:45:00			
03:00:00			
03:15:00			
03:30:00			
03:45:00			
04:00:00			
04:15:00			
04:30:00			
04:45:00			
05:00:00			
05:15:00			
05:30:00			
05:45:00			
06:00:00			
06:15:00			
06:30:00			
06:45:00			
07:00:00	8	8	8
07:15:00	9	9	9
07:30:00	11	11	11
07:45:00	11	11	11
08:00:00	16	16	16
08:15:00	18	18	18
08:30:00	19	19	19
08:45:00	13	13	13
09:00:00	12	12	12
09:15:00	8	8	8
09:30:00	8	8	8
09:45:00	12	12	12
10:00:00	8	8	8
10:15:00	2	2	2
10:30:00	6	6	6
10:45:00	7	7	7
11:00:00	9	9	9
11:15:00	8	8	8
11:30:00	7	7	7
11:45:00	9	9	9
12:00:00	17	17	17
12:15:00	19	19	19
12:30:00	11	11	11
12:45:00	11	11	11
13:00:00	14	14	14
13:15:00	11	11	11
13:30:00	10	10	10
13:45:00	10	10	10
14:00:00	8	8	8
14:15:00	11	11	11
14:30:00	20	20	20
14:45:00	6	6	6
15:00:00	11	11	11
15:15:00	13	13	13
15:30:00	10	10	10
15:45:00	9	9	9
16:00:00	12	12	12
16:15:00	21	21	21
16:30:00	21	21	21
16:45:00	18	18	18
17:00:00	32	32	32
17:15:00	26	26	26
17:30:00	27	27	27
17:45:00	18	18	18
18:00:00	11	11	11
18:15:00	16	16	16
18:30:00	18	18	18
18:45:00	11	11	11
19:00:00			
19:15:00			
19:30:00			
19:45:00			
20:00:00			
20:15:00			
20:30:00			
20:45:00			
21:00:00			
21:15:00			
21:30:00			
21:45:00			
22:00:00			
22:15:00			
22:30:00			
22:45:00			
23:00:00			
23:15:00			
23:30:00			
23:45:00			
07-19	623	623	623
06-22			
06-24			
00-24			
am Peak			
Peak Volume			
pm Peak			
Peak Volume			

Gallow Field Rd to Leicester Lane				
	Thu	Average		Total
	2017-10-26	Workday	7 Day	Count
00:00:00				
00:15:00				
00:30:00				
00:45:00				
01:00:00				
01:15:00				
01:30:00				
01:45:00				
02:00:00				
02:15:00				
02:30:00				
02:45:00				
03:00:00				
03:15:00				
03:30:00				
03:45:00				
04:00:00				
04:15:00				
04:30:00				
04:45:00				
05:00:00				
05:15:00				
05:30:00				
05:45:00				
06:00:00				
06:15:00				
06:30:00				
06:45:00				
07:00:00	2	2		2
07:15:00	1	1		1
07:30:00	10	10		10
07:45:00	8	8		8
08:00:00	8	8		8
08:15:00	15	15		15
08:30:00	15	15		15
08:45:00	12	12		12
09:00:00	9	9		9
09:15:00	8	8		8
09:30:00	8	8		8
09:45:00	4	4		4
10:00:00	9	9		9
10:15:00	7	7		7
10:30:00	4	4		4
10:45:00	6	6		6
11:00:00	4	4		4
11:15:00	3	3		3
11:30:00	2	2		2
11:45:00	5	5		5
12:00:00	2	2		2
12:15:00	7	7		7
12:30:00	4	4		4
12:45:00	0	0		0
13:00:00	6	6		6
13:15:00	6	6		6
13:30:00	5	5		5
13:45:00	8	8		8
14:00:00	2	2		2
14:15:00	9	9		9
14:30:00	5	5		5
14:45:00	4	4		4
15:00:00	4	4		4
15:15:00	8	8		8
15:30:00	6	6		6
15:45:00	3	3		3
16:00:00	8	8		8
16:15:00	7	7		7
16:30:00	10	10		10
16:45:00	6	6		6
17:00:00	7	7		7
17:15:00	6	6		6
17:30:00	8	8		8
17:45:00	8	8		8
18:00:00	8	8		8
18:15:00	7	7		7
18:30:00	3	3		3
18:45:00	1	1		1
19:00:00				
19:15:00				
19:30:00				
19:45:00				
20:00:00				
20:15:00				
20:30:00				
20:45:00				
21:00:00				
21:15:00				
21:30:00				
21:45:00				
22:00:00				
22:15:00				
22:30:00				
22:45:00				
23:00:00				
23:15:00				
23:30:00				
23:45:00				
07-19	298	298		298
06-22				
06-24				
00-24				
am Peak				
Peak Volume				
pm Peak				
Peak Volume				

Gallow Field Rd to Harborough Rd se				
	Thu 2017-10-26	Average Workday	7 Day	Total Count
00:00:00				
00:15:00				
00:30:00				
00:45:00				
01:00:00				
01:15:00				
01:30:00				
01:45:00				
02:00:00				
02:15:00				
02:30:00				
02:45:00				
03:00:00				
03:15:00				
03:30:00				
03:45:00				
04:00:00				
04:15:00				
04:30:00				
04:45:00				
05:00:00				
05:15:00				
05:30:00				
05:45:00				
06:00:00				
06:15:00				
06:30:00				
06:45:00				
07:00:00	3	3		3
07:15:00	7	7		7
07:30:00	8	8		8
07:45:00	14	14		14
08:00:00	9	9		9
08:15:00	13	13		13
08:30:00	12	12		12
08:45:00	11	11		11
09:00:00	8	8		8
09:15:00	13	13		13
09:30:00	8	8		8
09:45:00	10	10		10
10:00:00	5	5		5
10:15:00	10	10		10
10:30:00	7	7		7
10:45:00	6	6		6
11:00:00	5	5		5
11:15:00	8	8		8
11:30:00	6	6		6
11:45:00	5	5		5
12:00:00	11	11		11
12:15:00	7	7		7
12:30:00	9	9		9
12:45:00	4	4		4
13:00:00	16	16		16
13:15:00	11	11		11
13:30:00	6	6		6
13:45:00	6	6		6
14:00:00	5	5		5
14:15:00	7	7		7
14:30:00	12	12		12
14:45:00	12	12		12
15:00:00	3	3		3
15:15:00	8	8		8
15:30:00	8	8		8
15:45:00	6	6		6
16:00:00	8	8		8
16:15:00	14	14		14
16:30:00	8	8		8
16:45:00	4	4		4
17:00:00	6	6		6
17:15:00	6	6		6
17:30:00	7	7		7
17:45:00	5	5		5
18:00:00	2	2		2
18:15:00	6	6		6
18:30:00	6	6		6
18:45:00	8	8		8
19:00:00				
19:15:00				
19:30:00				
19:45:00				
20:00:00				
20:15:00				
20:30:00				
20:45:00				
21:00:00				
21:15:00				
21:30:00				
21:45:00				
22:00:00				
22:15:00				
22:30:00				
22:45:00				
23:00:00				
23:15:00				
23:30:00				
23:45:00				
07-19	379	379		379
06-22				
06-24				
00-24				
am Peak				
Peak Volume				
pm Peak				
Peak Volume				

Event key:   QC failure   Atypical (QC)  
  Weekends and defined holidays

Notes on data: Weekly (7-day) averages are calculated as the average of workday values and weekend values, weighted in the proportion 5:2.

Holidays & Events: **None**



### K.3. A4304 / Foxton Road

## Cover

### LEICESTERSHIRE\_MCC - 00008026446 - Main St/Westgate Ln/Foxton Road - Thursday, October 26, 2017

**Study Name** Main St/Westgate Ln/Foxton Road  
**Study Description** Main St/Westgate Ln/Foxton Road,  
**Date of Survey** Thursday, October 26, 2017  
**Time Period** 07:00 - 19:00  
**Comments** FID 2  
**Location**

**Classes** PC, MC, CAR, LGV, OGV1, OGV2, PSV

## Movements

### LEICESTERSHIRE\_MCC - 00008026446 - Main St/Westgate Ln/Foxton Road - Thursday, October 26, 2017

From: Main street east

To: Main Street west										To: Foxton Road									
Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total	Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total		
07:00	0	1	50	10	0	1	0	62	07:00	1	0	10	2	0	0	0	13		
07:15	0	1	70	8	3	2	0	84	07:15	0	0	11	1	0	0	0	12		
07:30	0	1	75	6	0	2	0	84	07:30	0	0	25	2	1	0	0	28		
07:45	0	1	70	14	1	7	1	94	07:45	0	0	27	2	0	0	0	29		
08:00	0	1	65	13	1	3	0	83	08:00	0	0	21	3	1	0	1	26		
08:15	0	0	62	11	3	1	0	77	08:15	0	0	20	3	1	0	0	24		
08:30	0	0	61	12	2	0	0	75	08:30	0	0	25	5	0	0	0	30		
08:45	0	0	39	10	2	2	0	53	08:45	1	0	22	3	0	0	0	26		
09:00	0	0	39	3	2	4	0	48	09:00	0	0	20	3	0	0	0	23		
09:15	0	0	44	6	1	0	1	52	09:15	0	0	12	1	0	0	0	13		
09:30	0	0	33	9	1	0	0	43	09:30	0	0	15	5	0	0	0	20		
09:45	0	0	46	5	2	1	0	54	09:45	0	0	10	1	1	0	0	12		
10:00	0	0	33	11	3	1	0	48	10:00	1	0	5	3	1	0	0	10		
10:15	0	0	23	12	1	2	0	38	10:15	0	0	9	2	0	0	0	11		
10:30	0	0	51	12	3	3	0	69	10:30	0	0	12	0	0	0	0	12		
10:45	0	0	33	7	2	1	0	43	10:45	0	0	7	1	0	0	0	8		
11:00	0	0	40	9	4	2	0	55	11:00	0	0	14	2	0	0	0	16		
11:15	0	0	49	3	2	3	1	58	11:15	0	0	12	0	1	0	0	13		
11:30	0	1	32	6	5	2	0	46	11:30	0	0	25	1	0	0	0	26		
11:45	0	0	28	7	1	0	0	36	11:45	0	0	13	2	0	0	0	15		
12:00	0	0	40	11	3	2	0	56	12:00	0	0	15	0	0	0	0	15		
12:15	0	0	46	8	2	0	0	56	12:15	0	0	10	2	0	0	0	12		
12:30	0	0	35	7	2	0	0	44	12:30	0	0	14	2	0	0	0	16		
12:45	0	0	43	8	3	2	1	57	12:45	0	1	11	2	1	0	0	15		
13:00	0	0	46	2	2	0	0	50	13:00	0	0	14	2	0	0	0	16		
13:15	0	1	41	8	1	2	0	53	13:15	0	0	18	2	0	0	0	20		
13:30	0	0	49	10	0	2	1	62	13:30	0	0	9	1	2	0	0	12		
13:45	0	0	39	9	0	2	0	50	13:45	0	0	10	2	0	0	0	12		
14:00	0	0	38	7	1	2	0	48	14:00	0	1	18	3	0	0	0	22		
14:15	1	0	46	5	2	0	1	55	14:15	0	0	10	2	0	0	0	12		
14:30	0	2	35	7	5	0	0	49	14:30	0	0	17	2	0	0	0	19		
14:45	0	0	44	13	1	0	0	58	14:45	0	0	7	0	1	0	0	8		
15:00	0	0	49	15	2	0	0	66	15:00	0	0	11	0	0	0	0	11		
15:15	0	0	51	3	1	3	1	59	15:15	0	0	12	1	0	0	0	13		
15:30	0	0	50	10	2	3	0	65	15:30	0	0	19	2	0	0	0	21		
15:45	0	1	48	11	1	0	0	61	15:45	0	0	21	3	0	0	0	24		
16:00	0	0	47	13	1	2	0	63	16:00	0	0	19	1	0	0	0	20		
16:15	0	0	52	12	0	3	1	68	16:15	0	0	10	5	0	0	0	15		
16:30	0	1	50	11	0	3	0	65	16:30	0	0	20	6	0	0	0	26		
16:45	0	0	55	10	0	1	0	66	16:45	0	0	12	5	0	0	0	17		
17:00	0	1	71	5	0	0	1	78	17:00	0	0	19	4	0	0	0	23		
17:15	0	0	55	3	0	1	0	59	17:15	0	1	21	1	0	0	0	23		
17:30	0	1	65	4	0	0	0	70	17:30	0	0	26	1	0	0	0	27		
17:45	0	0	47	4	0	0	0	51	17:45	0	0	20	3	0	0	0	23		
18:00	0	0	42	2	0	0	1	45	18:00	0	0	21	3	0	0	0	24		
18:15	0	1	41	3	0	0	0	45	18:15	0	0	19	0	0	0	0	19		
18:30	0	0	38	3	0	0	0	41	18:30	0	0	14	1	0	0	0	15		
18:45	0	0	45	3	0	0	0	48	18:45	0	0	9	1	0	0	0	10		
Total	1	14	2251	381	68	65	10	2790	Total	3	3	741	99	10	0	1	857		

From: Main Street west

To: Main street east

Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total
07:00	0	0	29	5	1	3	0	38
07:15	0	0	33	5	2	3	2	45
07:30	0	0	35	11	0	2	0	48
07:45	0	1	54	14	2	3	0	74
08:00	0	0	68	6	4	0	0	78
08:15	0	0	56	8	3	1	1	69
08:30	0	0	82	9	5	3	0	99
08:45	1	0	54	6	4	2	2	69
09:00	0	0	51	13	3	1	0	68
09:15	0	0	51	6	1	0	0	58
09:30	0	1	52	15	0	5	0	73
09:45	0	0	48	5	1	3	0	57
10:00	0	0	35	8	3	2	0	48
10:15	0	0	42	11	1	4	1	59
10:30	0	0	39	5	1	4	0	49
10:45	0	1	37	10	5	3	0	56
11:00	0	2	40	7	4	3	1	57
11:15	0	1	30	5	1	1	0	38
11:30	0	0	33	6	0	0	0	39
11:45	0	0	41	7	2	1	0	51
12:00	0	0	48	11	2	1	0	62
12:15	0	0	39	11	1	0	1	52
12:30	0	0	33	15	2	2	0	52
12:45	0	0	51	8	3	3	0	65
13:00	0	0	37	8	0	2	0	47
13:15	0	0	37	6	2	2	0	47
13:30	1	0	36	5	0	0	0	42
13:45	0	0	41	11	1	0	1	54
14:00	0	1	31	3	0	2	0	37
14:15	0	0	52	8	6	2	0	68
14:30	1	1	49	10	1	1	0	63
14:45	0	0	46	9	5	2	0	62
15:00	0	0	39	10	1	0	0	50
15:15	0	0	50	5	6	1	0	62
15:30	0	1	42	7	2	4	1	57
15:45	0	0	45	14	1	4	1	65
16:00	0	0	39	6	2	3	0	50
16:15	0	1	59	9	2	2	0	73
16:30	0	0	51	8	1	1	0	61
16:45	0	0	61	7	0	0	0	68
17:00	0	2	70	14	0	0	0	86
17:15	0	0	75	13	2	1	0	91
17:30	0	1	87	8	0	0	0	96
17:45	0	0	93	9	0	1	0	103
18:00	0	2	94	3	0	0	0	99
18:15	0	0	77	3	1	1	0	82
18:30	0	0	65	3	0	0	0	68
18:45	0	0	47	1	1	0	0	49
Total		3	15	2404	387	85	79	11 2984

To: Foxton Road

Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total
07:00	0	0	12	1	1	0	0	14
07:15	0	0	7	2	0	0	0	9
07:30	0	0	17	1	0	0	0	18
07:45	0	0	16	9	1	0	0	26
08:00	0	0	13	3	0	0	0	16
08:15	0	0	11	8	0	0	0	19
08:30	0	0	18	7	1	0	0	26
08:45	0	0	9	3	0	1	0	13
09:00	0	0	8	4	0	0	0	12
09:15	1	0	10	5	0	1	0	17
09:30	0	0	10	4	0	1	0	15
09:45	0	0	9	2	1	0	0	12
10:00	0	0	7	2	1	2	0	12
10:15	1	1	4	4	0	0	0	10
10:30	0	0	9	1	0	0	0	10
10:45	0	0	8	2	0	0	0	10
11:00	0	0	8	4	0	1	0	13
11:15	0	0	5	2	1	0	0	8
11:30	0	0	8	2	3	0	0	13
11:45	0	0	8	6	1	0	0	15
12:00	0	0	7	4	2	0	0	13
12:15	0	0	15	1	1	1	0	18
12:30	0	0	8	1	0	0	0	9
12:45	0	0	9	4	1	1	0	15
13:00	0	0	6	2	0	1	0	9
13:15	0	0	6	3	0	0	0	9
13:30	0	0	8	0	1	1	0	10
13:45	0	0	6	4	0	0	0	10
14:00	0	0	7	2	1	0	0	10
14:15	1	0	6	1	0	0	0	8
14:30	0	0	15	4	0	1	0	20
14:45	0	0	10	2	0	0	0	12
15:00	0	0	8	4	0	0	0	12
15:15	0	0	9	2	1	2	0	14
15:30	0	0	10	3	0	0	0	13
15:45	1	0	10	5	0	0	0	16
16:00	0	0	8	5	0	0	0	13
16:15	0	0	10	6	0	0	0	16
16:30	0	0	7	3	0	0	0	10
16:45	0	0	9	5	0	0	0	14
17:00	0	0	13	5	0	0	0	18
17:15	0	0	20	5	0	0	0	25
17:30	0	0	15	4	0	1	0	20
17:45	1	0	11	3	0	0	0	15
18:00	0	0	7	5	0	0	0	12
18:15	0	0	14	2	0	1	0	17
18:30	0	1	5	1	0	0	0	7
18:45	0	0	4	0	0	0	0	4
Total	5	2	460	158	17	15	0	657

From: Foxton Road										To: Main Street west									
To: Main street east																			
Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total	Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total		
07:00	0	0	8	1	0	0	0	0	9	07:00	0	0	7	4	0	0	11		
07:15	0	0	11	4	0	0	0	0	15	07:15	0	0	12	0	1	0	13		
07:30	0	0	13	3	0	0	0	0	16	07:30	0	0	10	4	0	0	14		
07:45	0	0	30	2	0	0	0	0	32	07:45	0	0	22	5	0	0	27		
08:00	0	0	19	4	0	0	0	0	23	08:00	0	0	21	1	0	0	22		
08:15	1	0	28	2	0	0	0	0	31	08:15	0	0	14	6	0	0	20		
08:30	0	0	37	2	1	0	0	0	40	08:30	0	0	15	2	0	1	18		
08:45	0	0	41	6	1	0	0	0	48	08:45	0	0	15	3	1	0	19		
09:00	1	0	14	4	0	0	0	0	19	09:00	0	0	7	5	1	2	15		
09:15	0	0	20	3	1	0	0	0	24	09:15	0	0	11	1	0	0	12		
09:30	0	0	13	2	1	0	0	0	16	09:30	0	0	9	4	0	2	15		
09:45	0	1	12	1	0	0	0	0	14	09:45	0	0	8	8	2	0	18		
10:00	0	0	16	5	0	0	0	0	21	10:00	0	0	3	2	0	0	5		
10:15	0	0	12	0	0	0	0	0	12	10:15	0	0	8	7	0	0	15		
10:30	0	0	15	2	1	0	0	0	18	10:30	1	0	7	2	0	0	10		
10:45	0	0	17	0	0	0	0	0	17	10:45	0	0	6	1	0	1	8		
11:00	0	0	19	4	0	0	0	0	23	11:00	0	0	5	8	0	0	13		
11:15	0	0	17	3	0	0	0	0	20	11:15	1	2	0	1	0	0	4		
11:30	1	0	12	3	0	0	0	0	16	11:30	0	0	4	1	0	0	5		
11:45	0	0	16	1	1	0	0	0	18	11:45	0	0	3	1	0	2	6		
12:00	0	0	11	2	0	0	0	0	13	12:00	0	0	7	0	0	0	7		
12:15	0	0	10	2	0	1	0	0	13	12:15	0	0	5	3	0	0	8		
12:30	0	0	15	0	0	0	0	0	15	12:30	0	0	13	4	0	0	18		
12:45	0	0	17	1	0	0	0	0	18	12:45	0	0	7	2	0	2	11		
13:00	0	0	18	2	0	0	0	0	20	13:00	0	0	6	3	0	0	9		
13:15	2	0	21	4	0	0	0	0	27	13:15	0	0	9	0	0	0	9		
13:30	0	0	15	1	0	0	0	0	16	13:30	0	0	6	3	1	1	11		
13:45	0	0	13	3	1	0	0	0	17	13:45	1	1	11	5	1	2	21		
14:00	0	0	14	6	0	0	0	0	20	14:00	0	0	12	2	1	1	16		
14:15	0	0	9	1	1	0	0	0	11	14:15	0	0	9	3	1	0	13		
14:30	0	0	12	2	0	0	0	0	14	14:30	0	0	11	5	0	0	16		
14:45	0	0	10	2	0	0	0	0	12	14:45	0	0	14	3	1	0	18		
15:00	0	0	14	4	2	0	0	0	20	15:00	0	0	7	4	0	0	11		
15:15	0	0	17	2	0	0	0	0	19	15:15	0	0	5	2	0	0	7		
15:30	0	0	23	3	0	0	0	0	26	15:30	0	0	18	3	1	0	22		
15:45	0	0	16	1	0	0	0	0	17	15:45	0	0	13	9	0	0	22		
16:00	0	0	16	3	0	0	0	0	19	16:00	0	0	11	4	0	0	15		
16:15	0	0	27	7	0	0	0	0	34	16:15	0	0	18	5	0	0	23		
16:30	0	0	19	1	0	0	0	0	20	16:30	0	0	14	4	0	1	19		
16:45	0	0	26	5	0	0	0	0	31	16:45	1	0	18	6	0	2	27		
17:00	0	0	34	6	0	0	0	0	40	17:00	0	0	30	6	1	0	37		
17:15	1	0	17	3	0	0	0	0	21	17:15	0	0	10	4	0	0	14		
17:30	0	0	38	1	0	0	0	0	39	17:30	0	1	14	3	1	0	19		
17:45	0	0	24	1	0	0	0	0	25	17:45	0	0	11	0	0	0	11		
18:00	0	0	30	5	0	0	0	0	35	18:00	0	0	5	0	0	0	5		
18:15	2	0	22	1	0	0	0	0	25	18:15	0	0	12	1	0	1	14		
18:30	0	0	16	2	0	0	0	0	18	18:30	0	0	6	1	0	0	7		
18:45	0	0	19	3	0	0	0	0	22	18:45	1	0	6	0	0	0	7		
Total		8	1	893	126	10	1	0	1039	Total	4	3	497	150	14	18	1	687	

# Arms

## LEICESTERSHIRE\_MCC - 00008026446 - Main St/Westgate Ln/Foxton Road - Thursday, October 26, 2017

Main street east														Away From Junction										Both Directions					
Towards Junction																													
Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total	Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total	Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total			
07:00		1	1	60	12	0	1	75	07:00	0	0	37	6	1	3	0	47	07:00	1	1	97	18	1	4	0	122			
07:15		0	1	81	9	3	2	96	07:15	0	0	44	9	2	3	2	60	07:15	0	1	125	18	5	5	2	156			
07:30		0	1	100	8	1	2	112	07:30	0	0	48	14	0	2	0	64	07:30	0	1	148	22	1	4	0	176			
07:45		0	1	97	16	1	7	123	07:45	0	1	84	16	2	3	0	106	07:45	0	2	181	32	3	10	1	229			
08:00		0	1	86	16	2	3	109	08:00	0	0	87	10	4	0	0	101	08:00	0	1	173	26	6	3	1	210			
08:15		0	0	82	14	4	1	101	08:15	1	0	84	10	3	1	1	100	08:15	1	0	166	24	7	2	1	201			
08:30		0	0	86	17	2	0	105	08:30	0	0	119	11	6	3	0	139	08:30	0	0	205	28	8	3	0	244			
08:45		1	0	61	13	2	2	79	08:45	1	0	95	12	5	2	2	117	08:45	2	0	156	25	7	4	2	196			
09:00		0	0	59	6	2	4	71	09:00	1	0	65	17	3	1	0	87	09:00	1	0	124	23	5	5	0	158			
09:15		0	0	56	7	1	0	65	09:15	0	0	71	9	2	0	0	82	09:15	0	0	127	16	3	0	1	147			
09:30		0	0	48	14	1	0	63	09:30	0	1	65	17	1	5	0	89	09:30	0	1	113	31	2	5	0	152			
09:45		0	0	56	6	3	1	66	09:45	0	1	60	6	1	3	0	71	09:45	0	1	116	12	4	4	0	137			
10:00		1	0	38	14	4	1	58	10:00	0	0	51	13	3	2	0	69	10:00	1	0	89	27	7	3	0	127			
10:15		0	0	32	14	1	2	49	10:15	0	0	54	11	1	4	1	71	10:15	0	0	86	25	2	6	1	120			
10:30		0	0	63	12	3	3	81	10:30	0	0	54	7	2	4	0	67	10:30	0	0	117	19	5	7	0	148			
10:45		0	0	40	8	2	1	51	10:45	0	1	54	10	5	3	0	73	10:45	0	1	94	18	7	4	0	124			
11:00		0	0	54	11	4	2	71	11:00	0	2	59	11	4	3	1	80	11:00	0	2	113	22	8	5	1	151			
11:15		0	0	61	3	3	3	71	11:15	0	1	47	8	1	1	0	58	11:15	0	1	108	11	4	4	1	129			
11:30		0	1	57	7	5	2	72	11:30	1	0	45	9	0	0	0	55	11:30	1	1	102	16	5	2	0	127			
11:45		0	0	41	9	1	0	51	11:45	0	0	57	8	3	1	0	69	11:45	0	0	98	17	4	1	0	120			
12:00		0	0	55	11	3	2	71	12:00	0	0	59	13	2	1	0	75	12:00	0	0	114	24	5	3	0	146			
12:15		0	0	56	10	2	0	68	12:15	0	0	49	13	1	1	1	65	12:15	0	0	105	23	3	1	1	133			
12:30		0	0	49	9	2	0	60	12:30	0	0	48	15	2	2	0	67	12:30	0	0	97	24	4	2	0	127			
12:45		0	1	54	10	4	2	72	12:45	0	0	68	9	3	3	0	83	12:45	0	1	122	19	7	5	1	155			
13:00		0	0	60	4	2	0	66	13:00	0	0	55	10	0	2	0	67	13:00	0	0	115	14	2	2	0	133			
13:15		0	1	59	10	1	2	73	13:15	2	0	58	10	2	2	0	74	13:15	2	1	117	20	3	4	0	147			
13:30		0	0	58	11	2	2	74	13:30	1	0	51	6	0	0	0	58	13:30	1	0	109	17	2	2	1	132			
13:45		0	0	49	11	0	2	62	13:45	0	0	54	14	2	0	1	71	13:45	0	0	103	25	2	2	1	133			
14:00		0	1	56	10	1	2	70	14:00	0	1	45	9	0	2	0	57	14:00	0	2	101	19	1	4	0	127			
14:15		1	0	56	7	2	0	67	14:15	0	0	61	9	7	2	0	79	14:15	1	0	117	16	9	2	1	146			
14:30		0	2	52	9	5	0	68	14:30	1	1	61	12	1	1	0	77	14:30	1	3	113	21	6	1	0	145			
14:45		0	0	51	13	2	0	66	14:45	0	0	56	11	5	2	0	74	14:45	0	0	107	24	7	2	0	140			
15:00		0	0	60	15	2	0	77	15:00	0	0	53	14	3	0	0	70	15:00	0	0	113	29	5	0	0	147			
15:15		0	0	63	4	1	3	72	15:15	0	0	67	7	6	1	0	81	15:15	0	0	130	11	7	4	1	153			
15:30		0	0	69	12	2	3	86	15:30	0	1	65	10	2	4	1	83	15:30	0	1	134	22	4	7	1	169			
15:45		0	1	69	14	1	0	85	15:45	0	0	61	15	1	4	1	82	15:45	0	1	130	29	2	4	1	167			
16:00		0	0	66	14	1	2	83	16:00	0	0	55	9	2	3	0	69	16:00	0	0	121	23	3	5	0	152			
16:15		0	0	62	17	0	3	83	16:15	0	1	86	16	2	2	0	107	16:15	0	1	148	33	2	5	1	190			
16:30		0	1	70	17	0	3	91	16:30	0	0	70	9	1	1	0	81	16:30	0	1	140	26	1	4	0	172			
16:45		0	0	67	15	0	1	83	16:45	0	0	87	12	0	0	0	99	16:45	0	0	154	27	0	1	0	182			
17:00		0	1	90	9	0	0	101	17:00	0	2	104	20	0	0	0	126	17:00	0	3	194	29	0	0	1	227			
17:15		0	1	76	4	0	1	82	17:15	1	0	92	16	2	1	0	112	17:15	1	1	168	20	2	2	0	194			
17:30		0	1	91	5	0	0	97	17:30	0	1	125	9	0	0	0	135	17:30	0	2	216	14	0	0	0	232			
17:45		0	0	67	7	0	0	74	17:45	0	0	117	10	0	1	0	128	17:45	0	0	184	17	0	1	0	202			
18:00		0	0	63	5	0	0	69	18:00	0	2	124	8	0	0	0	134	18:00	0	2	187	13	0	0	1	203			
18:15		0	1	60	3	0	0	64	18:15	2	0	99	4	1	1	0	107	18:15	2	1	159	7	1	1	0	171			
18:30		0	0	52	4	0	0	56	18:30	0	0	81	5	0	0	0	86	18:30	0	0	133	9	0	0	0	142			
18:45		0	0	54	4	0	0	58	18:45	0	0	66	4	1	0	0	71	18:45	0	0	120	8	1	0	0	129			
Total		4	17	2992	480	78	65	113647	Total	11	16	3297	513	95	80	11	4023	Total	15	33	6289	993	173	145	22	7670			

Main Street west																										
Towards Junction										Away From Junction										Both Directions						
Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total	Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total	Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total
07:00	0	0	41	6	2	3	0	52	07:00	0	1	57	14	0	1	0	73	07:00	0	1	98	20	2	4	0	125
07:15	0	0	40	7	2	3	2	54	07:15	0	1	82	18	4	2	0	97	07:15	0	1	122	15	6	5	2	151
07:30	0	0	52	12	0	2	0	66	07:30	0	1	85	10	0	2	0	98	07:30	0	1	137	22	0	4	0	164
07:45	0	0	70	23	3	3	0	100	07:45	0	1	92	19	1	7	1	121	07:45	0	2	162	42	4	10	1	221
08:00	0	0	81	9	4	0	0	94	08:00	0	1	86	14	1	3	0	105	08:00	0	1	167	23	5	3	0	199
08:15	0	0	67	16	3	1	1	88	08:15	0	0	76	17	3	1	0	97	08:15	0	0	143	33	6	2	1	185
08:30	0	0	100	16	6	3	0	125	08:30	0	0	76	14	2	1	0	93	08:30	0	0	176	30	8	4	0	218
08:45	1	0	63	9	4	3	2	82	08:45	0	0	54	13	3	2	0	72	08:45	1	0	117	22	7	5	2	154
09:00	0	0	59	17	3	1	0	80	09:00	0	0	46	8	3	6	0	63	09:00	0	0	105	25	6	7	0	143
09:15	1	0	61	11	1	1	0	75	09:15	0	0	55	7	1	0	1	64	09:15	1	0	116	18	2	1	1	139
09:30	0	0	62	19	0	6	0	88	09:30	0	0	42	13	1	2	0	58	09:30	0	1	104	32	1	8	0	146
09:45	0	0	57	7	2	3	0	69	09:45	0	0	54	13	4	1	0	72	09:45	0	0	111	20	6	4	0	141
10:00	0	0	42	10	4	4	0	60	10:00	0	0	36	13	3	1	0	53	10:00	0	0	78	23	7	5	0	113
10:15	1	0	46	15	1	4	1	69	10:15	0	0	31	19	1	2	0	53	10:15	1	1	77	34	2	6	1	122
10:30	0	0	48	6	1	4	0	59	10:30	1	0	58	14	3	3	0	79	10:30	1	0	106	20	4	7	0	138
10:45	0	0	45	12	5	3	0	66	10:45	0	0	39	8	2	2	0	51	10:45	0	1	84	20	7	5	0	117
11:00	0	0	48	11	4	4	1	70	11:00	0	0	45	17	4	2	0	68	11:00	0	2	93	28	8	6	1	138
11:15	0	0	35	7	2	1	0	46	11:15	0	1	51	3	3	3	1	62	11:15	0	2	86	10	5	4	1	108
11:30	0	0	41	8	3	0	0	52	11:30	0	1	36	7	3	2	0	51	11:30	0	1	77	15	8	2	0	103
11:45	0	0	49	13	3	1	0	66	11:45	0	0	31	8	1	2	0	42	11:45	0	0	80	21	4	3	0	108
12:00	0	0	55	15	4	3	2	75	12:00	0	0	47	11	3	2	0	63	12:00	0	0	102	26	7	3	0	138
12:15	0	0	54	12	2	1	1	70	12:15	0	0	51	11	2	0	0	64	12:15	0	0	105	23	4	1	1	134
12:30	0	0	41	16	2	2	0	61	12:30	0	0	48	11	2	0	1	62	12:30	0	0	89	27	4	2	1	123
12:45	0	0	60	12	4	4	0	80	12:45	0	0	50	10	3	4	1	68	12:45	0	0	110	22	7	8	1	148
13:00	0	0	43	10	0	3	0	56	13:00	0	0	52	5	2	0	0	59	13:00	0	0	95	15	2	3	0	115
13:15	0	0	43	9	2	2	0	56	13:15	0	1	50	8	1	2	0	62	13:15	0	1	93	17	3	4	0	118
13:30	1	0	44	5	1	1	0	52	13:30	0	0	55	13	1	3	1	73	13:30	1	0	99	18	2	4	1	125
13:45	0	0	47	15	1	0	1	64	13:45	1	1	50	14	1	4	0	71	13:45	1	1	97	29	2	4	1	135
14:00	0	0	38	5	1	2	0	47	14:00	0	0	50	9	2	3	0	64	14:00	0	1	88	14	3	5	0	111
14:15	1	0	58	9	6	2	0	76	14:15	1	0	55	8	3	0	1	68	14:15	2	0	113	17	9	2	1	144
14:30	1	1	64	14	1	2	0	83	14:30	0	2	46	12	5	0	0	65	14:30	1	3	110	26	6	2	0	148
14:45	0	0	56	11	5	2	0	74	14:45	0	0	58	16	2	0	0	76	14:45	0	0	114	27	7	2	0	150
15:00	0	0	47	14	1	0	0	62	15:00	0	0	56	19	2	0	0	77	15:00	0	0	103	33	3	0	0	139
15:15	0	0	59	7	7	3	0	76	15:15	0	0	56	5	1	3	1	66	15:15	0	0	115	12	8	6	1	142
15:30	0	1	52	10	2	4	1	70	15:30	0	0	68	13	3	3	0	87	15:30	0	1	120	23	5	7	1	157
15:45	1	0	55	19	1	4	1	81	15:45	0	1	61	20	1	0	0	83	15:45	1	1	116	39	2	4	1	164
16:00	0	0	47	11	2	3	0	63	16:00	0	0	58	17	1	2	0	78	16:00	0	0	105	28	3	5	0	141
16:15	0	0	69	15	2	2	0	89	16:15	0	0	70	17	0	3	1	91	16:15	0	1	139	32	2	5	1	180
16:30	0	0	58	11	1	1	0	71	16:30	0	1	64	15	0	4	0	84	16:30	0	1	122	26	1	5	0	155
16:45	0	0	70	12	0	0	0	82	16:45	1	0	73	16	0	3	0	93	16:45	1	0	143	28	0	3	0	175
17:00	0	0	83	19	0	0	0	104	17:00	0	1	101	11	1	0	1	115	17:00	0	3	184	30	1	0	1	219
17:15	0	0	95	18	2	1	0	116	17:15	0	0	65	7	0	1	0	73	17:15	0	0	160	25	2	2	0	189
17:30	0	0	102	12	0	1	0	116	17:30	0	2	79	7	1	0	0	89	17:30	0	3	181	19	1	1	0	205
17:45	1	0	104	12	0	1	0	118	17:45	0	0	58	4	0	0	0	62	17:45	1	0	162	16	0	1	0	180
18:00	0	0	101	8	0	0	0	111	18:00	0	0	47	2	0	0	1	50	18:00	0	2	148	10	0	0	1	161
18:15	0	0	91	5	1	2	0	99	18:15	0	1	53	4	0	1	0	59	18:15	0	1	144	9	1	3	0	158
18:30	0	0	70	4	0	0	0	75	18:30	0	0	44	4	0	0	0	48	18:30	0	1	114	8	0	0	0	123
18:45	0	0	51	1	1	0	0	53	18:45	1	0	51	3	0	0	0	55	18:45	1	0	102	4	1	0	0	108
Total		8	17	2864	545	102	94	11364	Total	5	17	2748	531	82	83	11	3477	Total	13	34	5612	1076	184	177	22	7118

Foxton Road																													
Towards Junction											Away From Junction											Both Directions							
Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total	Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total	Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total			
07:00	0	0	0	15	5	0	0	0	20	07:00	1	0	22	3	1	0	0	27	07:00	1	0	37	8	1	0	0	47		
07:15	0	0	0	23	4	1	0	0	28	07:15	0	0	18	3	0	0	0	21	07:15	0	0	41	7	1	0	0	49		
07:30	0	0	0	23	7	0	0	0	30	07:30	0	0	42	3	1	0	0	46	07:30	0	0	65	10	1	0	0	76		
07:45	0	0	0	52	7	0	0	0	59	07:45	0	0	<b>43</b>	<b>11</b>	1	0	0	<b>55</b>	07:45	0	0	<b>95</b>	18	1	0	0	<b>114</b>		
08:00	0	0	0	<b>40</b>	5	0	0	0	45	08:00	0	0	<b>34</b>	<b>6</b>	1	0	0	<b>42</b>	08:00	0	0	<b>74</b>	11	1	0	0	<b>87</b>		
08:15	1	0	0	<b>42</b>	8	0	0	0	51	08:15	0	0	<b>31</b>	<b>11</b>	1	0	0	<b>43</b>	08:15	1	0	<b>73</b>	19	1	0	0	<b>94</b>		
08:30	0	0	0	<b>52</b>	4	1	1	0	58	08:30	0	0	<b>43</b>	<b>12</b>	1	0	0	<b>56</b>	08:30	0	0	<b>95</b>	16	2	1	0	<b>114</b>		
08:45	0	0	0	<b>56</b>	9	2	0	0	67	08:45	1	0	31	6	0	1	0	39	08:45	1	0	87	15	2	1	0	106		
09:00	1	0	0	21	9	1	2	0	34	09:00	0	0	28	7	0	0	0	35	09:00	1	0	49	16	1	2	0	69		
09:15	0	0	0	31	4	1	0	0	36	09:15	1	0	22	6	0	0	1	30	09:15	1	0	53	10	1	1	0	66		
09:30	0	0	0	22	6	1	2	0	31	09:30	0	0	25	9	0	0	1	35	09:30	0	0	47	15	1	3	0	66		
09:45	0	0	1	20	9	2	0	0	32	09:45	0	0	19	3	2	0	0	24	09:45	0	1	39	12	4	0	0	56		
10:00	0	0	0	19	7	0	0	0	26	10:00	1	0	12	5	2	2	0	22	10:00	1	0	31	12	2	2	0	48		
10:15	0	0	0	20	7	0	0	0	27	10:15	1	1	13	6	0	0	0	21	10:15	1	1	33	13	0	0	0	48		
10:30	1	0	0	22	4	1	0	0	28	10:30	0	0	21	1	0	0	0	22	10:30	1	0	43	5	1	0	0	50		
10:45	0	0	0	23	1	0	1	0	25	10:45	0	0	15	3	0	0	0	18	10:45	0	0	38	4	0	1	0	43		
11:00	0	0	0	24	12	0	0	0	36	11:00	0	0	22	6	0	1	0	29	11:00	0	0	46	18	0	1	0	65		
11:15	0	0	1	19	3	1	0	0	24	11:15	0	0	17	2	2	0	0	21	11:15	0	1	36	5	3	0	0	45		
11:30	1	0	0	16	4	0	0	0	21	11:30	0	0	33	3	3	0	0	39	11:30	1	0	49	7	3	0	0	60		
11:45	0	0	0	19	2	1	2	0	24	11:45	0	0	21	8	1	0	0	30	11:45	0	0	40	10	2	2	0	54		
12:00	0	0	0	18	2	0	0	0	20	12:00	0	0	22	4	2	0	0	28	12:00	0	0	40	6	2	0	0	48		
12:15	0	0	0	15	5	0	1	0	21	12:15	0	0	25	3	1	1	0	30	12:15	0	0	40	8	1	2	0	51		
12:30	0	0	0	28	4	0	0	0	1	33	12:30	0	0	22	3	0	0	0	25	12:30	0	0	50	7	0	0	1	58	
12:45	0	0	0	24	3	0	2	0	29	12:45	0	1	20	6	2	1	0	30	12:45	0	1	44	9	2	3	0	59		
13:00	0	0	0	24	5	0	0	0	29	13:00	0	0	20	4	0	1	0	25	13:00	0	0	44	9	0	1	0	54		
13:15	2	0	0	30	4	0	0	0	36	13:15	0	0	24	5	0	0	0	29	13:15	2	0	54	9	0	0	0	65		
13:30	0	0	0	21	4	1	1	0	27	13:30	0	0	17	1	3	1	0	22	13:30	0	0	38	5	4	2	0	49		
13:45	1	0	1	24	8	2	2	0	38	13:45	0	0	16	6	0	0	0	22	13:45	1	1	40	14	2	2	0	60		
14:00	0	0	0	26	8	1	1	0	36	14:00	0	1	25	5	1	0	0	32	14:00	0	1	51	13	2	1	0	68		
14:15	0	0	0	18	4	2	0	0	24	14:15	1	0	16	3	0	0	0	20	14:15	1	0	34	7	2	0	0	44		
14:30	0	0	0	23	7	0	0	0	30	14:30	0	0	32	6	0	1	0	39	14:30	0	0	55	13	0	1	0	69		
14:45	0	0	0	24	5	1	0	0	30	14:45	0	0	17	2	1	0	0	20	14:45	0	0	41	7	2	0	0	50		
15:00	0	0	0	21	8	2	0	0	31	15:00	0	0	19	4	0	0	0	23	15:00	0	0	40	12	2	0	0	54		
15:15	0	0	0	22	4	0	0	0	26	15:15	0	0	21	3	1	2	0	27	15:15	0	0	43	7	1	2	0	53		
15:30	0	0	0	41	6	1	0	0	48	15:30	0	0	29	5	0	0	0	34	15:30	0	0	70	11	1	0	0	82		
15:45	0	0	0	29	10	0	0	0	39	15:45	1	0	31	8	0	0	0	40	15:45	1	0	60	18	0	0	0	79		
16:00	0	0	0	27	7	0	0	0	34	16:00	0	0	27	6	0	0	0	33	16:00	0	0	54	13	0	0	0	67		
16:15	0	0	0	45	12	0	0	0	57	16:15	0	0	20	11	0	0	0	31	16:15	0	0	65	23	0	0	0	88		
16:30	0	0	0	33	5	0	1	0	39	16:30	0	0	27	9	0	0	0	36	16:30	0	0	60	14	0	1	0	75		
16:45	1	0	0	44	11	0	2	0	58	16:45	0	0	21	10	0	0	0	31	16:45	1	0	65	21	0	2	0	89		
17:00	0	0	0	64	12	1	0	0	77	17:00	0	0	32	9	0	0	0	41	17:00	0	0	96	21	1	0	0	118		
17:15	1	0	0	27	7	0	0	0	35	17:15	0	1	41	6	0	0	0	48	17:15	1	1	68	13	0	0	0	83		
17:30	0	0	1	52	4	1	0	0	58	17:30	0	0	41	5	0	1	0	47	17:30	0	1	93	9	1	1	0	105		
17:45	0	0	0	35	1	0	0	0	36	17:45	1	0	31	6	0	0	0	38	17:45	1	0	66	7	0	0	0	74		
18:00	0	0	0	35	5	0	0	0	40	18:00	0	0	28	8	0	0	0	36	18:00	0	0	63	13	0	0	0	76		
18:15	2	0	0	34	2	0	1	0	39	18:15	0	0	33	2	0	1	0	36	18:15	2	0	67	4	0	2	0	75		
18:30	0	0	0	22	3	0	0	0	25	18:30	0	1	19	2	0	0	0	22	18:30	0	1	41	5	0	0	0	47		
18:45	1	0	0	25	3	0	0	0	29	18:45	0	0	13	1	0	0	0	14	18:45	1	0	38	4	0	0	0	43		
Total		12	4	1390	276	24	19	1	1726	Total		8	5	1201	257	27	15	1	1514	Total		20	9	2591	533	51	34	2	3240

## Movement Summary

LEICESTERSHIRE\_MCC - 00008026446 - Main St/Westgate Ln/Foxton Road - Thursday, October 26, 2017

From: Main street east					
		To: Main Street west		To: Foxton Road	
Total		2790		Total 857	
AM Peak 07:15 - 08:15		345		AM Peak 07:45 - 08:45 109	
PM Peak 16:15 - 17:15		277		PM Peak 17:15 - 18:15 97	
From: Main Street west					
To: Main street east			To: Foxton Road		
Total 2984			Total 657		
AM Peak 07:45 - 08:45 320			AM Peak 07:45 - 08:45 87		
PM Peak 17:15 - 18:15 389			PM Peak 17:00 - 18:00 78		
From: Foxton Road					
To: Main street east			To: Main Street west		
Total 1039			Total 687		
AM Peak 08:00 - 09:00 142			AM Peak 07:45 - 08:45 87		
PM Peak 16:45 - 17:45 131			PM Peak 16:15 - 17:15 106		

## Arm Summary

LEICESTERSHIRE\_MCC - 00008026446 - Main St/Westgate Ln/Foxton Road - Thursday, October 26, 2017

Main street east					
Towards Junction		Away From Junction		Both Directions	
Total 3647		Total 4023		Total 7670	
AM Peak 07:30 - 08:30 445		AM Peak 08:00 - 09:00 457		AM Peak 07:45 - 08:45 884	
PM Peak 16:45 - 17:45 363		PM Peak 17:15 - 18:15 509		PM Peak 17:00 - 18:00 855	
Main Street west					
Towards Junction		Away From Junction		Both Directions	
Total 3641		Total 3477		Total 7118	
AM Peak 07:45 - 08:45 407		AM Peak 07:15 - 08:15 421		AM Peak 07:45 - 08:45 823	
PM Peak 17:15 - 18:15 461		PM Peak 16:15 - 17:15 383		PM Peak 17:00 - 18:00 793	
Foxton Road					
Towards Junction		Away From Junction		Both Directions	
Total 1726		Total 1514		Total 3240	
AM Peak 08:00 - 09:00 221		AM Peak 07:45 - 08:45 196		AM Peak 07:45 - 08:45 409	
PM Peak 16:15 - 17:15 231		PM Peak 17:00 - 18:00 174		PM Peak 16:45 - 17:45 395	



## Total Flow

### LEICESTERSHIRE\_MCC - 000008026446 - Main St/Westgate Ln/Foxton Road - Thursday, October 26, 2017

Period	PC	MC	CAR	LGV	OGV1	OGV2	PSV	Total
07:00		1	1	116	23	2	4	0 147
07:15		0	1	144	20	6	5	2 178
07:30		0	1	175	27	1	4	0 208
07:45		0	2	219	46	4	10	1 282
08:00		0	1	207	30	6	3	1 248
08:15		1	0	191	38	7	2	1 240
08:30		0	0	238	37	9	4	0 288
08:45		2	0	180	31	8	5	2 228
09:00		1	0	139	32	6	7	0 185
09:15		1	0	148	22	3	1	1 176
09:30		0	1	132	39	2	8	0 182
09:45		0	1	133	22	7	4	0 167
10:00		1	0	99	31	8	5	0 144
10:15		1	1	98	36	2	6	1 145
10:30		1	0	133	22	5	7	0 168
10:45		0	1	108	21	7	5	0 142
11:00		0	2	126	34	8	6	1 177
11:15		0	2	115	13	6	4	1 141
11:30		1	1	114	19	8	2	0 145
11:45		0	0	109	24	5	3	0 141
12:00		0	0	128	28	7	3	0 166
12:15		0	0	125	27	4	2	1 159
12:30		0	0	118	29	4	2	1 154
12:45		0	1	138	25	8	8	1 181
13:00		0	0	127	19	2	3	0 151
13:15		2	1	132	23	3	4	0 165
13:30		1	0	123	20	4	4	1 153
13:45		1	1	120	34	3	4	1 164
14:00		0	2	120	23	3	5	0 153
14:15		2	0	132	20	10	2	1 167
14:30		1	3	139	30	6	2	0 181
14:45		0	0	131	29	8	2	0 170
15:00		0	0	128	37	5	0	0 170
15:15		0	0	144	15	8	6	1 174
15:30		0	1	162	28	5	7	1 204
15:45		1	1	153	43	2	4	1 205
16:00		0	0	140	32	3	5	0 180
16:15		0	1	176	44	2	5	1 229
16:30		0	1	161	33	1	5	0 201
16:45		1	0	181	38	0	3	0 223
17:00		0	3	237	40	1	0	1 282
17:15		1	1	198	29	2	2	0 233
17:30		0	3	245	21	1	1	0 271
17:45		1	0	206	20	0	1	0 228
18:00		0	2	199	18	0	0	1 220
18:15		2	1	185	10	1	3	0 202
18:30		0	1	144	11	0	0	0 156
18:45		1	0	130	8	1	0	0 140
Total		24	38	7246	1301	204	178	23 9014

## Total Summary

### LEICESTERSHIRE\_MCC - 000008026446 - Main St/Westgate Ln/Foxton Road - Thursday, October 26, 2017

Traffic Summary		
Total		9014
AM Peak	07:45 - 08:45	1058
PM Peak	17:00 - 18:00	1014

# Appendix L. HMP Gartree Expansion



Introduction sheet

<b>Client name</b>	Ministry of Justice
<b>Project / purpose</b>	Gartree 2
<b>Date of issue</b>	28/06/2021
<b>File Name</b>	HMP Gartree Houseblock Expansion Trip Distribution and Trip Generation
<b>Primary contact name</b>	
<b>Primary contact email</b>	
<b>Project number</b>	5200124

<b>Date</b>	<b>Contents/Changes</b>	<b>Version</b>	<b>Modeller</b>
28/06/2021	First Issue	1	CR

<b>Sheet Name</b>	<b>Description</b>
Staff Generation	Details the staff trip generation and mode splits
Shift Operation and Parking Accumulation	Staff Parking Accumulation by car and person trips
Visitor Generation	Visitor trip generation
Traffic Generation	Summary of traffic generation during peak hours, staff and visitors.

**Notes:**

MSOA Middle Super Output Area - the lowest geographical scale at which journey to work data is available

# Staff Generation

## Staff Numbers

It is anticipated that the prison will accommodate 120 prisoners. The prisoner to staff ratio is assumed to be 0.50\*. On this basis the number of staff at the prison will be 60. It is understood that 74% of staff will be on site 44

120	prisoners
0.50	*
60	
44	

The MoJ have provided advice indicating that the staff types would be split using the following proportions:

Uniform/Operational	60%
Non-uniform	40%

The following tables provide a summary of the staff numbers:

Uniform Staff	27
Non-Uniform Support Staff	18
<b>Total Staff</b>	<b>44</b>

## Existing Modal Splits

The 2011 census data has been interrogated for the modal splits of **Harborough**. It is considered appropriate that this data is applied to the daytime staff. However, the splits have been amended for those working evening shifts as they are less likely to walk, cycle, or use public transport

	Census Data	Day Shift	Late Shift
Car Driver	75.3%	-	-
Taxi	0.2%	-	-
Motorcycle	0.7%	-	-
Car Passenger	7.3%	-	-
Bus**	2.5%	-	-
Train**	0.8%	-	-
Cycle**	2.5%	-	-
Walk**	10.6%	-	-
<b>Total</b>	<b>100%</b>	<b>0</b>	<b>0%</b>

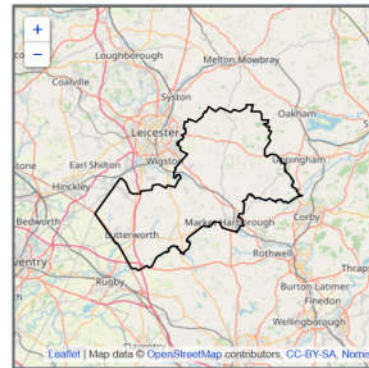
	Amended Census Data	Day Shift	Late Shift
Car Driver	84.3%	84.3%	90.1%
Taxi	0.3%	0.3%	0.3%
Motorcycle	0.8%	0.8%	0.9%
Car Passenger	8.2%	8.2%	8.8%
Bus**	2.8%	2.8%	-
Train**	0.9%	0.9%	-
Cycle**	2.8%	2.8%	-
Walk**	0.0%	0.0%	-
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

\* based on existing study into the staff and prisoner ratio.

\*\* modes excluded from late/night shift due to being undesirable or unavailable

Key:

- To fill in
- Calculated Value



Harborough

# Shift Operation and Parking Accumulation - Car Driver

Key:  Arrival  Departure  Shift

PERSON TRIPS																											
Uniformed Staff																											
Shift Title	Period	Shift (%)		00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Early Shift	07:00 to 12:30	22%	6							6							6										
Main Shift	08:00 to 17:30	48%	13								13										13						
Late Shift	13:30 to 20:30	23%	6													6									6		
Nights	20:00 to 07:00	6%	2								2												2				
<b>Total</b>		99%	26																								
Non-Uniformed Staff																											
Early Shift	08:30 to 16:30	48%	9									9									9						
Main Shift	09:30 to 17:00	52%	9									9															
<b>Total</b>		100%	18																								

Note: Shifts based on Table 3.1 HMP Oakwood Travel Plan (Atkins) 2009

<b>Total</b>	44
--------------	----

CAR TRIPS																											
Uniformed Staff																											
Shift Title	Period	Single Car Occupancy (%)		00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Early Shift	07:00 to 12:30	84%	5							5						5											
Main Shift	08:00 to 17:30	84%	11								11										11						
Late Shift	13:30 to 20:30	90%	6													6									6		
Nights	20:00 to 07:00	90%	1								1												1				
<b>Total</b>			23																								
Non-Uniformed Staff																											
Early Shift	08:30 to 16:30	84%	7								7										7						
Main Shift	09:30 to 17:00	84%	8									8										8					
<b>Total</b>			7																								

<b>Total</b>	30
--------------	----





# Traffic Generation

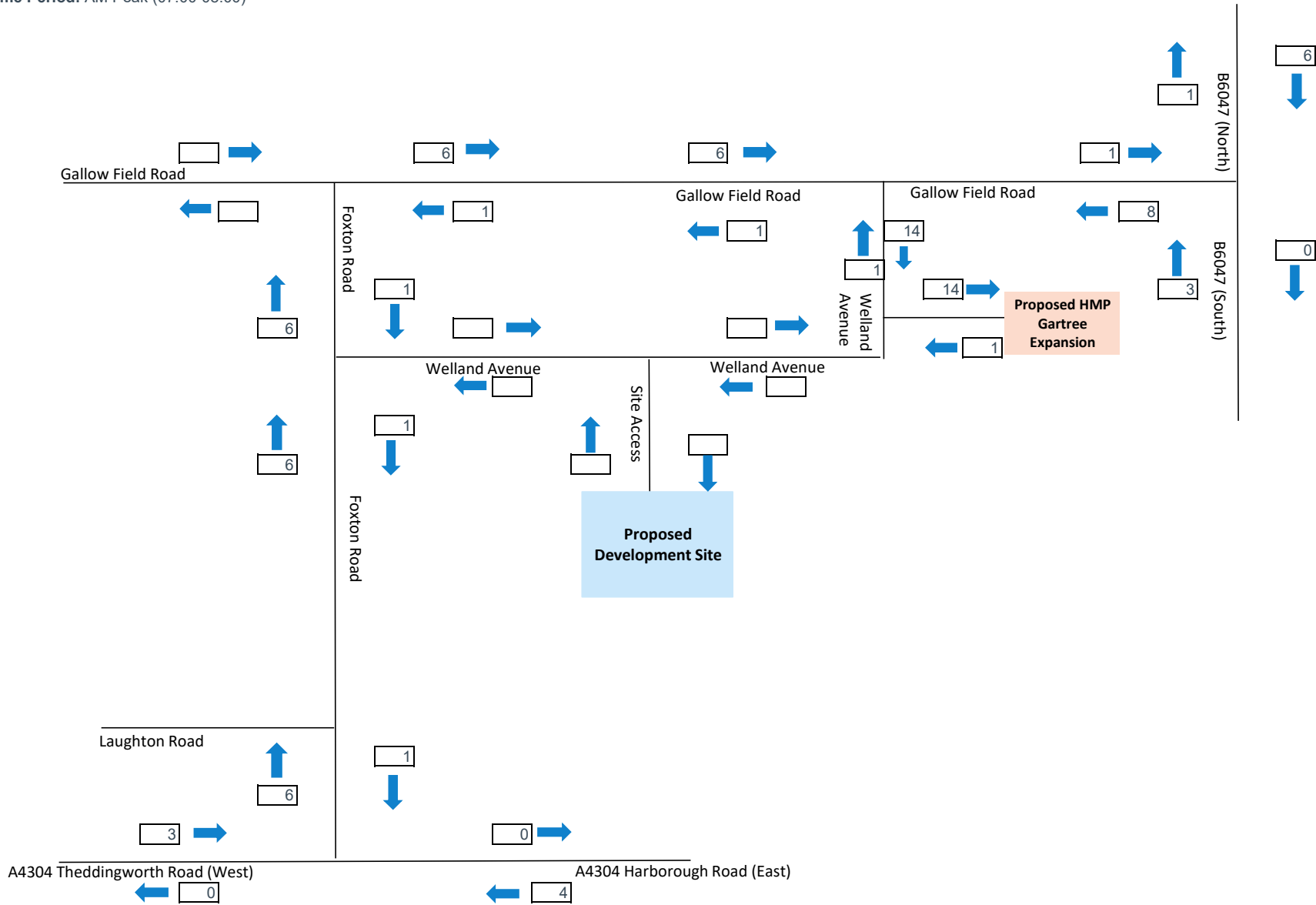
Vehicle Trips per hour						
	AM Peak (07:00-08:00)		PM Peak (17:00 to 18:00)		Daily	
	IN	OUT	IN	OUT	IN	OUT
Staff	14	1	0	17	38	38
Visitors	0	0	0	4	28	28
<b>Total</b>	14	1	0	20	66	66

\*Visiting start/end times do not coincide with peak hours

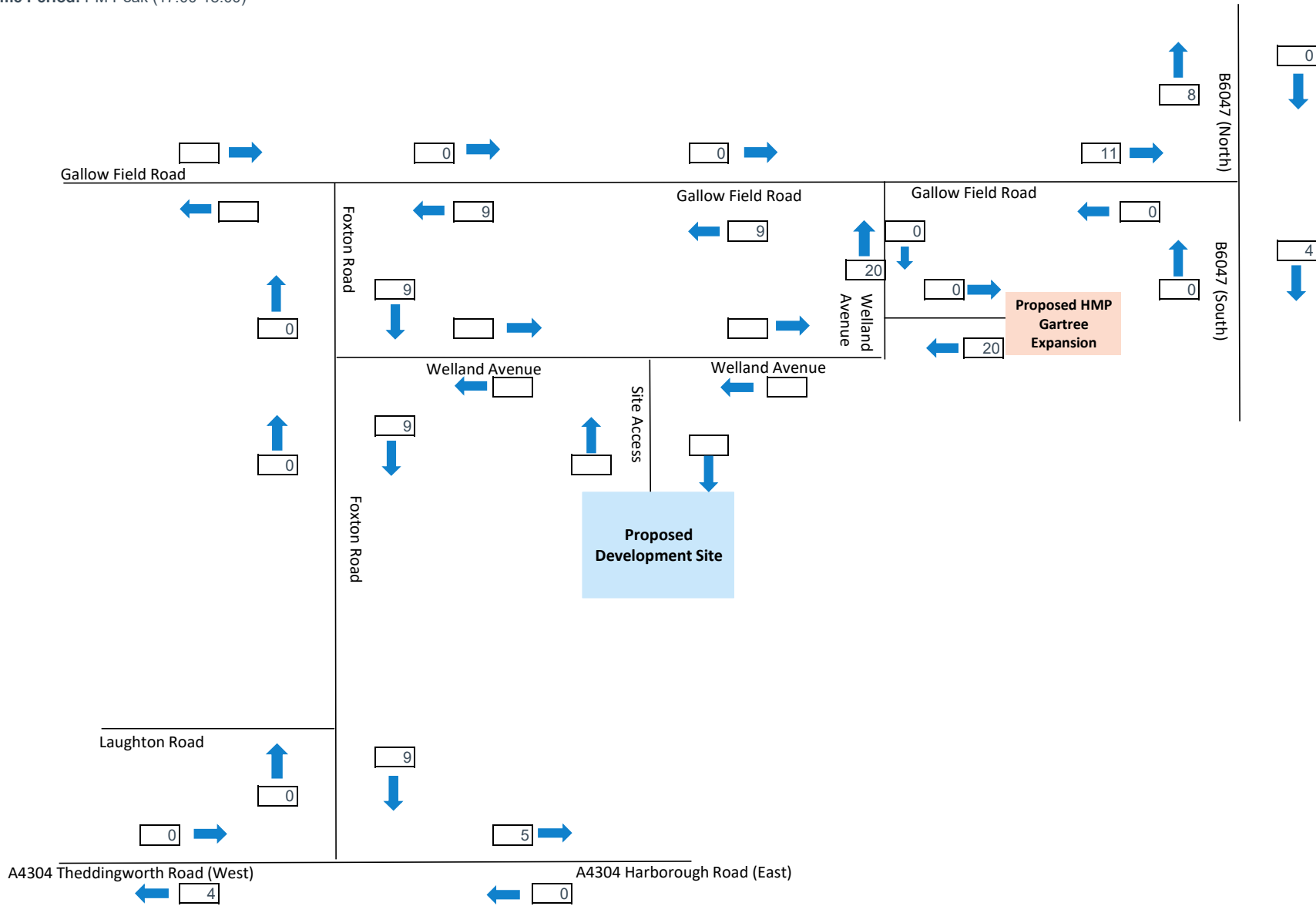
Route	Distribution	AM		PM		Daily	
		IN	OUT	IN	OUT	IN	OUT
<b>A</b>	19%	3	0	0	4	13	13
<b>B</b>	25%	4	0	0	5	16	16
<b>C</b>	17%	3	0	0	4	11	11
<b>D</b>	38%	6	1	0	8	25	25
<b>Total</b>	100%	14	1	0	20	66	66



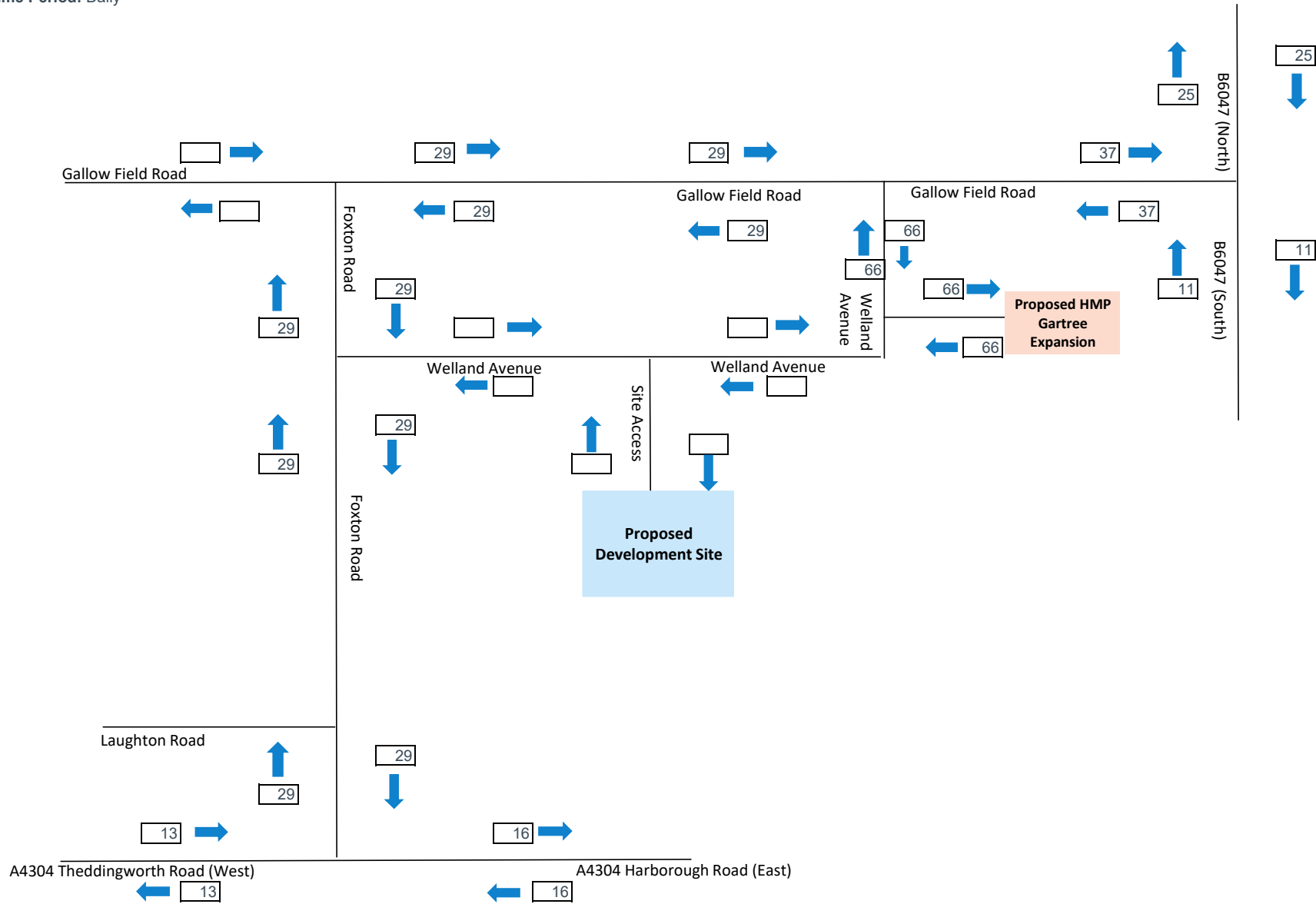
**Project:** Gartree 2  
**Scenario:** HMP Gartree Houseblock Expansion  
**Time Period:** AM Peak (07:00-08:00)



**Project:** Gartree 2  
**Scenario:** HMP Gartree Houseblock Expansion  
**Time Period:** PM Peak (17:00-18:00)



**Project:** Gartree 2  
**Scenario:** HMP Gartree Houseblock Expansion  
**Time Period:** Daily



# Appendix M. Proposed Site Access / Welland Avenue Junction Model Outputs

## M.1. Development Peak Hour

Junctions 9
PICADY 9 - Priority Intersection Module
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**Filename:** Gartree2\_Site\_Access\_devpeak\_v0.1.j9  
**Path:** \\wsatkings.com\project\GBBMA\HandT\CS\Projects\5200124-MACE\_Prisoners\_ROGE6351\05\_Technical\6\_Raven\Junction Models\04\_Site Access  
**Report generation date:** 09/07/2021 09:36:48

- »2025 OY With dev, AM
- »2025 OY With dev, PM
- »2025 Cumulative, AM
- »2025 Cumulative, PM

**Summary of junction performance**

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
<b>2025 OY With dev</b>								
Stream B-AC	0.0	5.51	0.03	A	0.7	9.10	0.42	A
Stream C-AB	0.7	10.36	0.40	B	0.0	0.00	0.00	A
<b>2025 Cumulative</b>								
Stream B-AC	0.0	5.51	0.03	A	0.7	9.10	0.42	A
Stream C-AB	0.7	10.36	0.40	B	0.0	0.00	0.00	A

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

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

**File summary**

**File Description**

<b>Title</b>	Gartree 2 Site Access
<b>Location</b>	Welland Avenue
<b>Site number</b>	
<b>Date</b>	06/07/2021
<b>Version</b>	1
<b>Status</b>	
<b>Identifier</b>	
<b>Client</b>	MACE
<b>Jobnumber</b>	
<b>Enumerator</b>	WSATKINS\CART5172
<b>Description</b>	

**Units**

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

### Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

### Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025 OY With dev	AM	ONE HOUR	06:45	08:15	15	✓
D2	2025 OY With dev	PM	ONE HOUR	16:45	18:15	15	✓
D3	2025 Cumulative	AM	ONE HOUR	06:45	08:15	15	✓
D4	2025 Cumulative	PM	ONE HOUR	16:45	18:15	15	✓

### Analysis Set Details

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

# 2025 OY With dev, AM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		9.03	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	Welland Avenue (N)		Major
B	Site Access		Minor
C	Welland Avenue (S)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.50			0.0	✓	0.00

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

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.65	20	25

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	529	0.098	0.249	0.156	0.355
1	B-C	681	0.107	0.270	-	-
1	C-B	574	0.227	0.227	-	-

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

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

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

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025 OY With dev	AM	ONE HOUR	06:45	08:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	16	100.000
B		ONE HOUR	✓	21	100.000
C		ONE HOUR	✓	215	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	0	16
	B	0	0	21
	C	10	205	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	7
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.03	5.51	0.0	A	19	29
C-AB	0.40	10.36	0.7	B	191	287
C-A					6	9
A-B					0	0
A-C					15	22



### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	4	678	0.023	16	0.0	0.0	5.435	A
C-AB	156	39	576	0.271	155	0.0	0.4	8.512	A
C-A	5	1			5				
A-B	0	0			0				
A-C	12	3			12				

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	5	677	0.028	19	0.0	0.0	5.466	A
C-AB	187	47	577	0.325	187	0.4	0.5	9.219	A
C-A	6	2			6				
A-B	0	0			0				
A-C	14	4			14				

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	677	0.034	23	0.0	0.0	5.508	A
C-AB	230	58	578	0.399	229	0.5	0.7	10.322	B
C-A	7	2			7				
A-B	0	0			0				
A-C	18	4			18				

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	677	0.034	23	0.0	0.0	5.508	A
C-AB	230	58	578	0.399	230	0.7	0.7	10.363	B
C-A	7	2			7				
A-B	0	0			0				
A-C	18	4			18				

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	5	677	0.028	19	0.0	0.0	5.468	A
C-AB	187	47	577	0.325	188	0.7	0.5	9.275	A
C-A	6	2			6				
A-B	0	0			0				
A-C	14	4			14				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	4	678	0.023	16	0.0	0.0	5.435	A
C-AB	156	39	576	0.271	157	0.5	0.4	8.590	A
C-A	5	1			5				
A-B	0	0			0				
A-C	12	3			12				

# 2025 OY With dev, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		8.32	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025 OY With dev	PM	ONE HOUR	16:45	18:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	14	100.000
B		ONE HOUR	✓	256	100.000
C		ONE HOUR	✓	10	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	14
	B	0	0	256
	C	10	0	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	13	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.42	9.10	0.7	A	235	352
C-AB	0.00	0.00	0.0	A	0	0
C-A					9	14
A-B					0	0
A-C					13	19

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	678	0.284	191	0.0	0.4	7.364	A
C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	8	2			8				
A-B	0	0			0				
A-C	11	3			11				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	58	678	0.339	230	0.4	0.5	8.023	A
C-AB	0	0	571	0.000	0	0.0	0.0	0.000	A
C-A	9	2			9				
A-B	0	0			0				
A-C	13	3			13				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	282	70	677	0.416	281	0.5	0.7	9.071	A
C-AB	0	0	570	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
A-B	0	0			0				
A-C	15	4			15				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	282	70	677	0.416	282	0.7	0.7	9.105	A
C-AB	0	0	570	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
A-B	0	0			0				
A-C	15	4			15				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	58	678	0.339	231	0.7	0.5	8.068	A
C-AB	0	0	571	0.000	0	0.0	0.0	0.000	A
C-A	9	2			9				
A-B	0	0			0				
A-C	13	3			13				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	678	0.284	193	0.5	0.4	7.425	A
C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	8	2			8				
A-B	0	0			0				
A-C	11	3			11				

# 2025 Cumulative, AM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		9.03	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 Cumulative	AM	ONE HOUR	06:45	08:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	16	100.000
B		ONE HOUR	✓	21	100.000
C		ONE HOUR	✓	215	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	16
	B	0	0	21
	C	10	205	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.03	5.51	0.0	A	19	29
C-AB	0.40	10.36	0.7	B	191	287
C-A					6	9
A-B					0	0
A-C					15	22

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	4	678	0.023	16	0.0	0.0	5.435	A
C-AB	156	39	576	0.271	155	0.0	0.4	8.512	A
C-A	5	1			5				
A-B	0	0			0				
A-C	12	3			12				

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	5	677	0.028	19	0.0	0.0	5.466	A
C-AB	187	47	577	0.325	187	0.4	0.5	9.219	A
C-A	6	2			6				
A-B	0	0			0				
A-C	14	4			14				

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	677	0.034	23	0.0	0.0	5.508	A
C-AB	230	58	578	0.399	229	0.5	0.7	10.322	B
C-A	7	2			7				
A-B	0	0			0				
A-C	18	4			18				

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	677	0.034	23	0.0	0.0	5.508	A
C-AB	230	58	578	0.399	230	0.7	0.7	10.363	B
C-A	7	2			7				
A-B	0	0			0				
A-C	18	4			18				

**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	5	677	0.028	19	0.0	0.0	5.468	A
C-AB	187	47	577	0.325	188	0.7	0.5	9.275	A
C-A	6	2			6				
A-B	0	0			0				
A-C	14	4			14				

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	4	678	0.023	16	0.0	0.0	5.435	A
C-AB	156	39	576	0.271	157	0.5	0.4	8.590	A
C-A	5	1			5				
A-B	0	0			0				
A-C	12	3			12				

# 2025 Cumulative, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		8.32	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2025 Cumulative	PM	ONE HOUR	16:45	18:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	14	100.000
B		ONE HOUR	✓	256	100.000
C		ONE HOUR	✓	10	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	14
	B	0	0	256
	C	10	0	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	13	0	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.42	9.10	0.7	A	235	352
C-AB	0.00	0.00	0.0	A	0	0
C-A					9	14
A-B					0	0
A-C					13	19

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	678	0.284	191	0.0	0.4	7.364	A
C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	8	2			8				
A-B	0	0			0				
A-C	11	3			11				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	58	678	0.339	230	0.4	0.5	8.023	A
C-AB	0	0	571	0.000	0	0.0	0.0	0.000	A
C-A	9	2			9				
A-B	0	0			0				
A-C	13	3			13				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	282	70	677	0.416	281	0.5	0.7	9.071	A
C-AB	0	0	570	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
A-B	0	0			0				
A-C	15	4			15				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	282	70	677	0.416	282	0.7	0.7	9.105	A
C-AB	0	0	570	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
A-B	0	0			0				
A-C	15	4			15				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	58	678	0.339	231	0.7	0.5	8.068	A
C-AB	0	0	571	0.000	0	0.0	0.0	0.000	A
C-A	9	2			9				
A-B	0	0			0				
A-C	13	3			13				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	678	0.284	193	0.5	0.4	7.425	A
C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	8	2			8				
A-B	0	0			0				
A-C	11	3			11				

## M.2. Network Peak Hour

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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**Filename:** Gartree2\_Site\_Access\_v0.1.j9  
**Path:** \\wsatkings.com\project\GBBMA\HandTCS\Projects\5200124-MACE\_Prisoners\_ROGE6351\05\_Technical\6\_Raven\Junction Models\04\_Site Access  
**Report generation date:** 06/07/2021 21:49:04

- »2025 OY With dev, AM
- »2025 OY With dev, PM
- »2025 Cumulative, AM
- »2025 Cumulative, PM

**Summary of junction performance**

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
<b>2025 OY With dev</b>								
Stream B-AC	0.0	0.00	0.00	A	0.1	5.98	0.11	A
Stream C-AB	0.3	8.21	0.24	A	0.1	6.68	0.07	A
<b>2025 Cumulative</b>								
Stream B-AC	0.0	0.00	0.00	A	0.1	5.98	0.11	A
Stream C-AB	0.3	8.21	0.24	A	0.1	6.68	0.07	A

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

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

**File summary**

**File Description**

<b>Title</b>	Gartree 2 Site Access
<b>Location</b>	Welland Avenue
<b>Site number</b>	
<b>Date</b>	06/07/2021
<b>Version</b>	1
<b>Status</b>	
<b>Identifier</b>	
<b>Client</b>	MACE
<b>Jobnumber</b>	
<b>Enumerator</b>	WSATKINS\CART5172
<b>Description</b>	

**Units**

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

### Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

### Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025 OY With dev	AM	ONE HOUR	07:45	09:15	15	✓
D2	2025 OY With dev	PM	ONE HOUR	15:45	17:15	15	✓
D3	2025 Cumulative	AM	ONE HOUR	07:45	09:15	15	✓
D4	2025 Cumulative	PM	ONE HOUR	15:45	17:15	15	✓

### Analysis Set Details

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

# 2025 OY With dev, AM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.90	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	Welland Avenue (N)		Major
B	Site Access		Minor
C	Welland Avenue (S)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.50			0.0	✓	0.00

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

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.65	20	25

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	529	0.098	0.249	0.156	0.355
1	B-C	681	0.107	0.270	-	-
1	C-B	574	0.227	0.227	-	-

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

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

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

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025 OY With dev	AM	ONE HOUR	07:45	09:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	16	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	134	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	0	16
	B	0	0	0
	C	10	124	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	7
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.24	8.21	0.3	A	116	174
C-A					7	11
A-B					0	0
A-C					15	22

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	570	0.000	0	0.0	0.0	0.000	A
C-AB	95	24	576	0.164	94	0.0	0.2	7.448	A
C-A	6	2			6				
A-B	0	0			0				
A-C	12	3			12				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	564	0.000	0	0.0	0.0	0.000	A
C-AB	113	28	577	0.196	113	0.2	0.2	7.759	A
C-A	7	2			7				
A-B	0	0			0				
A-C	14	4			14				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	557	0.000	0	0.0	0.0	0.000	A
C-AB	139	35	577	0.241	139	0.2	0.3	8.203	A
C-A	8	2			8				
A-B	0	0			0				
A-C	18	4			18				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	557	0.000	0	0.0	0.0	0.000	A
C-AB	139	35	578	0.241	139	0.3	0.3	8.213	A
C-A	8	2			8				
A-B	0	0			0				
A-C	18	4			18				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	564	0.000	0	0.0	0.0	0.000	A
C-AB	113	28	577	0.196	114	0.3	0.2	7.775	A
C-A	7	2			7				
A-B	0	0			0				
A-C	14	4			14				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	570	0.000	0	0.0	0.0	0.000	A
C-AB	95	24	576	0.164	95	0.2	0.2	7.477	A
C-A	6	2			6				
A-B	0	0			0				
A-C	12	3			12				



# 2025 OY With dev, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.06	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025 OY With dev	PM	ONE HOUR	15:45	17:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	14	100.000
B		ONE HOUR	✓	68	100.000
C		ONE HOUR	✓	44	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	14
	B	0	0	68
	C	10	34	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	13	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	5.98	0.1	A	62	94
C-AB	0.07	6.68	0.1	A	32	48
C-A					9	13
A-B					0	0
A-C					13	19

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	51	13	678	0.075	51	0.0	0.1	5.734	A
C-AB	26	6	577	0.045	26	0.0	0.0	6.542	A
C-A	7	2			7				
A-B	0	0			0				
A-C	11	3			11				

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	15	678	0.090	61	0.1	0.1	5.836	A
C-AB	31	8	577	0.054	31	0.0	0.1	6.601	A
C-A	9	2			9				
A-B	0	0			0				
A-C	13	3			13				

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	677	0.111	75	0.1	0.1	5.976	A
C-AB	38	10	578	0.066	38	0.1	0.1	6.681	A
C-A	10	3			10				
A-B	0	0			0				
A-C	15	4			15				

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	677	0.111	75	0.1	0.1	5.976	A
C-AB	38	10	578	0.066	38	0.1	0.1	6.682	A
C-A	10	3			10				
A-B	0	0			0				
A-C	15	4			15				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	15	678	0.090	61	0.1	0.1	5.838	A
C-AB	31	8	577	0.054	31	0.1	0.1	6.605	A
C-A	9	2			9				
A-B	0	0			0				
A-C	13	3			13				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	51	13	678	0.075	51	0.1	0.1	5.742	A
C-AB	26	6	577	0.045	26	0.1	0.0	6.550	A
C-A	7	2			7				
A-B	0	0			0				
A-C	11	3			11				

# 2025 Cumulative, AM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.90	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 Cumulative	AM	ONE HOUR	07:45	09:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	16	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	134	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	16
	B	0	0	0
	C	10	124	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.24	8.21	0.3	A	116	174
C-A					7	11
A-B					0	0
A-C					15	22

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	570	0.000	0	0.0	0.0	0.000	A
C-AB	95	24	576	0.164	94	0.0	0.2	7.448	A
C-A	6	2			6				
A-B	0	0			0				
A-C	12	3			12				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	564	0.000	0	0.0	0.0	0.000	A
C-AB	113	28	577	0.196	113	0.2	0.2	7.759	A
C-A	7	2			7				
A-B	0	0			0				
A-C	14	4			14				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	557	0.000	0	0.0	0.0	0.000	A
C-AB	139	35	577	0.241	139	0.2	0.3	8.203	A
C-A	8	2			8				
A-B	0	0			0				
A-C	18	4			18				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	557	0.000	0	0.0	0.0	0.000	A
C-AB	139	35	578	0.241	139	0.3	0.3	8.213	A
C-A	8	2			8				
A-B	0	0			0				
A-C	18	4			18				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	564	0.000	0	0.0	0.0	0.000	A
C-AB	113	28	577	0.196	114	0.3	0.2	7.775	A
C-A	7	2			7				
A-B	0	0			0				
A-C	14	4			14				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	570	0.000	0	0.0	0.0	0.000	A
C-AB	95	24	576	0.164	95	0.2	0.2	7.477	A
C-A	6	2			6				
A-B	0	0			0				
A-C	12	3			12				

# 2025 Cumulative, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.06	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2025 Cumulative	PM	ONE HOUR	15:45	17:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	14	100.000
B		ONE HOUR	✓	68	100.000
C		ONE HOUR	✓	44	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	14
	B	0	0	68
	C	10	34	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	13	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	5.98	0.1	A	62	94
C-AB	0.07	6.68	0.1	A	32	48
C-A					9	13
A-B					0	0
A-C					13	19

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	51	13	678	0.075	51	0.0	0.1	5.734	A
C-AB	26	6	577	0.045	26	0.0	0.0	6.542	A
C-A	7	2			7				
A-B	0	0			0				
A-C	11	3			11				

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	15	678	0.090	61	0.1	0.1	5.836	A
C-AB	31	8	577	0.054	31	0.0	0.1	6.601	A
C-A	9	2			9				
A-B	0	0			0				
A-C	13	3			13				

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	677	0.111	75	0.1	0.1	5.976	A
C-AB	38	10	578	0.066	38	0.1	0.1	6.681	A
C-A	10	3			10				
A-B	0	0			0				
A-C	15	4			15				

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	677	0.111	75	0.1	0.1	5.976	A
C-AB	38	10	578	0.066	38	0.1	0.1	6.682	A
C-A	10	3			10				
A-B	0	0			0				
A-C	15	4			15				



16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	15	678	0.090	61	0.1	0.1	5.838	A
C-AB	31	8	577	0.054	31	0.1	0.1	6.605	A
C-A	9	2			9				
A-B	0	0			0				
A-C	13	3			13				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	51	13	678	0.075	51	0.1	0.1	5.742	A
C-AB	26	6	577	0.045	26	0.1	0.0	6.550	A
C-A	7	2			7				
A-B	0	0			0				
A-C	11	3			11				

# Appendix N. Gallow Field Road / Foxton Road Junction Model Outputs

## N.1. Development Peak Hour

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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**Filename:** GallowFieldRd\_FoxtonRd\_devpeak\_v0.1.j9  
**Path:** \\wsatkins.com\project\GBBMA\HandTCS\Projects\5200124-MACE\_Prisoners\_ROGE6351  
 \05\_Technical\6\_Raven\Junction Models\03\_GallowFieldRd\_FoxtonRd  
**Report generation date:** 08/07/2021 17:09:18

- »2021, AM
- »2021, PM
- »2025 OY without Dev, AM
- »2025 OY without Dev, PM
- »2025 OY with Dev, AM
- »2025 OY with Dev, PM
- »2025 Cumulative, AM
- »2025 Cumulative, PM

**Summary of junction performance**

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
<b>2021</b>								
Stream B-AC	0.4	10.55	0.28	B	0.3	9.96	0.24	A
Stream C-AB	0.1	5.65	0.04	A	0.1	5.94	0.09	A
<b>2025 OY without Dev</b>								
Stream B-AC	0.4	10.89	0.30	B	0.4	10.30	0.26	B
Stream C-AB	0.1	5.67	0.05	A	0.1	6.00	0.10	A
<b>2025 OY with Dev</b>								
Stream B-AC	0.5	11.82	0.33	B	1.6	21.55	0.63	C
Stream C-AB	0.1	5.97	0.05	A	0.1	5.99	0.10	A
<b>2025 Cumulative</b>								
Stream B-AC	0.5	12.11	0.35	B	1.7	21.66	0.63	C
Stream C-AB	0.1	5.97	0.05	A	0.1	6.02	0.10	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.*

## File summary

### File Description

<b>Title</b>	Gallow Field Road / Foxton Road Junction
<b>Location</b>	
<b>Site number</b>	
<b>Date</b>	06/07/2021
<b>Version</b>	1
<b>Status</b>	
<b>Identifier</b>	
<b>Client</b>	MACE
<b>Jobnumber</b>	
<b>Enumerator</b>	WSATKINSCART5172
<b>Description</b>	

### Units

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

### Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

### Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021	AM	ONE HOUR	06:45	08:15	15	✓
D2	2021	PM	ONE HOUR	16:45	18:15	15	✓
D3	2025 OY without Dev	AM	ONE HOUR	06:45	08:15	15	✓
D4	2025 OY without Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2025 OY with Dev	AM	ONE HOUR	06:45	08:15	15	✓
D6	2025 OY with Dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2025 Cumulative	AM	ONE HOUR	06:45	08:15	15	✓
D8	2025 Cumulative	PM	ONE HOUR	16:45	18:15	15	✓

### Analysis Set Details

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

# 2021, AM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.28	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	Gallow Field Road (E)		Major
B	Foxtan Road		Minor
C	Gallow Field Road (W)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.50			180.0	✓	0.00

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

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.70	15	32

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	483	0.090	0.227	0.143	0.325
1	B-C	625	0.098	0.247	-	-
1	C-B	678	0.268	0.268	-	-

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

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

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

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021	AM	ONE HOUR	06:45	08:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	74	100.000
B		ONE HOUR	✓	119	100.000
C		ONE HOUR	✓	72	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	53	21
	B	102	0	17
	C	48	24	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	10	0
	B	0	0	3
	C	2	4	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.28	10.55	0.4	B	109	164
C-AB	0.04	5.65	0.1	A	24	35
C-A					42	64
A-B					49	73
A-C					19	29

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	482	0.186	89	0.0	0.2	9.172	A
C-AB	19	5	686	0.028	19	0.0	0.0	5.606	A
C-A	35	9			35				
A-B	40	10			40				
A-C	16	4			16				

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	479	0.224	107	0.2	0.3	9.718	A
C-AB	23	6	688	0.033	23	0.0	0.0	5.626	A
C-A	42	10			42				
A-B	48	12			48				
A-C	19	5			19				

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	131	33	474	0.277	131	0.3	0.4	10.522	B
C-AB	29	7	690	0.042	29	0.0	0.1	5.653	A
C-A	51	13			51				
A-B	58	15			58				
A-C	23	6			23				

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	131	33	474	0.277	131	0.4	0.4	10.545	B
C-AB	29	7	690	0.042	29	0.1	0.1	5.655	A
C-A	51	13			51				
A-B	58	15			58				
A-C	23	6			23				

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	478	0.224	107	0.4	0.3	9.748	A
C-AB	23	6	688	0.033	23	0.1	0.0	5.627	A
C-A	42	10			42				
A-B	48	12			48				
A-C	19	5			19				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	482	0.186	90	0.3	0.2	9.228	A
C-AB	19	5	686	0.028	19	0.0	0.0	5.609	A
C-A	35	9			35				
A-B	40	10			40				
A-C	16	4			16				

# 2021, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.00	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2021	PM	ONE HOUR	16:45	18:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	139	100.000
B		ONE HOUR	✓	106	100.000
C		ONE HOUR	✓	102	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	73	66
	B	65	0	41
	C	50	52	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	2
	B	3	0	0
	C	9	0	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.24	9.96	0.3	A	97	146
C-AB	0.09	5.94	0.1	A	51	77
C-A					42	63
A-B					67	100
A-C					61	91

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	80	20	499	0.160	79	0.0	0.2	8.709	A
C-AB	41	10	674	0.062	41	0.0	0.1	5.711	A
C-A	35	9			35				
A-B	55	14			55				
A-C	50	12			50				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	24	493	0.193	95	0.2	0.2	9.203	A
C-AB	50	13	674	0.074	50	0.1	0.1	5.803	A
C-A	42	10			42				
A-B	66	16			66				
A-C	59	15			59				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	117	29	485	0.241	116	0.2	0.3	9.940	A
C-AB	62	16	673	0.093	62	0.1	0.1	5.934	A
C-A	50	12			50				
A-B	80	20			80				
A-C	73	18			73				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	117	29	485	0.241	117	0.3	0.3	9.956	A
C-AB	62	16	673	0.093	62	0.1	0.1	5.939	A
C-A	50	12			50				
A-B	80	20			80				
A-C	73	18			73				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	24	493	0.193	96	0.3	0.2	9.227	A
C-AB	50	13	674	0.074	50	0.1	0.1	5.813	A
C-A	42	10			42				
A-B	66	16			66				
A-C	59	15			59				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	80	20	499	0.160	80	0.2	0.2	8.751	A
C-AB	41	10	674	0.062	42	0.1	0.1	5.720	A
C-A	35	9			35				
A-B	55	14			55				
A-C	50	12			50				

# 2025 OY without Dev, AM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.43	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 OY without Dev	AM	ONE HOUR	06:45	08:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	80	100.000
B		ONE HOUR	✓	127	100.000
C		ONE HOUR	✓	77	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	57	23
	B	109	0	18
	C	51	26	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	10	0
	B	0	0	3
	C	2	4	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.30	10.89	0.4	B	117	175
C-AB	0.05	5.67	0.1	A	26	38
C-A					45	67
A-B					52	78
A-C					21	32

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	480	0.199	95	0.0	0.2	9.347	A
C-AB	21	5	686	0.030	21	0.0	0.0	5.618	A
C-A	37	9			37				
A-B	43	11			43				
A-C	17	4			17				

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	114	29	477	0.239	114	0.2	0.3	9.956	A
C-AB	25	6	688	0.036	25	0.0	0.0	5.640	A
C-A	44	11			44				
A-B	51	13			51				
A-C	21	5			21				

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	140	35	472	0.296	139	0.3	0.4	10.865	B
C-AB	31	8	690	0.045	31	0.0	0.1	5.671	A
C-A	54	13			54				
A-B	63	16			63				
A-C	25	6			25				

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	140	35	472	0.296	140	0.4	0.4	10.893	B
C-AB	31	8	690	0.045	31	0.1	0.1	5.671	A
C-A	54	13			54				
A-B	63	16			63				
A-C	25	6			25				

**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	114	29	477	0.240	115	0.4	0.3	9.994	A
C-AB	25	6	688	0.036	25	0.1	0.0	5.639	A
C-A	44	11			44				
A-B	51	13			51				
A-C	21	5			21				

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	480	0.199	96	0.3	0.3	9.410	A
C-AB	21	5	686	0.030	21	0.0	0.0	5.620	A
C-A	37	9			37				
A-B	43	11			43				
A-C	17	4			17				

# 2025 OY without Dev, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.12	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2025 OY without Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	149	100.000
B		ONE HOUR	✓	114	100.000
C		ONE HOUR	✓	110	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	78	71
	B	70	0	44
	C	54	56	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	2
	B	3	0	0
	C	9	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.26	10.30	0.4	B	105	157
C-AB	0.10	6.00	0.1	A	56	83
C-A					45	68
A-B					72	107
A-C					65	98

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	86	21	497	0.173	85	0.0	0.2	8.885	A
C-AB	45	11	674	0.067	45	0.0	0.1	5.744	A
C-A	38	9			38				
A-B	59	15			59				
A-C	53	13			53				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	102	26	490	0.209	102	0.2	0.3	9.440	A
C-AB	54	14	673	0.081	54	0.1	0.1	5.845	A
C-A	45	11			45				
A-B	70	18			70				
A-C	64	16			64				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	126	31	481	0.261	125	0.3	0.4	10.281	B
C-AB	68	17	673	0.101	68	0.1	0.1	5.989	A
C-A	53	13			53				
A-B	86	21			86				
A-C	78	20			78				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	126	31	481	0.261	126	0.4	0.4	10.302	B
C-AB	68	17	673	0.101	68	0.1	0.1	5.996	A
C-A	53	13			53				
A-B	86	21			86				
A-C	78	20			78				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	102	26	490	0.209	103	0.4	0.3	9.470	A
C-AB	54	14	673	0.081	54	0.1	0.1	5.855	A
C-A	45	11			45				
A-B	70	18			70				
A-C	64	16			64				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	86	21	497	0.173	86	0.3	0.2	8.933	A
C-AB	45	11	674	0.067	45	0.1	0.1	5.754	A
C-A	38	9			38				
A-B	59	15			59				
A-C	53	13			53				



# 2025 OY with Dev, AM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.41	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2025 OY with Dev	AM	ONE HOUR	06:45	08:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	195	100.000
B		ONE HOUR	✓	139	100.000
C		ONE HOUR	✓	77	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	172	23
	B	121	0	18
	C	51	26	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	0
	B	0	0	3
	C	2	4	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.33	11.82	0.5	B	128	191
C-AB	0.05	5.97	0.1	A	26	39
C-A					45	67
A-B					158	237
A-C					21	32

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	26	471	0.222	104	0.0	0.3	9.804	A
C-AB	21	5	664	0.031	21	0.0	0.0	5.815	A
C-A	37	9			37				
A-B	129	32			129				
A-C	17	4			17				

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	31	466	0.268	125	0.3	0.4	10.583	B
C-AB	25	6	661	0.038	25	0.0	0.0	5.880	A
C-A	44	11			44				
A-B	155	39			155				
A-C	21	5			21				

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	38	459	0.334	153	0.4	0.5	11.784	B
C-AB	31	8	657	0.048	31	0.0	0.1	5.970	A
C-A	53	13			53				
A-B	189	47			189				
A-C	25	6			25				

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	38	459	0.334	153	0.5	0.5	11.825	B
C-AB	31	8	657	0.048	31	0.1	0.1	5.972	A
C-A	53	13			53				
A-B	189	47			189				
A-C	25	6			25				

**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	31	466	0.268	125	0.5	0.4	10.634	B
C-AB	25	6	661	0.038	25	0.1	0.0	5.882	A
C-A	44	11			44				
A-B	155	39			155				
A-C	21	5			21				

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	26	471	0.222	105	0.4	0.3	9.882	A
C-AB	21	5	664	0.031	21	0.0	0.0	5.819	A
C-A	37	9			37				
A-B	129	32			129				
A-C	17	4			17				

# 2025 OY with Dev, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		11.44	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2025 OY with Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	149	100.000
B		ONE HOUR	✓	257	100.000
C		ONE HOUR	✓	110	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	78	71
	B	213	0	44
	C	54	56	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	2
	B	1	0	0
	C	9	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.63	21.55	1.6	C	236	354
C-AB	0.10	5.99	0.1	A	56	83
C-A					45	68
A-B					72	107
A-C					65	98

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	467	0.414	191	0.0	0.7	12.997	B
C-AB	45	11	674	0.067	45	0.0	0.1	5.744	A
C-A	38	9			38				
A-B	59	15			59				
A-C	53	13			53				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	231	58	460	0.502	230	0.7	1.0	15.664	C
C-AB	54	14	673	0.081	54	0.1	0.1	5.845	A
C-A	45	11			45				
A-B	70	18			70				
A-C	64	16			64				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	283	71	451	0.628	280	1.0	1.6	20.993	C
C-AB	68	17	673	0.101	68	0.1	0.1	5.989	A
C-A	53	13			53				
A-B	86	21			86				
A-C	78	20			78				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	283	71	451	0.628	283	1.6	1.6	21.548	C
C-AB	68	17	673	0.101	68	0.1	0.1	5.994	A
C-A	53	13			53				
A-B	86	21			86				
A-C	78	20			78				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	231	58	460	0.502	233	1.6	1.0	16.167	C
C-AB	54	14	673	0.081	54	0.1	0.1	5.855	A
C-A	45	11			45				
A-B	70	18			70				
A-C	64	16			64				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	467	0.414	195	1.0	0.7	13.384	B
C-AB	45	11	674	0.067	45	0.1	0.1	5.754	A
C-A	38	9			38				
A-B	59	15			59				
A-C	53	13			53				

# 2025 Cumulative, AM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.61	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2025 Cumulative	AM	ONE HOUR	06:45	08:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	195	100.000
B		ONE HOUR	✓	145	100.000
C		ONE HOUR	✓	77	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	172	23
	B	127	0	18
	C	51	26	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	0
	B	0	0	3
	C	2	4	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.35	12.11	0.5	B	133	200
C-AB	0.05	5.97	0.1	A	26	39
C-A					45	67
A-B					158	237
A-C					21	32

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	27	470	0.232	108	0.0	0.3	9.937	A
C-AB	21	5	664	0.031	21	0.0	0.0	5.815	A
C-A	37	9			37				
A-B	129	32			129				
A-C	17	4			17				

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	130	33	465	0.280	130	0.3	0.4	10.771	B
C-AB	25	6	661	0.038	25	0.0	0.0	5.880	A
C-A	44	11			44				
A-B	155	39			155				
A-C	21	5			21				

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	160	40	458	0.349	159	0.4	0.5	12.062	B
C-AB	31	8	657	0.048	31	0.0	0.1	5.970	A
C-A	53	13			53				
A-B	189	47			189				
A-C	25	6			25				

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	160	40	458	0.349	160	0.5	0.5	12.111	B
C-AB	31	8	657	0.048	31	0.1	0.1	5.970	A
C-A	53	13			53				
A-B	189	47			189				
A-C	25	6			25				



**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	130	33	465	0.280	131	0.5	0.4	10.828	B
C-AB	25	6	661	0.038	25	0.1	0.0	5.880	A
C-A	44	11			44				
A-B	155	39			155				
A-C	21	5			21				

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	27	470	0.232	110	0.4	0.3	10.025	B
C-AB	21	5	664	0.031	21	0.0	0.0	5.817	A
C-A	37	9			37				
A-B	129	32			129				
A-C	17	4			17				

# 2025 Cumulative, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		11.30	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2025 Cumulative	PM	ONE HOUR	16:45	18:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	158	100.000
B		ONE HOUR	✓	257	100.000
C		ONE HOUR	✓	110	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	87	71
	B	213	0	44
	C	54	56	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	2
	B	1	0	0
	C	9	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.63	21.66	1.7	C	236	354
C-AB	0.10	6.02	0.1	A	56	83
C-A					45	68
A-B					80	120
A-C					65	98

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	467	0.415	191	0.0	0.7	13.020	B
C-AB	45	11	672	0.067	45	0.0	0.1	5.761	A
C-A	38	9			38				
A-B	65	16			65				
A-C	53	13			53				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	231	58	460	0.503	230	0.7	1.0	15.715	C
C-AB	54	14	671	0.081	54	0.1	0.1	5.865	A
C-A	45	11			45				
A-B	78	20			78				
A-C	64	16			64				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	283	71	450	0.629	280	1.0	1.6	21.099	C
C-AB	68	17	670	0.101	68	0.1	0.1	6.015	A
C-A	53	13			53				
A-B	96	24			96				
A-C	78	20			78				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	283	71	450	0.629	283	1.6	1.7	21.664	C
C-AB	68	17	670	0.101	68	0.1	0.1	6.020	A
C-A	53	13			53				
A-B	96	24			96				
A-C	78	20			78				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	231	58	460	0.503	233	1.7	1.1	16.222	C
C-AB	54	14	671	0.081	54	0.1	0.1	5.878	A
C-A	45	11			45				
A-B	78	20			78				
A-C	64	16			64				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	467	0.415	195	1.1	0.7	13.416	B
C-AB	45	11	672	0.067	45	0.1	0.1	5.773	A
C-A	38	9			38				
A-B	65	16			65				
A-C	53	13			53				

## N.2. Network Peak Hour

Junctions 9
PICADY 9 - Priority Intersection Module
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**Filename:** GallowFieldRd\_FoxtonRd\_v0.1.j9  
**Path:** \\wsatkins.com\project\GBBMA\HandTCS\Projects\5200124-MACE\_Prisons\_ROGE6351  
 \05\_Technical\6\_Raven\Junction Models\03\_GallowFieldRd\_FoxtonRd  
**Report generation date:** 06/07/2021 21:09:35

- »2021, AM
- »2021, PM
- »2025 OY without Dev, AM
- »2025 OY without Dev, PM
- »2025 OY with Dev, AM
- »2025 OY with Dev, PM
- »2025 Cumulative, AM
- »2025 Cumulative, PM

**Summary of junction performance**

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2021								
Stream B-AC	0.5	11.90	0.33	B	0.3	9.98	0.23	A
Stream C-AB	0.1	5.83	0.09	A	0.1	5.86	0.07	A
2025 OY without Dev								
Stream B-AC	0.6	12.46	0.36	B	0.3	10.29	0.25	B
Stream C-AB	0.1	5.88	0.10	A	0.1	5.91	0.07	A
2025 OY with Dev								
Stream B-AC	0.6	12.75	0.36	B	0.5	12.21	0.35	B
Stream C-AB	0.1	6.07	0.10	A	0.1	5.96	0.08	A
2025 Cumulative								
Stream B-AC	0.6	13.05	0.37	B	0.6	12.39	0.36	B
Stream C-AB	0.1	6.07	0.10	A	0.1	5.97	0.08	A

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

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

## File summary

### File Description

<b>Title</b>	Gallow Field Road / Foxton Road Junction
<b>Location</b>	
<b>Site number</b>	
<b>Date</b>	06/07/2021
<b>Version</b>	1
<b>Status</b>	
<b>Identifier</b>	
<b>Client</b>	MACE
<b>Jobnumber</b>	
<b>Enumerator</b>	WSATKINSCART5172
<b>Description</b>	

### Units

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

### Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

### Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021	AM	ONE HOUR	07:45	09:15	15	✓
D2	2021	PM	ONE HOUR	15:45	17:15	15	✓
D3	2025 OY without Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2025 OY without Dev	PM	ONE HOUR	15:45	17:15	15	✓
D5	2025 OY with Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2025 OY with Dev	PM	ONE HOUR	15:45	17:15	15	✓
D7	2025 Cumulative	AM	ONE HOUR	07:45	09:15	15	✓
D8	2025 Cumulative	PM	ONE HOUR	15:45	17:15	15	✓

### Analysis Set Details

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

# 2021, AM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.23	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	Gallow Field Road (E)		Major
B	Foxtan Road		Minor
C	Gallow Field Road (W)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.50			180.0	✓	0.00

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

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.70	15	32

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	483	0.090	0.227	0.143	0.325
1	B-C	625	0.098	0.247	-	-
1	C-B	678	0.268	0.268	-	-

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

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

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



## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021	AM	ONE HOUR	07:45	09:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	119	100.000
B		ONE HOUR	✓	142	100.000
C		ONE HOUR	✓	123	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	72	47
	B	100	0	42
	C	74	49	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	3	7
	B	4	0	8
	C	9	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.33	11.90	0.5	B	130	195
C-AB	0.09	5.83	0.1	A	50	75
C-A					63	94
A-B					66	99
A-C					43	65

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	488	0.219	106	0.0	0.3	9.867	A
C-AB	40	10	690	0.058	40	0.0	0.1	5.681	A
C-A	52	13			52				
A-B	54	14			54				
A-C	35	9			35				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	32	482	0.265	127	0.3	0.4	10.652	B
C-AB	49	12	692	0.070	49	0.1	0.1	5.740	A
C-A	62	15			62				
A-B	65	16			65				
A-C	42	11			42				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	39	474	0.330	156	0.4	0.5	11.865	B
C-AB	61	15	695	0.088	61	0.1	0.1	5.828	A
C-A	74	19			74				
A-B	79	20			79				
A-C	52	13			52				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	39	474	0.330	156	0.5	0.5	11.903	B
C-AB	61	15	695	0.088	61	0.1	0.1	5.833	A
C-A	74	19			74				
A-B	79	20			79				
A-C	52	13			52				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	32	482	0.265	128	0.5	0.4	10.703	B
C-AB	49	12	692	0.070	49	0.1	0.1	5.750	A
C-A	62	15			62				
A-B	65	16			65				
A-C	42	11			42				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	488	0.219	107	0.4	0.3	9.948	A
C-AB	40	10	690	0.058	40	0.1	0.1	5.688	A
C-A	52	13			52				
A-B	54	14			54				
A-C	35	9			35				

# 2021, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.20	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2021	PM	ONE HOUR	15:45	17:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	196	100.000
B		ONE HOUR	✓	103	100.000
C		ONE HOUR	✓	96	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	117	79
	B	59	0	44
	C	59	37	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	2	0	5
	C	5	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.23	9.98	0.3	A	95	142
C-AB	0.07	5.86	0.1	A	37	56
C-A					51	77
A-B					107	161
A-C					72	109

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	19	502	0.155	77	0.0	0.2	8.736	A
C-AB	30	7	667	0.045	30	0.0	0.1	5.663	A
C-A	42	11			42				
A-B	88	22			88				
A-C	59	15			59				

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	93	23	495	0.187	92	0.2	0.2	9.227	A
C-AB	36	9	665	0.054	36	0.1	0.1	5.741	A
C-A	50	13			50				
A-B	105	26			105				
A-C	71	18			71				

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	113	28	486	0.233	113	0.2	0.3	9.961	A
C-AB	45	11	663	0.068	45	0.1	0.1	5.852	A
C-A	61	15			61				
A-B	129	32			129				
A-C	87	22			87				

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	113	28	486	0.233	113	0.3	0.3	9.977	A
C-AB	45	11	663	0.068	45	0.1	0.1	5.858	A
C-A	61	15			61				
A-B	129	32			129				
A-C	87	22			87				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	93	23	495	0.187	93	0.3	0.2	9.252	A
C-AB	36	9	665	0.054	36	0.1	0.1	5.750	A
C-A	50	13			50				
A-B	105	26			105				
A-C	71	18			71				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	19	502	0.155	78	0.2	0.2	8.775	A
C-AB	30	7	667	0.045	30	0.1	0.1	5.668	A
C-A	42	11			42				
A-B	88	22			88				
A-C	59	15			59				

# 2025 OY without Dev, AM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.46	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 OY without Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	127	100.000
B		ONE HOUR	✓	152	100.000
C		ONE HOUR	✓	132	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	77	50
	B	107	0	45
	C	79	53	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	7
	B	4	0	8
	C	9	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.36	12.46	0.6	B	139	209
C-AB	0.10	5.88	0.1	A	55	82
C-A					67	100
A-B					71	106
A-C					46	69

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	114	29	486	0.235	113	0.0	0.3	10.115	B
C-AB	44	11	690	0.063	43	0.0	0.1	5.703	A
C-A	56	14			56				
A-B	58	14			58				
A-C	38	9			38				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	137	34	480	0.285	136	0.3	0.4	11.005	B
C-AB	53	13	693	0.077	53	0.1	0.1	5.772	A
C-A	66	16			66				
A-B	69	17			69				
A-C	45	11			45				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	42	471	0.355	167	0.4	0.6	12.407	B
C-AB	67	17	697	0.096	67	0.1	0.1	5.871	A
C-A	79	20			79				
A-B	85	21			85				
A-C	55	14			55				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	42	471	0.355	167	0.6	0.6	12.457	B
C-AB	67	17	697	0.096	67	0.1	0.1	5.876	A
C-A	79	20			79				
A-B	85	21			85				
A-C	55	14			55				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	137	34	480	0.285	137	0.6	0.4	11.069	B
C-AB	53	13	693	0.077	53	0.1	0.1	5.786	A
C-A	66	16			66				
A-B	69	17			69				
A-C	45	11			45				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	114	29	486	0.235	115	0.4	0.3	10.209	B
C-AB	44	11	690	0.063	44	0.1	0.1	5.714	A
C-A	56	14			56				
A-B	58	14			58				
A-C	38	9			38				



# 2025 OY without Dev, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.28	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2025 OY without Dev	PM	ONE HOUR	15:45	17:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	211	100.000
B		ONE HOUR	✓	110	100.000
C		ONE HOUR	✓	103	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	126	85
	B	63	0	47
	C	63	40	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	2	0	5
	C	5	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.25	10.29	0.3	B	101	151
C-AB	0.07	5.91	0.1	A	40	61
C-A					54	81
A-B					116	173
A-C					78	117

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	83	21	499	0.166	82	0.0	0.2	8.897	A
C-AB	32	8	666	0.049	32	0.0	0.1	5.696	A
C-A	45	11			45				
A-B	95	24			95				
A-C	64	16			64				

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	99	25	492	0.201	99	0.2	0.3	9.447	A
C-AB	39	10	664	0.059	39	0.1	0.1	5.782	A
C-A	53	13			53				
A-B	113	28			113				
A-C	76	19			76				

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	121	30	482	0.251	121	0.3	0.3	10.275	B
C-AB	49	12	661	0.074	49	0.1	0.1	5.906	A
C-A	64	16			64				
A-B	139	35			139				
A-C	94	23			94				

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	121	30	482	0.251	121	0.3	0.3	10.294	B
C-AB	49	12	661	0.074	49	0.1	0.1	5.912	A
C-A	64	16			64				
A-B	139	35			139				
A-C	94	23			94				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	99	25	492	0.201	99	0.3	0.3	9.474	A
C-AB	39	10	664	0.059	39	0.1	0.1	5.791	A
C-A	53	13			53				
A-B	113	28			113				
A-C	76	19			76				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	83	21	499	0.166	83	0.3	0.2	8.943	A
C-AB	32	8	666	0.049	32	0.1	0.1	5.702	A
C-A	45	11			45				
A-B	95	24			95				
A-C	64	16			64				

# 2025 OY with Dev, AM

### Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.79	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2025 OY with Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	196	100.000
B		ONE HOUR	✓	152	100.000
C		ONE HOUR	✓	132	100.000

## Origin-Destination Data

#### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	146	50
	B	107	0	45
	C	79	53	0

## Vehicle Mix

#### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	7
	B	4	0	8
	C	9	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.36	12.75	0.6	B	139	209
C-AB	0.10	6.07	0.1	A	55	82
C-A					66	100
A-B					134	201
A-C					46	69

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	114	29	481	0.238	113	0.0	0.3	10.246	B
C-AB	44	11	677	0.065	43	0.0	0.1	5.826	A
C-A	56	14			56				
A-B	110	27			110				
A-C	38	9			38				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	137	34	474	0.288	136	0.3	0.4	11.188	B
C-AB	53	13	677	0.079	53	0.1	0.1	5.922	A
C-A	65	16			65				
A-B	131	33			131				
A-C	45	11			45				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	42	464	0.361	167	0.4	0.6	12.700	B
C-AB	67	17	677	0.099	67	0.1	0.1	6.061	A
C-A	78	20			78				
A-B	161	40			161				
A-C	55	14			55				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	42	464	0.361	167	0.6	0.6	12.754	B
C-AB	67	17	677	0.099	67	0.1	0.1	6.070	A
C-A	78	20			78				
A-B	161	40			161				
A-C	55	14			55				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	137	34	474	0.288	137	0.6	0.4	11.263	B
C-AB	53	13	677	0.079	53	0.1	0.1	5.937	A
C-A	65	16			65				
A-B	131	33			131				
A-C	45	11			45				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	114	29	481	0.238	115	0.4	0.3	10.343	B
C-AB	44	11	677	0.065	44	0.1	0.1	5.837	A
C-A	56	14			56				
A-B	110	27			110				
A-C	38	9			38				

# 2025 OY with Dev, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.31	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2025 OY with Dev	PM	ONE HOUR	15:45	17:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	229	100.000
B		ONE HOUR	✓	148	100.000
C		ONE HOUR	✓	103	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	144	85
	B	101	0	47
	C	63	40	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	1
	B	1	0	5
	C	5	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.35	12.21	0.5	B	136	204
C-AB	0.08	5.96	0.1	A	40	61
C-A					54	81
A-B					132	198
A-C					78	117

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	28	482	0.231	110	0.0	0.3	9.862	A
C-AB	32	8	663	0.049	32	0.0	0.1	5.728	A
C-A	45	11			45				
A-B	108	27			108				
A-C	64	16			64				

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	133	33	475	0.280	133	0.3	0.4	10.748	B
C-AB	39	10	660	0.060	39	0.1	0.1	5.821	A
C-A	53	13			53				
A-B	129	32			129				
A-C	76	19			76				

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	163	41	464	0.351	162	0.4	0.5	12.165	B
C-AB	49	12	656	0.075	49	0.1	0.1	5.956	A
C-A	64	16			64				
A-B	159	40			159				
A-C	94	23			94				

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	163	41	464	0.351	163	0.5	0.5	12.211	B
C-AB	49	12	656	0.075	49	0.1	0.1	5.960	A
C-A	64	16			64				
A-B	159	40			159				
A-C	94	23			94				



16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	133	33	475	0.280	134	0.5	0.4	10.809	B
C-AB	39	10	660	0.060	39	0.1	0.1	5.831	A
C-A	53	13			53				
A-B	129	32			129				
A-C	76	19			76				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	28	482	0.231	112	0.4	0.3	9.946	A
C-AB	32	8	663	0.049	33	0.1	0.1	5.734	A
C-A	45	11			45				
A-B	108	27			108				
A-C	64	16			64				

# 2025 Cumulative, AM

## Data Errors and Warnings

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

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.97	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2025 Cumulative	AM	ONE HOUR	07:45	09:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	196	100.000
B		ONE HOUR	✓	157	100.000
C		ONE HOUR	✓	132	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	146	50
	B	112	0	45
	C	79	53	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	7
	B	4	0	8
	C	9	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.37	13.05	0.6	B	144	216
C-AB	0.10	6.07	0.1	A	55	82
C-A					66	100
A-B					134	201
A-C					46	69

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	118	30	480	0.246	117	0.0	0.3	10.382	B
C-AB	44	11	677	0.065	43	0.0	0.1	5.826	A
C-A	56	14			56				
A-B	110	27			110				
A-C	38	9			38				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	141	35	473	0.299	141	0.3	0.4	11.384	B
C-AB	53	13	677	0.079	53	0.1	0.1	5.922	A
C-A	65	16			65				
A-B	131	33			131				
A-C	45	11			45				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	173	43	463	0.374	172	0.4	0.6	12.989	B
C-AB	67	17	677	0.099	67	0.1	0.1	6.061	A
C-A	78	20			78				
A-B	161	40			161				
A-C	55	14			55				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	173	43	463	0.374	173	0.6	0.6	13.052	B
C-AB	67	17	677	0.099	67	0.1	0.1	6.070	A
C-A	78	20			78				
A-B	161	40			161				
A-C	55	14			55				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	141	35	473	0.299	142	0.6	0.5	11.458	B
C-AB	53	13	677	0.079	53	0.1	0.1	5.934	A
C-A	65	16			65				
A-B	131	33			131				
A-C	45	11			45				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	118	30	480	0.246	119	0.5	0.3	10.488	B
C-AB	44	11	677	0.065	44	0.1	0.1	5.837	A
C-A	56	14			56				
A-B	110	27			110				
A-C	38	9			38				

# 2025 Cumulative, PM

## Data Errors and Warnings

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

## Junction Network

### Junctions

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

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2025 Cumulative	PM	ONE HOUR	15:45	17:15	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	232	100.000
B		ONE HOUR	✓	151	100.000
C		ONE HOUR	✓	103	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	147	85
	B	104	0	47
	C	63	40	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	1
	B	1	0	5
	C	5	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.36	12.39	0.6	B	139	208
C-AB	0.08	5.97	0.1	A	40	61
C-A					54	81
A-B					135	202
A-C					78	117

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	114	28	481	0.236	112	0.0	0.3	9.944	A
C-AB	32	8	662	0.049	32	0.0	0.1	5.734	A
C-A	45	11			45				
A-B	111	28			111				
A-C	64	16			64				

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	136	34	474	0.287	135	0.3	0.4	10.867	B
C-AB	39	10	659	0.060	39	0.1	0.1	5.828	A
C-A	53	13			53				
A-B	132	33			132				
A-C	76	19			76				

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	166	42	463	0.359	166	0.4	0.6	12.341	B
C-AB	49	12	656	0.075	49	0.1	0.1	5.965	A
C-A	64	16			64				
A-B	162	40			162				
A-C	94	23			94				

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	166	42	463	0.359	166	0.6	0.6	12.393	B
C-AB	49	12	656	0.075	49	0.1	0.1	5.968	A
C-A	64	16			64				
A-B	162	40			162				
A-C	94	23			94				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	136	34	474	0.287	136	0.6	0.4	10.931	B
C-AB	39	10	659	0.060	39	0.1	0.1	5.836	A
C-A	53	13			53				
A-B	132	33			132				
A-C	76	19			76				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	114	28	481	0.236	114	0.4	0.3	10.037	B
C-AB	32	8	662	0.049	33	0.1	0.1	5.742	A
C-A	45	11			45				
A-B	111	28			111				
A-C	64	16			64				

# Appendix O. Harborough Road / Leicester Lane / Gallow Field Road Model Outputs

## O.1. Development Peak Hour



<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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**Filename:** GallowField\_CrossRoads\_PICADY DevPeak\_v0.2.j9

**Path:** P:\GBBMA\HandT\CS\Projects\5200124-MACE\_Prisoners\_ROGE6351\05\_Technical\6\_Raven\Junction  
Models\01\_GallowFieldCrossRoads

**Report generation date:** 14/07/2021 10:37:15

- 
- »2021 Baseline, AM
  - »2021 Baseline, PM
  - »OY 2025 Without Development, AM
  - »OY 2025 Without Development, PM
  - »OY 2025 With Development, AM
  - »OY 2025 With Development, PM
  - »2025 Cumulative, AM
  - »2025 Cumulative, PM

### Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
<b>2021 Baseline</b>								
Stream B-CD	0.1	11.08	0.05	B	0.1	11.09	0.07	B
Stream B-AD	0.2	16.07	0.14	C	0.2	15.92	0.14	C
Stream A-BCD	0.5	10.45	0.33	B	0.2	8.70	0.14	A
Stream D-AB	0.2	8.24	0.15	A	0.4	9.49	0.28	A
Stream D-BC	0.2	14.54	0.18	B	0.2	14.54	0.18	B
Stream C-ABD	0.0	7.75	0.01	A	0.0	7.72	0.04	A
<b>OY 2025 Without Development</b>								
Stream B-CD	0.1	11.81	0.06	B	0.1	11.91	0.08	B
Stream B-AD	0.2	17.86	0.16	C	0.2	17.75	0.16	C
Stream A-BCD	0.6	11.11	0.35	B	0.2	9.07	0.15	A
Stream D-AB	0.2	8.80	0.17	A	0.5	10.42	0.32	B
Stream D-BC	0.3	16.36	0.21	C	0.3	16.34	0.20	C
Stream C-ABD	0.0	8.02	0.01	A	0.0	7.93	0.04	A
<b>OY 2025 With Development</b>								
Stream B-CD	0.1	12.79	0.07	B	0.1	12.05	0.08	B
Stream B-AD	0.2	20.44	0.18	C	0.2	20.46	0.18	C
Stream A-BCD	1.2	14.83	0.53	B	0.2	9.07	0.15	A
Stream D-AB	0.2	9.64	0.20	A	1.3	17.34	0.57	C
Stream D-BC	0.4	20.89	0.27	C	0.7	25.32	0.42	D
Stream C-ABD	0.0	8.67	0.01	A	0.0	7.93	0.04	A
<b>2025 Cumulative</b>								
Stream B-CD	0.1	12.88	0.07	B	0.1	12.06	0.08	B
Stream B-AD	0.2	20.67	0.18	C	0.2	20.74	0.18	C
Stream A-BCD	1.3	15.21	0.55	C	0.2	9.07	0.15	A
Stream D-AB	0.3	9.71	0.20	A	1.4	18.68	0.59	C
Stream D-BC	0.4	21.33	0.27	C	0.8	27.06	0.45	D
Stream C-ABD	0.0	8.72	0.01	A	0.0	7.93	0.04	A

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

### File summary

#### File Description

Title	Raven
Location	B6047 Harborough Road / Leicester Lane / Gallow Field Road
Site number	
Date	12/04/2021
Version	V0.1
Status	(new file)
Identifier	CR
Client	MACE (on behalf of MoJ)
Jobnumber	5200124
Enumerator	WSATKINSICART5172
Description	

### Units

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

### Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

### Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15
D3	OY 2025 Without Development	AM	ONE HOUR	06:45	08:15	15
D4	OY 2025 Without Development	PM	ONE HOUR	16:45	18:15	15
D5	OY 2025 With Development	AM	ONE HOUR	06:45	08:15	15
D6	OY 2025 With Development	PM	ONE HOUR	16:45	18:15	15
D7	2025 Cumulative	AM	ONE HOUR	06:45	08:15	15
D8	2025 Cumulative	PM	ONE HOUR	16:45	18:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2021 Baseline, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.80	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	B6047 Harborough Road (North)		Major
B	Leicester Lane		Minor
C	B6047 Harborough Road (South)		Major
D	Gallow Field Road		Minor

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.00		✓	3.00	72.6	✓	5.00
C	6.00		✓	3.00	91.0	✓	5.00

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

### Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	4.70	3.70	3.30	3.30	✓	1.00	28	30
D	One lane plus flare	10.00	7.40	4.50	3.50	3.50	✓	1.00	190	140

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	670	-	-	-	-	-	-	0.259	0.371	0.259	-	-	-
1	B-A	539	0.098	0.248	0.248	-	-	-	0.156	0.354	-	0.248	0.248	0.124
1	B-C	682	0.105	0.264	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	532	0.097	0.245	0.245	-	-	-	0.154	0.350	0.154	-	-	-
1	B-D, offside lane	539	0.098	0.248	0.248	-	-	-	0.156	0.354	0.156	-	-	-
1	C-B	681	0.264	0.264	0.377	-	-	-	-	-	-	-	-	-
1	D-A	760	-	-	-	-	-	-	0.294	-	0.116	-	-	-
1	D-B, nearside lane	655	0.190	0.190	0.431	-	-	-	0.301	0.301	0.119	-	-	-
1	D-B, offside lane	653	0.189	0.189	0.429	-	-	-	0.300	0.300	0.119	-	-	-
1	D-C	653	-	0.189	0.429	0.150	0.300	0.300	0.300	0.300	0.119	-	-	-

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

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

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

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	666	100.000
B		✓	51	100.000
C		✓	494	100.000
D		✓	123	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	34	476	156
	B	27	0	12	12
	C	446	3	0	45
	D	62	15	46	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	3	5	4
	B	0	0	20	0
	C	5	0	0	2
	D	0	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.05	11.08	0.1	B
B-AD	0.14	16.07	0.2	C
A-BCD	0.33	10.45	0.5	B
A-B				
A-C				
D-AB	0.15	8.24	0.2	A
D-BC	0.18	14.54	0.2	B
C-ABD	0.01	7.75	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	14	469	0.029	14	0.0	8.869	A
B-AD	25	349	0.071	24	0.1	11.090	B
A-BCD	117	573	0.205	116	0.3	8.180	A
A-B	26			26			
A-C	358			358			
D-AB	53	603	0.088	52	0.1	6.588	A
D-BC	40	421	0.095	39	0.1	9.682	A
C-ABD	2	536	0.004	2	0.0	6.749	A
C-D	34			34			
C-A	336			336			

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	17	435	0.038	17	0.0	9.649	A
B-AD	29	311	0.094	29	0.1	12.753	B
A-BCD	140	555	0.253	140	0.3	9.021	A
A-B	31			31			
A-C	428			428			
D-AB	63	570	0.111	63	0.1	7.160	A
D-BC	47	375	0.126	47	0.1	11.270	B
C-ABD	3	507	0.005	3	0.0	7.138	A
C-D	40			40			
C-A	401			401			

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	21	385	0.054	21	0.1	11.074	B
B-AD	36	260	0.137	35	0.2	16.025	C
A-BCD	173	531	0.325	172	0.5	10.422	B
A-B	37			37			
A-C	523			523			
D-AB	78	519	0.150	78	0.2	8.226	A
D-BC	58	312	0.185	57	0.2	14.497	B
C-ABD	3	468	0.007	3	0.0	7.751	A
C-D	50			50			
C-A	491			491			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	21	384	0.054	21	0.1	11.080	B
B-AD	36	260	0.137	36	0.2	16.068	C
A-BCD	173	531	0.325	173	0.5	10.455	B
A-B	37			37			
A-C	523			523			
D-AB	78	518	0.150	78	0.2	8.243	A
D-BC	58	311	0.185	58	0.2	14.545	B
C-ABD	3	468	0.007	3	0.0	7.754	A
C-D	50			50			
C-A	491			491			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	17	435	0.038	17	0.0	9.654	A
B-AD	29	311	0.094	29	0.1	12.802	B
A-BCD	140	555	0.253	141	0.4	9.062	A
A-B	31			31			
A-C	428			428			
D-AB	63	569	0.111	63	0.1	7.184	A
D-BC	47	374	0.126	48	0.2	11.313	B
C-ABD	3	507	0.005	3	0.0	7.143	A
C-D	40			40			
C-A	401			401			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	14	469	0.030	14	0.0	8.884	A
B-AD	25	348	0.071	25	0.1	11.134	B
A-BCD	117	573	0.205	118	0.3	8.230	A
A-B	26			26			
A-C	358			358			
D-AB	53	602	0.088	53	0.1	6.608	A
D-BC	40	420	0.095	40	0.1	9.724	A
C-ABD	2	535	0.004	2	0.0	6.756	A
C-D	34			34			
C-A	336			336			

# 2021 Baseline, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.55	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	547	100.000
B		✓	55	100.000
C		✓	577	100.000
D		✓	187	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	42	443	62
	B	23	0	9	23
	C	518	18	0	41
	D	121	29	37	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	2	5
	B	0	0	0	0
	C	2	6	0	0
	D	2	4	3	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.07	11.09	0.1	B
B-AD	0.14	15.92	0.2	C
A-BCD	0.14	8.70	0.2	A
A-B				
A-C				
D-AB	0.28	9.49	0.4	A
D-BC	0.18	14.54	0.2	B
C-ABD	0.04	7.72	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	16	432	0.037	16	0.0	8.652	A
B-AD	26	350	0.073	25	0.1	11.072	B
A-BCD	47	555	0.084	46	0.1	7.420	A
A-B	32			32			
A-C	334			334			
D-AB	103	626	0.164	102	0.2	7.007	A
D-BC	38	411	0.093	38	0.1	9.951	A
C-ABD	14	567	0.024	13	0.0	6.890	A
C-D	31			31			
C-A	390			390			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	19	398	0.048	19	0.1	9.509	A
B-AD	30	314	0.097	30	0.1	12.701	B
A-BCD	56	533	0.105	56	0.1	7.912	A
A-B	38			38			
A-C	398			398			
D-AB	123	591	0.208	123	0.3	7.849	A
D-BC	45	369	0.122	45	0.1	11.460	B
C-ABD	16	545	0.030	16	0.0	7.215	A
C-D	37			37			
C-A	466			466			

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	24	349	0.068	24	0.1	11.081	B
B-AD	37	263	0.140	36	0.2	15.884	C
A-BCD	68	503	0.136	68	0.2	8.693	A
A-B	46			46			
A-C	488			488			
D-AB	151	539	0.281	151	0.4	9.460	A
D-BC	55	310	0.176	54	0.2	14.494	B
C-ABD	20	514	0.039	20	0.0	7.716	A
C-D	45			45			
C-A	570			570			

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	24	348	0.069	24	0.1	11.092	B
B-AD	37	263	0.140	37	0.2	15.925	C
A-BCD	68	503	0.136	68	0.2	8.702	A
A-B	46			46			
A-C	488			488			
D-AB	151	539	0.281	151	0.4	9.493	A
D-BC	55	310	0.176	55	0.2	14.536	B
C-ABD	20	514	0.039	20	0.0	7.717	A
C-D	45			45			
C-A	570			570			

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	19	397	0.048	19	0.1	9.524	A
B-AD	30	313	0.097	31	0.1	12.742	B
A-BCD	56	533	0.105	56	0.1	7.923	A
A-B	38			38			
A-C	398			398			
D-AB	123	591	0.208	123	0.3	7.882	A
D-BC	45	369	0.122	45	0.1	11.495	B
C-ABD	16	545	0.030	16	0.0	7.220	A
C-D	37			37			
C-A	466			466			

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	16	431	0.037	16	0.0	8.668	A
B-AD	26	350	0.073	26	0.1	11.114	B
A-BCD	47	555	0.084	47	0.1	7.435	A
A-B	32			32			
A-C	334			334			
D-AB	103	626	0.164	103	0.2	7.045	A
D-BC	38	411	0.093	38	0.1	9.987	A
C-ABD	14	567	0.024	14	0.0	6.893	A
C-D	31			31			
C-A	390			390			

# OY 2025 Without Development, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.03	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	OY 2025 Without Development	AM	ONE HOUR	06:45	08:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	713	100.000
B		✓	55	100.000
C		✓	529	100.000
D		✓	131	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	36	510	167
	B	29	0	13	13
	C	478	3	0	48
	D	66	16	49	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	3	5	4
	B	0	0	20	0
	C	5	0	0	2
	D	0	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.06	11.81	0.1	B
B-AD	0.16	17.86	0.2	C
A-BCD	0.35	11.11	0.6	B
A-B				
A-C				
D-AB	0.17	8.80	0.2	A
D-BC	0.21	16.36	0.3	C
C-ABD	0.01	8.02	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	15	457	0.033	15	0.0	9.129	A
B-AD	26	335	0.079	26	0.1	11.638	B
A-BCD	126	566	0.222	125	0.3	8.454	A
A-B	27			27			
A-C	384			384			
D-AB	56	591	0.095	56	0.1	6.779	A
D-BC	42	404	0.105	42	0.1	10.190	B
C-ABD	2	525	0.004	2	0.0	6.881	A
C-D	36			36			
C-A	360			360			

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	420	0.043	18	0.0	10.046	B
B-AD	31	295	0.106	31	0.1	13.642	B
A-BCD	150	547	0.275	150	0.4	9.423	A
A-B	32			32			
A-C	458			458			
D-AB	67	554	0.122	67	0.1	7.447	A
D-BC	50	355	0.142	50	0.2	12.116	B
C-ABD	3	495	0.005	3	0.0	7.317	A
C-D	43			43			
C-A	430			430			

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	22	364	0.062	22	0.1	11.804	B
B-AD	38	240	0.159	38	0.2	17.792	C
A-BCD	185	522	0.355	185	0.6	11.066	B
A-B	40			40			
A-C	560			560			
D-AB	83	496	0.168	83	0.2	8.774	A
D-BC	61	287	0.213	61	0.3	16.285	C
C-ABD	3	453	0.007	3	0.0	8.011	A
C-D	53			53			
C-A	526			526			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	22	363	0.062	22	0.1	11.813	B
B-AD	38	240	0.159	38	0.2	17.859	C
A-BCD	185	522	0.355	185	0.6	11.111	B
A-B	40			40			
A-C	560			560			
D-AB	83	496	0.168	83	0.2	8.801	A
D-BC	61	287	0.213	61	0.3	16.361	C
C-ABD	3	452	0.007	3	0.0	8.016	A
C-D	53			53			
C-A	526			526			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	419	0.043	18	0.1	10.055	B
B-AD	31	295	0.107	32	0.1	13.701	B
A-BCD	150	547	0.275	151	0.4	9.474	A
A-B	32			32			
A-C	458			458			
D-AB	67	553	0.122	68	0.1	7.477	A
D-BC	50	354	0.142	51	0.2	12.176	B
C-ABD	3	494	0.005	3	0.0	7.326	A
C-D	43			43			
C-A	430			430			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	15	457	0.033	15	0.0	9.146	A
B-AD	26	334	0.079	27	0.1	11.694	B
A-BCD	126	566	0.222	126	0.3	8.515	A
A-B	27			27			
A-C	384			384			
D-AB	56	590	0.095	56	0.1	6.798	A
D-BC	42	403	0.105	43	0.1	10.244	B
C-ABD	2	525	0.004	2	0.0	6.892	A
C-D	36			36			
C-A	360			360			

# OY 2025 Without Development, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.79	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	OY 2025 Without Development	PM	ONE HOUR	16:45	18:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	587	100.000
B		✓	60	100.000
C		✓	619	100.000
D		✓	201	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	45	475	67
	B	25	0	10	25
	C	556	19	0	44
	D	130	31	40	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	2	5
	B	0	0	0	0
	C	2	6	0	0
	D	2	4	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.08	11.91	0.1	B
B-AD	0.16	17.75	0.2	C
A-BCD	0.15	9.07	0.2	A
A-B				
A-C				
D-AB	0.32	10.42	0.5	B
D-BC	0.20	16.34	0.3	C
C-ABD	0.04	7.93	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	17	420	0.042	17	0.0	8.935	A
B-AD	28	336	0.082	27	0.1	11.632	B
A-BCD	50	547	0.092	50	0.1	7.597	A
A-B	34			34			
A-C	358			358			
D-AB	110	614	0.180	110	0.2	7.291	A
D-BC	41	395	0.103	40	0.1	10.466	B
C-ABD	14	559	0.026	14	0.0	7.003	A
C-D	33			33			
C-A	419			419			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	21	383	0.055	21	0.1	9.946	A
B-AD	33	297	0.110	33	0.1	13.606	B
A-BCD	60	523	0.115	60	0.1	8.158	A
A-B	40			40			
A-C	427			427			
D-AB	132	575	0.230	132	0.3	8.299	A
D-BC	48	350	0.138	48	0.2	12.307	B
C-ABD	17	535	0.032	17	0.0	7.367	A
C-D	40			40			
C-A	500			500			

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	26	329	0.080	26	0.1	11.894	B
B-AD	40	243	0.163	39	0.2	17.685	C
A-BCD	74	491	0.150	74	0.2	9.063	A
A-B	50			50			
A-C	523			523			
D-AB	163	516	0.315	162	0.5	10.373	B
D-BC	59	286	0.205	58	0.3	16.278	C
C-ABD	21	502	0.042	21	0.0	7.930	A
C-D	48			48			
C-A	612			612			

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	26	329	0.080	26	0.1	11.908	B
B-AD	40	242	0.163	40	0.2	17.755	C
A-BCD	74	490	0.150	74	0.2	9.070	A
A-B	50			50			
A-C	523			523			
D-AB	163	516	0.316	163	0.5	10.424	B
D-BC	58	286	0.205	58	0.3	16.344	C
C-ABD	21	502	0.042	21	0.0	7.931	A
C-D	48			48			
C-A	612			612			

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	21	383	0.055	21	0.1	9.966	A
B-AD	33	297	0.111	33	0.1	13.665	B
A-BCD	60	523	0.115	60	0.1	8.169	A
A-B	40			40			
A-C	427			427			
D-AB	132	574	0.230	133	0.3	8.347	A
D-BC	48	350	0.138	49	0.2	12.360	B
C-ABD	17	535	0.032	17	0.0	7.370	A
C-D	40			40			
C-A	500			500			

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	17	420	0.042	18	0.0	8.955	A
B-AD	28	336	0.082	28	0.1	11.689	B
A-BCD	50	547	0.092	51	0.1	7.613	A
A-B	34			34			
A-C	358			358			
D-AB	110	613	0.180	111	0.2	7.336	A
D-BC	41	395	0.104	41	0.1	10.515	B
C-ABD	14	559	0.026	14	0.0	7.009	A
C-D	33			33			
C-A	419			419			



# OY 2025 With Development, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.37	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	OY 2025 With Development	AM	ONE HOUR	06:45	08:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	792	100.000
B		✓	55	100.000
C		✓	565	100.000
D		✓	143	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	36	510	246	
	B	29	0	13	13	
	C	478	3	0	84	
	D	74	16	53	0	

## Vehicle Mix

### Heavy Vehicle Percentages

		To				
		A	B	C	D	
From	A	0	3	5	3	
	B	0	0	20	0	
	C	5	0	0	1	
	D	0	7	2	0	

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.07	12.79	0.1	B
B-AD	0.18	20.44	0.2	C
A-BCD	0.53	14.83	1.2	B
A-B				
A-C				
D-AB	0.20	9.64	0.2	A
D-BC	0.27	20.89	0.4	C
C-ABD	0.01	8.67	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	15	444	0.034	15	0.0	9.403	A
B-AD	26	318	0.083	26	0.1	12.314	B
A-BCD	186	561	0.331	184	0.5	9.782	A
A-B	27			27			
A-C	383			383			
D-AB	62	585	0.107	62	0.1	6.926	A
D-BC	45	373	0.121	45	0.1	11.225	B
C-ABD	2	503	0.004	2	0.0	7.189	A
C-D	63			63			
C-A	360			360			

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	402	0.045	18	0.1	10.501	B
B-AD	31	274	0.114	31	0.1	14.789	B
A-BCD	224	544	0.411	223	0.7	11.520	B
A-B	32			32			
A-C	456			456			
D-AB	75	543	0.138	75	0.2	7.746	A
D-BC	54	318	0.169	53	0.2	13.933	B
C-ABD	3	468	0.006	3	0.0	7.744	A
C-D	76			76			
C-A	430			430			

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	23	338	0.067	22	0.1	12.764	B
B-AD	38	215	0.177	38	0.2	20.298	C
A-BCD	286	536	0.533	284	1.2	14.625	B
A-B	39			39			
A-C	547			547			
D-AB	92	470	0.197	92	0.2	9.581	A
D-BC	65	242	0.268	64	0.4	20.666	C
C-ABD	3	419	0.008	3	0.0	8.652	A
C-D	92			92			
C-A	526			526			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	23	337	0.067	23	0.1	12.793	B
B-AD	38	214	0.177	38	0.2	20.437	C
A-BCD	286	536	0.533	286	1.2	14.835	B
A-B	39			39			
A-C	547			547			
D-AB	92	469	0.197	92	0.2	9.640	A
D-BC	65	242	0.269	65	0.4	20.885	C
C-ABD	3	419	0.008	3	0.0	8.666	A
C-D	92			92			
C-A	526			526			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	401	0.045	18	0.1	10.520	B
B-AD	31	274	0.115	32	0.1	14.896	B
A-BCD	224	544	0.411	226	0.7	11.718	B
A-B	32			32			
A-C	456			456			
D-AB	75	541	0.138	75	0.2	7.794	A
D-BC	54	317	0.169	54	0.2	14.077	B
C-ABD	3	466	0.006	3	0.0	7.763	A
C-D	76			76			
C-A	430			430			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	15	443	0.034	15	0.0	9.425	A
B-AD	26	317	0.083	27	0.1	12.395	B
A-BCD	186	561	0.331	187	0.5	9.935	A
A-B	27			27			
A-C	383			383			
D-AB	62	584	0.107	63	0.1	6.962	A
D-BC	45	372	0.122	46	0.1	11.322	B
C-ABD	2	502	0.005	2	0.0	7.206	A
C-D	63			63			
C-A	360			360			

# OY 2025 With Development, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		5.28	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	OY 2025 With Development	PM	ONE HOUR	16:45	18:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	587	100.000
B		✓	60	100.000
C		✓	619	100.000
D		✓	343	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	45	475	67
	B	25	0	10	25
	C	556	19	0	44
	D	228	31	84	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	2	5
	B	0	0	0	0
	C	2	6	0	0
	D	0	4	1	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.08	12.05	0.1	B
B-AD	0.18	20.46	0.2	C
A-BCD	0.15	9.07	0.2	A
A-B				
A-C				
D-AB	0.57	17.34	1.3	C
D-BC	0.42	25.32	0.7	D
C-ABD	0.04	7.93	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	419	0.042	17	0.0	8.950	A
B-AD	28	320	0.086	27	0.1	12.277	B
A-BCD	50	547	0.092	50	0.1	7.597	A
A-B	34			34			
A-C	358			358			
D-AB	185	611	0.303	183	0.4	8.410	A
D-BC	73	384	0.190	72	0.2	11.670	B
C-ABD	14	559	0.026	14	0.0	7.003	A
C-D	33			33			
C-A	419			419			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	21	382	0.056	21	0.1	9.983	A
B-AD	33	277	0.118	33	0.1	14.732	B
A-BCD	60	523	0.115	60	0.1	8.158	A
A-B	40			40			
A-C	427			427			
D-AB	222	564	0.393	221	0.6	10.496	B
D-BC	86	332	0.261	86	0.3	14.824	B
C-ABD	17	535	0.032	17	0.0	7.367	A
C-D	40			40			
C-A	500			500			

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	27	326	0.082	27	0.1	12.019	B
B-AD	39	216	0.182	39	0.2	20.295	C
A-BCD	74	491	0.150	74	0.2	9.063	A
A-B	50			50			
A-C	523			523			
D-AB	274	484	0.566	271	1.3	16.797	C
D-BC	104	249	0.417	103	0.7	24.651	C
C-ABD	21	502	0.042	21	0.0	7.930	A
C-D	48			48			
C-A	612			612			

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	27	326	0.082	27	0.1	12.045	B
B-AD	39	215	0.183	39	0.2	20.455	C
A-BCD	74	490	0.150	74	0.2	9.070	A
A-B	50			50			
A-C	523			523			
D-AB	274	481	0.568	274	1.3	17.340	C
D-BC	104	248	0.420	104	0.7	25.316	D
C-ABD	21	502	0.042	21	0.0	7.931	A
C-D	48			48			
C-A	612			612			

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	21	381	0.056	21	0.1	10.005	B
B-AD	33	276	0.119	33	0.1	14.853	B
A-BCD	60	523	0.115	60	0.1	8.170	A
A-B	40			40			
A-C	427			427			
D-AB	222	562	0.395	224	0.7	10.772	B
D-BC	86	330	0.261	88	0.4	15.112	C
C-ABD	17	535	0.032	17	0.0	7.370	A
C-D	40			40			
C-A	500			500			

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	419	0.042	18	0.0	8.970	A
B-AD	28	319	0.087	28	0.1	12.355	B
A-BCD	50	547	0.092	51	0.1	7.616	A
A-B	34			34			
A-C	358			358			
D-AB	185	610	0.304	186	0.4	8.541	A
D-BC	73	383	0.190	73	0.2	11.803	B
C-ABD	14	559	0.026	14	0.0	7.009	A
C-D	33			33			
C-A	419			419			

# 2025 Cumulative, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.50	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2025 Cumulative	AM	ONE HOUR	06:45	08:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	798	100.000
B		✓	55	100.000
C		✓	568	100.000
D		✓	144	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	36	510	252
	B	29	0	13	13
	C	478	3	0	87
	D	75	16	53	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	3	5	3
	B	0	0	20	0
	C	5	0	0	1
	D	0	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.07	12.88	0.1	B
B-AD	0.18	20.67	0.2	C
A-BCD	0.55	15.21	1.3	C
A-B				
A-C				
D-AB	0.20	9.71	0.3	A
D-BC	0.27	21.33	0.4	C
C-ABD	0.01	8.72	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	15	443	0.034	15	0.0	9.425	A
B-AD	26	317	0.083	26	0.1	12.370	B
A-BCD	190	561	0.340	188	0.5	9.907	A
A-B	27			27			
A-C	383			383			
D-AB	63	585	0.108	63	0.1	6.932	A
D-BC	45	370	0.122	45	0.1	11.317	B
C-ABD	2	501	0.005	2	0.0	7.214	A
C-D	65			65			
C-A	360			360			

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	401	0.045	18	0.1	10.540	B
B-AD	31	273	0.115	31	0.1	14.887	B
A-BCD	230	544	0.422	229	0.7	11.723	B
A-B	32			32			
A-C	456			456			
D-AB	76	542	0.140	76	0.2	7.763	A
D-BC	54	315	0.171	53	0.2	14.097	B
C-ABD	3	465	0.006	3	0.0	7.779	A
C-D	78			78			
C-A	430			430			



07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	23	336	0.067	22	0.1	12.851	B
B-AD	38	213	0.179	38	0.2	20.526	C
A-BCD	295	539	0.547	293	1.3	14.974	B
A-B	38			38			
A-C	545			545			
D-AB	94	469	0.200	93	0.2	9.645	A
D-BC	65	239	0.272	64	0.4	21.086	C
C-ABD	3	417	0.008	3	0.0	8.705	A
C-D	96			96			
C-A	526			526			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	23	335	0.067	23	0.1	12.883	B
B-AD	38	212	0.179	38	0.2	20.674	C
A-BCD	295	539	0.547	295	1.3	15.213	C
A-B	38			38			
A-C	545			545			
D-AB	94	467	0.200	94	0.3	9.708	A
D-BC	65	238	0.273	65	0.4	21.328	C
C-ABD	3	416	0.008	3	0.0	8.721	A
C-D	96			96			
C-A	526			526			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	400	0.045	18	0.1	10.563	B
B-AD	31	272	0.115	32	0.1	15.004	C
A-BCD	230	545	0.422	232	0.8	11.945	B
A-B	32			32			
A-C	456			456			
D-AB	76	541	0.140	76	0.2	7.812	A
D-BC	54	314	0.171	54	0.2	14.250	B
C-ABD	3	464	0.006	3	0.0	7.798	A
C-D	78			78			
C-A	430			430			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	15	442	0.034	15	0.0	9.449	A
B-AD	26	316	0.084	27	0.1	12.454	B
A-BCD	190	561	0.340	191	0.5	10.070	B
A-B	27			27			
A-C	383			383			
D-AB	63	584	0.108	63	0.1	6.969	A
D-BC	45	369	0.123	46	0.1	11.417	B
C-ABD	2	500	0.005	2	0.0	7.234	A
C-D	65			65			
C-A	360			360			

# 2025 Cumulative, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		5.71	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2025 Cumulative	PM	ONE HOUR	16:45	18:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	587	100.000
B		✓	60	100.000
C		✓	619	100.000
D		✓	355	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	45	475	67
	B	25	0	10	25
	C	556	19	0	44
	D	236	31	88	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	2	5
	B	0	0	0	0
	C	2	6	0	0
	D	0	4	1	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.08	12.06	0.1	B
B-AD	0.18	20.74	0.2	C
A-BCD	0.15	9.07	0.2	A
A-B				
A-C				
D-AB	0.59	18.68	1.4	C
D-BC	0.45	27.06	0.8	D
C-ABD	0.04	7.93	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	419	0.042	17	0.0	8.951	A
B-AD	28	319	0.087	27	0.1	12.336	B
A-BCD	50	547	0.092	50	0.1	7.597	A
A-B	34			34			
A-C	358			358			
D-AB	191	610	0.314	189	0.5	8.554	A
D-BC	76	383	0.198	75	0.2	11.816	B
C-ABD	14	559	0.026	14	0.0	7.003	A
C-D	33			33			
C-A	419			419			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	21	382	0.056	21	0.1	9.987	A
B-AD	33	275	0.119	33	0.1	14.838	B
A-BCD	60	523	0.115	60	0.1	8.158	A
A-B	40			40			
A-C	427			427			
D-AB	229	562	0.408	228	0.7	10.799	B
D-BC	90	330	0.273	89	0.4	15.164	C
C-ABD	17	535	0.032	17	0.0	7.367	A
C-D	40			40			
C-A	500			500			

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	27	326	0.082	27	0.1	12.032	B
B-AD	39	214	0.184	39	0.2	20.560	C
A-BCD	74	491	0.150	74	0.2	9.063	A
A-B	50			50			
A-C	523			523			
D-AB	283	478	0.591	280	1.4	17.960	C
D-BC	108	244	0.443	107	0.8	26.179	D
C-ABD	21	502	0.042	21	0.0	7.930	A
C-D	48			48			
C-A	612			612			

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	27	325	0.082	27	0.1	12.060	B
B-AD	39	213	0.185	39	0.2	20.737	C
A-BCD	74	490	0.150	74	0.2	9.070	A
A-B	50			50			
A-C	523			523			
D-AB	283	475	0.595	283	1.4	18.676	C
D-BC	108	243	0.446	108	0.8	27.057	D
C-ABD	21	502	0.042	21	0.0	7.931	A
C-D	48			48			
C-A	612			612			

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	21	381	0.056	21	0.1	10.009	B
B-AD	33	274	0.119	33	0.1	14.966	B
A-BCD	60	523	0.115	60	0.1	8.170	A
A-B	40			40			
A-C	427			427			
D-AB	229	559	0.410	232	0.7	11.134	B
D-BC	90	328	0.274	91	0.4	15.510	C
C-ABD	17	535	0.032	17	0.0	7.370	A
C-D	40			40			
C-A	500			500			

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	419	0.042	18	0.0	8.972	A
B-AD	28	318	0.087	28	0.1	12.417	B
A-BCD	50	547	0.092	51	0.1	7.616	A
A-B	34			34			
A-C	358			358			
D-AB	191	608	0.315	192	0.5	8.698	A
D-BC	76	382	0.199	76	0.3	11.963	B
C-ABD	14	559	0.026	14	0.0	7.009	A
C-D	33			33			
C-A	419			419			

## O.2. Network Peak Hour

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
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**Filename:** GallowField\_CrossRoads\_PICADY\_v0.4.j9

**Path:** P:\GBBMA\HandT\CS\Projects\5200124-MACE\_Prisoners\_ROGE6351\05\_Technical\6\_Raven\Junction  
Models\01\_GallowFieldCrossRoads

**Report generation date:** 14/07/2021 11:00:23

- 
- »2021 Baseline, AM
  - »2021 Baseline, PM
  - »OY 2025 Without Development, AM
  - »OY 2025 Without Development, PM
  - »OY 2025 With Development, AM
  - »OY 2025 With Development, PM
  - »2025 Cumulative, AM
  - »2025 Cumulative, PM

## Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
<b>2021 Baseline</b>								
Stream B-CD	0.1	11.20	0.07	B	0.1	11.46	0.08	B
Stream B-AD	0.2	18.00	0.16	C	0.3	16.96	0.20	C
Stream A-BCD	0.2	8.66	0.18	A	0.2	9.00	0.16	A
Stream D-AB	0.3	9.74	0.21	A	0.4	10.09	0.31	B
Stream D-BC	0.2	14.79	0.19	B	0.3	15.83	0.20	C
Stream C-ABD	0.0	10.06	0.02	B	0.0	6.97	0.01	A
<b>OY 2025 Without Development</b>								
Stream B-CD	0.1	12.12	0.08	B	0.1	12.40	0.10	B
Stream B-AD	0.2	20.46	0.19	C	0.3	19.14	0.23	C
Stream A-BCD	0.3	9.01	0.20	A	0.2	9.43	0.18	A
Stream D-AB	0.3	10.75	0.24	B	0.5	11.21	0.35	B
Stream D-BC	0.3	16.93	0.22	C	0.3	18.04	0.24	C
Stream C-ABD	0.0	10.46	0.03	B	0.0	7.14	0.02	A
<b>OY 2025 With Development</b>								
Stream B-CD	0.1	12.76	0.09	B	0.1	12.67	0.10	B
Stream B-AD	0.2	22.19	0.20	C	0.3	20.38	0.25	C
Stream A-BCD	0.4	10.26	0.30	B	0.3	9.74	0.21	A
Stream D-AB	0.3	11.41	0.25	B	0.7	12.72	0.42	B
Stream D-BC	0.3	19.07	0.24	C	0.4	20.64	0.30	C
Stream C-ABD	0.0	10.97	0.03	B	0.0	7.22	0.02	A
<b>2025 Cumulative</b>								
Stream B-CD	0.1	12.82	0.09	B	0.1	12.72	0.10	B
Stream B-AD	0.2	22.35	0.20	C	0.3	20.55	0.25	C
Stream A-BCD	0.5	10.40	0.31	B	0.3	9.83	0.21	A
Stream D-AB	0.4	11.47	0.25	B	0.7	12.91	0.42	B
Stream D-BC	0.3	19.28	0.24	C	0.5	21.01	0.30	C
Stream C-ABD	0.0	11.02	0.03	B	0.0	7.24	0.02	A

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

## File summary

### File Description

<b>Title</b>	Raven
<b>Location</b>	B6047 Harborough Road / Leicester Lane / Gallow Field Road
<b>Site number</b>	
<b>Date</b>	12/04/2021
<b>Version</b>	V0.1
<b>Status</b>	(new file)
<b>Identifier</b>	CR
<b>Client</b>	MACE (on behalf of MoJ)
<b>Jobnumber</b>	5200124
<b>Enumerator</b>	WSATKINSICART5172
<b>Description</b>	

## Units

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

### Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

### Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	07:45	09:15	15
D2	2021 Baseline	PM	ONE HOUR	15:45	17:15	15
D3	OY 2025 Without Development	AM	ONE HOUR	07:45	09:15	15
D4	OY 2025 Without Development	PM	ONE HOUR	15:45	17:15	15
D5	OY 2025 With Development	AM	ONE HOUR	07:45	09:15	15
D6	OY 2025 With Development	PM	ONE HOUR	15:45	17:15	15
D7	2025 Cumulative	AM	ONE HOUR	07:45	09:15	15
D8	2025 Cumulative	PM	ONE HOUR	15:45	17:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000



# 2021 Baseline, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.42	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	B6047 Harborough Road (North)		Major
B	Leicester Lane		Minor
C	B6047 Harborough Road (South)		Major
D	Gallow Field Road		Minor

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.00		✓	3.00	72.6	✓	5.00
C	6.00		✓	3.00	91.0	✓	5.00

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

### Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	4.70	3.70	3.30	3.30	✓	1.00	28	30
D	One lane plus flare	10.00	7.40	4.50	3.50	3.50	✓	1.00	190	140

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	670	-	-	-	-	-	-	0.259	0.371	0.259	-	-	-
1	B-A	535	0.097	0.246	0.246	-	-	-	0.155	0.352	-	0.246	0.246	0.123
1	B-C	686	0.105	0.266	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	535	0.097	0.246	0.246	-	-	-	0.155	0.352	0.155	-	-	-
1	B-D, offside lane	535	0.097	0.246	0.246	-	-	-	0.155	0.352	0.155	-	-	-
1	C-B	681	0.264	0.264	0.377	-	-	-	-	-	-	-	-	-
1	D-A	761	-	-	-	-	-	-	0.295	-	0.117	-	-	-
1	D-B, nearside lane	656	0.190	0.190	0.431	-	-	-	0.302	0.302	0.119	-	-	-
1	D-B, offside lane	651	0.189	0.189	0.428	-	-	-	0.300	0.300	0.119	-	-	-
1	D-C	651	-	0.189	0.428	0.150	0.300	0.300	0.300	0.300	0.119	-	-	-

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

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

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

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	07:45	09:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	729	100.000
B		✓	58	100.000
C		✓	495	100.000
D		✓	149	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	60	583	86	
	B	28	0	15	15	
	C	436	10	0	49	
	D	76	32	41	0	

## Vehicle Mix

### Heavy Vehicle Percentages

		To				
		A	B	C	D	
From	A	0	2	3	4	
	B	0	0	7	0	
	C	8	25	0	2	
	D	7	0	8	0	

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.07	11.20	0.1	B
B-AD	0.16	18.00	0.2	C
A-BCD	0.18	8.66	0.2	A
A-B				
A-C				
D-AB	0.21	9.74	0.3	A
D-BC	0.19	14.79	0.2	B
C-ABD	0.02	10.06	0.0	B
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	17	455	0.038	17	0.0	8.593	A
B-AD	26	333	0.079	26	0.1	11.721	B
A-BCD	65	572	0.113	64	0.1	7.363	A
A-B	45			45			
A-C	439			439			
D-AB	70	585	0.120	70	0.1	7.365	A
D-BC	42	425	0.099	42	0.1	9.909	A
C-ABD	8	529	0.014	7	0.0	8.626	A
C-D	37			37			
C-A	328			328			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	21	417	0.050	21	0.1	9.485	A
B-AD	31	293	0.107	31	0.1	13.741	B
A-BCD	77	553	0.140	77	0.2	7.862	A
A-B	54			54			
A-C	524			524			
D-AB	84	549	0.153	84	0.2	8.164	A
D-BC	50	380	0.131	50	0.2	11.505	B
C-ABD	9	499	0.018	9	0.0	9.177	A
C-D	44			44			
C-A	392			392			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	26	362	0.072	26	0.1	11.188	B
B-AD	38	238	0.160	38	0.2	17.937	C
A-BCD	95	527	0.180	94	0.2	8.648	A
A-B	66			66			
A-C	642			642			
D-AB	104	494	0.210	103	0.3	9.716	A
D-BC	60	318	0.189	60	0.2	14.740	B
C-ABD	11	458	0.024	11	0.0	10.057	B
C-D	54			54			
C-A	480			480			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	26	361	0.072	26	0.1	11.201	B
B-AD	38	238	0.160	38	0.2	18.003	C
A-BCD	95	527	0.180	95	0.2	8.657	A
A-B	66			66			
A-C	642			642			
D-AB	104	494	0.210	104	0.3	9.742	A
D-BC	60	318	0.190	60	0.2	14.792	B
C-ABD	11	458	0.024	11	0.0	10.059	B
C-D	54			54			
C-A	480			480			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	21	417	0.050	21	0.1	9.497	A
B-AD	31	293	0.107	32	0.1	13.798	B
A-BCD	77	553	0.140	78	0.2	7.874	A
A-B	54			54			
A-C	524			524			
D-AB	84	549	0.153	84	0.2	8.189	A
D-BC	50	380	0.131	50	0.2	11.556	B
C-ABD	9	499	0.018	9	0.0	9.182	A
C-D	44			44			
C-A	392			392			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	17	454	0.038	17	0.0	8.606	A
B-AD	26	332	0.079	26	0.1	11.776	B
A-BCD	65	572	0.113	65	0.1	7.385	A
A-B	45			45			
A-C	439			439			
D-AB	70	585	0.120	70	0.1	7.396	A
D-BC	42	425	0.099	42	0.1	9.957	A
C-ABD	8	529	0.014	8	0.0	8.635	A
C-D	37			37			
C-A	328			328			

# 2021 Baseline, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

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

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Baseline	PM	ONE HOUR	15:45	17:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	509	100.000
B		✓	74	100.000
C		✓	626	100.000
D		✓	202	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	40	398	71	
	B	38	0	10	26	
	C	547	7	0	72	
	D	130	28	44	0	

## Vehicle Mix

### Heavy Vehicle Percentages

		To				
		A	B	C	D	
From	A	0	0	4	3	
	B	0	0	0	0	
	C	3	0	0	1	
	D	2	0	7	0	

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.08	11.46	0.1	B
B-AD	0.20	16.96	0.3	C
A-BCD	0.16	9.00	0.2	A
A-B				
A-C				
D-AB	0.31	10.09	0.4	B
D-BC	0.20	15.83	0.3	C
C-ABD	0.01	6.97	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	428	0.042	18	0.0	8.768	A
B-AD	38	353	0.107	37	0.1	11.383	B
A-BCD	53	547	0.098	53	0.1	7.503	A
A-B	30			30			
A-C	300			300			
D-AB	109	617	0.177	108	0.2	7.187	A
D-BC	43	406	0.106	42	0.1	10.420	B
C-ABD	5	574	0.009	5	0.0	6.328	A
C-D	54			54			
C-A	412			412			

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	22	393	0.056	22	0.1	9.691	A
B-AD	45	317	0.141	44	0.2	13.220	B
A-BCD	64	523	0.122	64	0.1	8.073	A
A-B	36			36			
A-C	358			358			
D-AB	131	580	0.225	131	0.3	8.140	A
D-BC	51	363	0.140	51	0.2	12.145	B
C-ABD	6	553	0.011	6	0.0	6.583	A
C-D	65			65			
C-A	492			492			

**16:15 - 16:30**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	342	0.081	28	0.1	11.437	B
B-AD	54	266	0.202	53	0.2	16.897	C
A-BCD	78	490	0.160	78	0.2	8.994	A
A-B	44			44			
A-C	438			438			
D-AB	161	525	0.307	160	0.4	10.045	B
D-BC	61	301	0.204	61	0.3	15.765	C
C-ABD	8	524	0.015	8	0.0	6.968	A
C-D	79			79			
C-A	602			602			

**16:30 - 16:45**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	342	0.081	28	0.1	11.456	B
B-AD	54	266	0.202	54	0.3	16.962	C
A-BCD	78	490	0.160	78	0.2	9.003	A
A-B	44			44			
A-C	438			438			
D-AB	161	524	0.307	161	0.4	10.090	B
D-BC	61	301	0.204	61	0.3	15.834	C
C-ABD	8	524	0.015	8	0.0	6.969	A
C-D	79			79			
C-A	602			602			

**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	22	393	0.056	22	0.1	9.712	A
B-AD	45	316	0.141	45	0.2	13.284	B
A-BCD	64	523	0.122	64	0.1	8.083	A
A-B	36			36			
A-C	358			358			
D-AB	131	580	0.226	131	0.3	8.183	A
D-BC	51	362	0.140	51	0.2	12.207	B
C-ABD	6	553	0.011	6	0.0	6.585	A
C-D	65			65			
C-A	492			492			

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	18	428	0.042	18	0.0	8.789	A
B-AD	38	352	0.107	38	0.1	11.447	B
A-BCD	53	547	0.098	54	0.1	7.522	A
A-B	30			30			
A-C	300			300			
D-AB	109	617	0.177	110	0.2	7.227	A
D-BC	43	405	0.106	43	0.1	10.471	B
C-ABD	5	574	0.009	5	0.0	6.333	A
C-D	54			54			
C-A	412			412			

# OY 2025 Without Development, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.66	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	OY 2025 Without Development	AM	ONE HOUR	07:45	09:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	781	100.000
B		✓	62	100.000
C		✓	531	100.000
D		✓	159	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	64	625	92
	B	30	0	16	16
	C	467	11	0	53
	D	81	34	44	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	2	3	4
	B	0	0	7	0
	C	8	25	0	0
	D	7	7	8	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.08	12.12	0.1	B
B-AD	0.19	20.46	0.2	C
A-BCD	0.20	9.01	0.3	A
A-B				
A-C				
D-AB	0.24	10.75	0.3	B
D-BC	0.22	16.93	0.3	C
C-ABD	0.03	10.46	0.0	B
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	19	441	0.042	18	0.0	8.891	A
B-AD	28	318	0.089	28	0.1	12.375	B
A-BCD	69	565	0.123	69	0.1	7.536	A
A-B	48			48			
A-C	471			471			
D-AB	75	573	0.131	74	0.2	7.719	A
D-BC	45	409	0.110	44	0.1	10.624	B
C-ABD	8	518	0.016	8	0.0	8.822	A
C-D	40			40			
C-A	352			352			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	22	400	0.056	22	0.1	9.953	A
B-AD	33	276	0.121	33	0.1	14.847	B
A-BCD	83	545	0.152	83	0.2	8.098	A
A-B	58			58			
A-C	562			562			
D-AB	90	533	0.169	90	0.2	8.686	A
D-BC	53	361	0.147	53	0.2	12.591	B
C-ABD	10	486	0.020	10	0.0	9.444	A
C-D	48			48			
C-A	420			420			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	338	0.082	28	0.1	12.103	B
B-AD	40	217	0.187	40	0.2	20.353	C
A-BCD	101	517	0.196	101	0.3	8.999	A
A-B	70			70			
A-C	688			688			
D-AB	111	470	0.236	111	0.3	10.704	B
D-BC	64	293	0.218	64	0.3	16.851	C
C-ABD	12	443	0.027	12	0.0	10.454	B
C-D	58			58			
C-A	514			514			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	338	0.082	28	0.1	12.123	B
B-AD	40	216	0.187	40	0.2	20.458	C
A-BCD	101	517	0.196	101	0.3	9.010	A
A-B	70			70			
A-C	688			688			
D-AB	111	469	0.236	111	0.3	10.746	B
D-BC	64	293	0.219	64	0.3	16.935	C
C-ABD	12	442	0.027	12	0.0	10.456	B
C-D	58			58			
C-A	514			514			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	22	399	0.056	22	0.1	9.968	A
B-AD	33	275	0.121	34	0.1	14.931	B
A-BCD	83	545	0.152	83	0.2	8.112	A
A-B	58			58			
A-C	562			562			
D-AB	90	532	0.169	90	0.2	8.728	A
D-BC	53	361	0.147	54	0.2	12.656	B
C-ABD	10	486	0.020	10	0.0	9.450	A
C-D	48			48			
C-A	420			420			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	19	441	0.042	19	0.0	8.908	A
B-AD	28	318	0.089	28	0.1	12.445	B
A-BCD	69	565	0.123	69	0.1	7.559	A
A-B	48			48			
A-C	471			471			
D-AB	75	572	0.131	75	0.2	7.756	A
D-BC	45	409	0.110	45	0.1	10.679	B
C-ABD	8	518	0.016	8	0.0	8.830	A
C-D	40			40			
C-A	352			352			

# OY 2025 Without Development, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.27	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	OY 2025 Without Development	PM	ONE HOUR	15:45	17:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	546	100.000
B		✓	80	100.000
C		✓	672	100.000
D		✓	216	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	43	427	76
	B	41	0	11	28
	C	587	8	0	77
	D	139	30	47	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	4	3
	B	0	0	0	0
	C	3	0	0	1
	D	2	0	7	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.10	12.40	0.1	B
B-AD	0.23	19.14	0.3	C
A-BCD	0.18	9.43	0.2	A
A-B				
A-C				
D-AB	0.35	11.21	0.5	B
D-BC	0.24	18.04	0.3	C
C-ABD	0.02	7.14	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	20	416	0.048	20	0.0	9.066	A
B-AD	40	339	0.119	40	0.1	12.006	B
A-BCD	57	538	0.106	57	0.1	7.701	A
A-B	32			32			
A-C	321			321			
D-AB	117	604	0.194	116	0.2	7.492	A
D-BC	46	390	0.117	45	0.1	10.988	B
C-ABD	6	566	0.011	6	0.0	6.425	A
C-D	58			58			
C-A	442			442			

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	24	378	0.064	24	0.1	10.163	B
B-AD	48	300	0.159	48	0.2	14.245	B
A-BCD	68	512	0.133	68	0.2	8.350	A
A-B	39			39			
A-C	384			384			
D-AB	140	563	0.249	140	0.3	8.650	A
D-BC	54	343	0.158	54	0.2	13.108	B
C-ABD	7	544	0.013	7	0.0	6.708	A
C-D	69			69			
C-A	528			528			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	30	321	0.095	30	0.1	12.365	B
B-AD	58	246	0.234	57	0.3	19.030	C
A-BCD	84	477	0.176	83	0.2	9.421	A
A-B	47			47			
A-C	470			470			
D-AB	173	500	0.345	172	0.5	11.140	B
D-BC	65	276	0.236	65	0.3	17.928	C
C-ABD	9	513	0.017	9	0.0	7.141	A
C-D	85			85			
C-A	646			646			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	31	321	0.095	31	0.1	12.398	B
B-AD	58	246	0.234	58	0.3	19.141	C
A-BCD	84	477	0.176	84	0.2	9.432	A
A-B	47			47			
A-C	470			470			
D-AB	173	499	0.346	173	0.5	11.211	B
D-BC	65	276	0.237	65	0.3	18.042	C
C-ABD	9	513	0.017	9	0.0	7.142	A
C-D	85			85			
C-A	646			646			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	24	377	0.064	24	0.1	10.194	B
B-AD	48	300	0.160	48	0.2	14.337	B
A-BCD	68	512	0.133	69	0.2	8.365	A
A-B	39			39			
A-C	384			384			
D-AB	140	562	0.249	141	0.3	8.710	A
D-BC	54	343	0.158	55	0.2	13.197	B
C-ABD	7	544	0.013	7	0.0	6.713	A
C-D	69			69			
C-A	528			528			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	20	416	0.048	20	0.1	9.095	A
B-AD	40	339	0.119	41	0.1	12.082	B
A-BCD	57	538	0.106	57	0.1	7.723	A
A-B	32			32			
A-C	321			321			
D-AB	117	603	0.194	117	0.2	7.550	A
D-BC	46	389	0.117	46	0.1	11.052	B
C-ABD	6	566	0.011	6	0.0	6.430	A
C-D	58			58			
C-A	442			442			

# OY 2025 With Development, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.10	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	OY 2025 With Development	AM	ONE HOUR	07:45	09:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	829	100.000
B		✓	62	100.000
C		✓	552	100.000
D		✓	159	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	64	625	140	
	B	30	0	16	16	
	C	467	11	0	74	
	D	81	34	44	0	

## Vehicle Mix

### Heavy Vehicle Percentages

		To				
		A	B	C	D	
From	A	0	2	3	2	
	B	0	0	7	0	
	C	8	25	0	0	
	D	7	7	8	0	

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.09	12.76	0.1	B
B-AD	0.20	22.19	0.2	C
A-BCD	0.30	10.26	0.4	B
A-B				
A-C				
D-AB	0.25	11.41	0.3	B
D-BC	0.24	19.07	0.3	C
C-ABD	0.03	10.97	0.0	B
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	19	433	0.043	18	0.0	9.055	A
B-AD	28	309	0.091	28	0.1	12.785	B
A-BCD	105	561	0.188	104	0.2	8.027	A
A-B	48			48			
A-C	471			471			
D-AB	75	564	0.133	74	0.2	7.856	A
D-BC	45	392	0.115	44	0.1	11.169	B
C-ABD	8	505	0.016	8	0.0	9.065	A
C-D	56			56			
C-A	352			352			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	22	390	0.057	22	0.1	10.232	B
B-AD	33	264	0.126	33	0.1	15.565	C
A-BCD	126	540	0.233	126	0.3	8.851	A
A-B	58			58			
A-C	562			562			
D-AB	90	520	0.173	90	0.2	8.937	A
D-BC	53	340	0.156	53	0.2	13.503	B
C-ABD	10	470	0.021	10	0.0	9.781	A
C-D	67			67			
C-A	420			420			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	323	0.086	28	0.1	12.733	B
B-AD	40	203	0.199	40	0.2	22.050	C
A-BCD	155	513	0.302	154	0.4	10.231	B
A-B	70			70			
A-C	688			688			
D-AB	111	450	0.247	111	0.3	11.344	B
D-BC	64	267	0.239	63	0.3	18.951	C
C-ABD	12	422	0.029	12	0.0	10.964	B
C-D	81			81			
C-A	514			514			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	322	0.087	28	0.1	12.760	B
B-AD	40	202	0.199	40	0.2	22.194	C
A-BCD	155	513	0.302	155	0.4	10.259	B
A-B	70			70			
A-C	688			688			
D-AB	111	449	0.248	111	0.3	11.406	B
D-BC	64	267	0.239	64	0.3	19.074	C
C-ABD	12	422	0.029	12	0.0	10.972	B
C-D	81			81			
C-A	514			514			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	22	389	0.057	22	0.1	10.252	B
B-AD	33	264	0.127	34	0.1	15.674	C
A-BCD	126	540	0.233	126	0.3	8.887	A
A-B	58			58			
A-C	562			562			
D-AB	90	519	0.173	90	0.2	8.989	A
D-BC	53	339	0.156	54	0.2	13.595	B
C-ABD	10	470	0.021	10	0.0	9.789	A
C-D	67			67			
C-A	420			420			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	19	433	0.043	19	0.0	9.077	A
B-AD	28	308	0.091	28	0.1	12.868	B
A-BCD	105	561	0.188	106	0.2	8.072	A
A-B	48			48			
A-C	471			471			
D-AB	75	563	0.133	75	0.2	7.901	A
D-BC	45	391	0.115	45	0.1	11.220	B
C-ABD	8	504	0.016	8	0.0	9.078	A
C-D	56			56			
C-A	352			352			



# OY 2025 With Development, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.92	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	OY 2025 With Development	PM	ONE HOUR	15:45	17:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	559	100.000
B		✓	80	100.000
C		✓	678	100.000
D		✓	255	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	43	427	89
	B	41	0	11	28
	C	587	8	0	83
	D	166	30	59	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	4	2
	B	0	0	0	0
	C	3	0	0	1
	D	1	0	6	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.10	12.67	0.1	B
B-AD	0.25	20.38	0.3	C
A-BCD	0.21	9.74	0.3	A
A-B				
A-C				
D-AB	0.42	12.72	0.7	B
D-BC	0.30	20.64	0.4	C
C-ABD	0.02	7.22	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	20	414	0.048	20	0.0	9.134	A
B-AD	40	332	0.122	40	0.1	12.309	B
A-BCD	67	537	0.125	66	0.1	7.801	A
A-B	32			32			
A-C	321			321			
D-AB	138	603	0.228	136	0.3	7.765	A
D-BC	54	382	0.142	54	0.2	11.468	B
C-ABD	6	563	0.011	6	0.0	6.467	A
C-D	62			62			
C-A	442			442			

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	24	374	0.065	24	0.1	10.280	B
B-AD	48	291	0.164	48	0.2	14.772	B
A-BCD	80	511	0.157	80	0.2	8.518	A
A-B	39			39			
A-C	384			384			
D-AB	165	560	0.295	164	0.4	9.182	A
D-BC	64	333	0.193	64	0.2	14.019	B
C-ABD	7	539	0.013	7	0.0	6.764	A
C-D	75			75			
C-A	528			528			

**16:15 - 16:30**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	31	315	0.097	30	0.1	12.629	B
B-AD	57	234	0.245	57	0.3	20.233	C
A-BCD	98	475	0.206	98	0.3	9.720	A
A-B	47			47			
A-C	470			470			
D-AB	203	490	0.415	202	0.7	12.581	B
D-BC	78	261	0.297	77	0.4	20.420	C
C-ABD	9	507	0.017	9	0.0	7.219	A
C-D	91			91			
C-A	646			646			

**16:30 - 16:45**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	31	315	0.097	31	0.1	12.668	B
B-AD	57	234	0.245	57	0.3	20.381	C
A-BCD	98	475	0.206	98	0.3	9.735	A
A-B	47			47			
A-C	470			470			
D-AB	203	489	0.416	203	0.7	12.722	B
D-BC	78	261	0.298	77	0.4	20.639	C
C-ABD	9	507	0.017	9	0.0	7.220	A
C-D	91			91			
C-A	646			646			

**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	24	373	0.065	24	0.1	10.317	B
B-AD	48	290	0.164	48	0.2	14.888	B
A-BCD	80	511	0.157	80	0.2	8.538	A
A-B	39			39			
A-C	384			384			
D-AB	165	558	0.295	166	0.4	9.282	A
D-BC	64	333	0.194	65	0.3	14.163	B
C-ABD	7	539	0.013	7	0.0	6.767	A
C-D	75			75			
C-A	528			528			

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	20	413	0.048	20	0.1	9.163	A
B-AD	40	331	0.122	41	0.1	12.400	B
A-BCD	67	537	0.125	67	0.1	7.827	A
A-B	32			32			
A-C	321			321			
D-AB	138	602	0.229	138	0.3	7.836	A
D-BC	54	382	0.142	55	0.2	11.558	B
C-ABD	6	562	0.011	6	0.0	6.473	A
C-D	62			62			
C-A	442			442			

# 2025 Cumulative, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.14	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2025 Cumulative	AM	ONE HOUR	07:45	09:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	833	100.000
B		✓	62	100.000
C		✓	554	100.000
D		✓	159	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	64	625	144
	B	30	0	16	16
	C	467	11	0	76
	D	81	34	44	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	2	3	2
	B	0	0	7	0
	C	8	25	0	0
	D	7	7	8	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.09	12.82	0.1	B
B-AD	0.20	22.35	0.2	C
A-BCD	0.31	10.40	0.5	B
A-B				
A-C				
D-AB	0.25	11.47	0.4	B
D-BC	0.24	19.28	0.3	C
C-ABD	0.03	11.02	0.0	B
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	19	433	0.043	18	0.0	9.069	A
B-AD	28	308	0.091	28	0.1	12.820	B
A-BCD	108	561	0.193	107	0.2	8.086	A
A-B	48			48			
A-C	471			471			
D-AB	75	563	0.133	74	0.2	7.868	A
D-BC	45	390	0.115	44	0.1	11.182	B
C-ABD	8	503	0.016	8	0.0	9.085	A
C-D	57			57			
C-A	352			352			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	22	389	0.057	22	0.1	10.258	B
B-AD	33	263	0.127	33	0.1	15.640	C
A-BCD	130	540	0.240	129	0.3	8.937	A
A-B	58			58			
A-C	562			562			
D-AB	90	519	0.173	90	0.2	8.960	A
D-BC	53	338	0.157	53	0.2	13.586	B
C-ABD	10	469	0.021	10	0.0	9.810	A
C-D	68			68			
C-A	420			420			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	321	0.087	28	0.1	12.792	B
B-AD	40	202	0.200	40	0.2	22.204	C
A-BCD	159	512	0.311	159	0.5	10.367	B
A-B	70			70			
A-C	687			687			
D-AB	111	448	0.248	111	0.3	11.407	B
D-BC	64	265	0.240	63	0.3	19.151	C
C-ABD	12	421	0.029	12	0.0	11.009	B
C-D	84			84			
C-A	514			514			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	321	0.087	28	0.1	12.820	B
B-AD	40	201	0.200	40	0.2	22.354	C
A-BCD	159	512	0.311	159	0.5	10.398	B
A-B	70			70			
A-C	687			687			
D-AB	111	447	0.249	111	0.4	11.471	B
D-BC	64	265	0.241	64	0.3	19.281	C
C-ABD	12	421	0.029	12	0.0	11.017	B
C-D	84			84			
C-A	514			514			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	22	388	0.058	22	0.1	10.277	B
B-AD	33	263	0.127	34	0.1	15.740	C
A-BCD	130	540	0.240	130	0.3	8.973	A
A-B	58			58			
A-C	562			562			
D-AB	90	518	0.174	90	0.2	9.012	A
D-BC	53	338	0.157	54	0.2	13.681	B
C-ABD	10	468	0.021	10	0.0	9.819	A
C-D	68			68			
C-A	420			420			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	19	432	0.043	19	0.0	9.090	A
B-AD	28	308	0.092	28	0.1	12.905	B
A-BCD	108	561	0.193	109	0.2	8.133	A
A-B	48			48			
A-C	471			471			
D-AB	75	562	0.133	75	0.2	7.914	A
D-BC	45	389	0.115	45	0.1	11.271	B
C-ABD	8	503	0.016	8	0.0	9.097	A
C-D	57			57			
C-A	352			352			

# 2025 Cumulative, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.00	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2025 Cumulative	PM	ONE HOUR	15:45	17:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	562	100.000
B		✓	80	100.000
C		✓	679	100.000
D		✓	258	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	43	427	92
	B	41	0	11	28
	C	587	8	0	84
	D	168	30	60	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	4	2
	B	0	0	0	0
	C	3	0	0	1
	D	1	0	6	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.10	12.72	0.1	B
B-AD	0.25	20.55	0.3	C
A-BCD	0.21	9.83	0.3	A
A-B				
A-C				
D-AB	0.42	12.91	0.7	B
D-BC	0.30	21.01	0.5	C
C-ABD	0.02	7.24	0.0	A
C-D				
C-A				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	20	413	0.048	20	0.0	9.148	A
B-AD	40	331	0.122	40	0.1	12.349	B
A-BCD	69	536	0.129	69	0.1	7.842	A
A-B	32			32			
A-C	321			321			
D-AB	139	603	0.231	138	0.3	7.796	A
D-BC	55	381	0.145	54	0.2	11.537	B
C-ABD	6	562	0.011	6	0.0	6.477	A
C-D	63			63			
C-A	442			442			

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	24	373	0.065	24	0.1	10.304	B
B-AD	48	290	0.165	48	0.2	14.843	B
A-BCD	83	511	0.162	83	0.2	8.576	A
A-B	39			39			
A-C	384			384			
D-AB	167	559	0.298	166	0.4	9.243	A
D-BC	65	332	0.197	65	0.3	14.145	B
C-ABD	7	538	0.013	7	0.0	6.777	A
C-D	76			76			
C-A	528			528			



**16:15 - 16:30**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	31	314	0.098	31	0.1	12.680	B
B-AD	57	233	0.247	57	0.3	20.396	C
A-BCD	101	475	0.213	101	0.3	9.813	A
A-B	47			47			
A-C	470			470			
D-AB	205	488	0.421	204	0.7	12.758	B
D-BC	79	259	0.304	78	0.4	20.776	C
C-ABD	9	506	0.017	9	0.0	7.237	A
C-D	92			92			
C-A	646			646			

**16:30 - 16:45**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	31	314	0.098	31	0.1	12.719	B
B-AD	57	232	0.247	57	0.3	20.550	C
A-BCD	101	475	0.213	101	0.3	9.828	A
A-B	47			47			
A-C	470			470			
D-AB	206	487	0.422	205	0.7	12.908	B
D-BC	79	258	0.304	79	0.5	21.014	C
C-ABD	9	506	0.017	9	0.0	7.239	A
C-D	92			92			
C-A	646			646			

**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	24	373	0.065	24	0.1	10.339	B
B-AD	48	289	0.165	48	0.2	14.965	B
A-BCD	83	511	0.162	83	0.2	8.595	A
A-B	39			39			
A-C	384			384			
D-AB	167	557	0.299	168	0.4	9.350	A
D-BC	65	331	0.197	66	0.3	14.296	B
C-ABD	7	538	0.013	7	0.0	6.783	A
C-D	76			76			
C-A	528			528			

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	20	412	0.048	20	0.1	9.178	A
B-AD	40	330	0.122	41	0.1	12.440	B
A-BCD	69	536	0.129	69	0.2	7.869	A
A-B	32			32			
A-C	321			321			
D-AB	139	602	0.231	140	0.3	7.873	A
D-BC	55	380	0.145	55	0.2	11.630	B
C-ABD	6	561	0.011	6	0.0	6.483	A
C-D	63			63			
C-A	442			442			

# Appendix P. A4304 / Foxtan Road Junction Model Outputs

## P.1. Development Peak Hour

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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**Filename:** FoxtonRd\_A4304\_PICADY\_devpeakv0.1.j9  
**Path:** \\wsatkins.com\project\GBBMA\HandTCS\Projects\5200124-MACE\_Prisoners\_ROGE6351  
 \05\_Technical\6\_Raven\Junction Models\02\_FoxtonRd\_A4304  
**Report generation date:** 08/07/2021 16:38:52

- »2021 Baseline, AM
- »2021 Baseline, PM
- »OY 2025 Without Development, AM
- »OY 2025 Without Development, PM
- »OY 2025 With Development, AM
- »OY 2025 With Development, PM
- »2025 Cumulative, AM
- »2025 Cumulative, PM

**Summary of junction performance**

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
<b>2021 Baseline</b>								
Stream B-AC	0.4	10.54	0.30	B	0.9	13.73	0.46	B
Stream C-AB	0.4	6.24	0.19	A	0.5	7.08	0.27	A
<b>OY 2025 Without Development</b>								
Stream B-AC	0.5	11.20	0.33	B	1.0	15.40	0.51	C
Stream C-AB	0.4	6.33	0.21	A	0.6	7.29	0.30	A
<b>OY 2025 With Development</b>								
Stream B-AC	0.6	12.22	0.36	B	3.1	31.73	0.77	D
Stream C-AB	0.8	7.74	0.35	A	0.6	7.29	0.30	A
<b>2025 Cumulative</b>								
Stream B-AC	0.6	12.29	0.36	B	3.4	34.58	0.79	D
Stream C-AB	0.9	7.88	0.36	A	0.6	7.29	0.30	A

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

## File summary

### File Description

<b>Title</b>	Raven
<b>Location</b>	Foxton Road / A4304
<b>Site number</b>	
<b>Date</b>	12/04/2021
<b>Version</b>	V0.1
<b>Status</b>	(new file)
<b>Identifier</b>	CR
<b>Client</b>	MACE (on behalf of MoJ)
<b>Jobnumber</b>	5200124
<b>Enumerator</b>	WSATKINSCART5172
<b>Description</b>	

## Units

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

## Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

## Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15
D3	OY 2025 Without Development	AM	ONE HOUR	06:45	08:15	15
D4	OY 2025 Without Development	PM	ONE HOUR	16:45	18:15	15
D5	OY 2025 With Development	AM	ONE HOUR	06:45	08:15	15
D6	OY 2025 With Development	PM	ONE HOUR	16:45	18:15	15
D7	2025 Cumulative	AM	ONE HOUR	06:45	08:15	15
D8	2025 Cumulative	PM	ONE HOUR	16:45	18:15	15

## Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2021 Baseline, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxton Road / A4304	T-Junction	Two-way		2.71	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	A4304 (West)		Major
B	Foxton Road		Minor
C	A4304 (East)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.60			58.3	✓	0.00

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

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.80	32	70

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	564	0.096	0.242	0.152	0.345
1	B-C	722	0.103	0.260	-	-
1	C-B	608	0.219	0.219	-	-

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

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

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

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	328	100.000
B		✓	139	100.000
C		✓	352	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	93	235
	B	65	0	74
	C	275	77	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	2	12
	B	8	0	3
	C	8	1	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.30	10.54	0.4	B
C-AB	0.19	6.24	0.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	554	0.189	104	0.2	8.404	A
C-AB	82	697	0.118	82	0.2	6.022	A
C-A	183			183			
A-B	70			70			
A-C	177			177			

**07:00 - 07:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	537	0.233	125	0.3	9.194	A
C-AB	106	716	0.148	106	0.3	6.091	A
C-A	210			210			
A-B	84			84			
A-C	211			211			

**07:15 - 07:30**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	513	0.298	153	0.4	10.507	B
C-AB	144	743	0.193	143	0.4	6.222	A
C-A	244			244			
A-B	102			102			
A-C	259			259			

**07:30 - 07:45**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	513	0.299	153	0.4	10.538	B
C-AB	144	743	0.194	144	0.4	6.245	A
C-A	244			244			
A-B	102			102			
A-C	259			259			

**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	536	0.233	125	0.3	9.233	A
C-AB	106	716	0.148	107	0.3	6.131	A
C-A	210			210			
A-B	84			84			
A-C	211			211			

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	554	0.189	105	0.2	8.456	A
C-AB	83	697	0.119	83	0.2	6.056	A
C-A	182			182			
A-B	70			70			
A-C	177			177			

# 2021 Baseline, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxton Road / A4304	T-Junction	Two-way		4.18	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	396	100.000
B		✓	206	100.000
C		✓	351	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	68	328
	B	90	0	116
	C	243	108	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	6
	B	2	0	0
	C	1	0	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.46	13.73	0.9	B
C-AB	0.27	7.08	0.5	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	155	541	0.287	153	0.4	9.331	A
C-AB	112	670	0.167	111	0.3	6.446	A
C-A	152			152			
A-B	51			51			
A-C	247			247			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	185	520	0.356	185	0.5	10.796	B
C-AB	143	684	0.209	143	0.4	6.674	A
C-A	173			173			
A-B	61			61			
A-C	295			295			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	227	491	0.462	226	0.8	13.604	B
C-AB	192	704	0.273	192	0.5	7.061	A
C-A	194			194			
A-B	75			75			
A-C	361			361			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	227	491	0.462	227	0.9	13.726	B
C-AB	193	704	0.274	193	0.5	7.081	A
C-A	194			194			
A-B	75			75			
A-C	361			361			

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	185	520	0.356	186	0.6	10.916	B
C-AB	143	684	0.209	144	0.4	6.705	A
C-A	172			172			
A-B	61			61			
A-C	295			295			

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	155	541	0.287	156	0.4	9.444	A
C-AB	112	671	0.167	113	0.3	6.485	A
C-A	152			152			
A-B	51			51			
A-C	247			247			

# OY 2025 Without Development, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxtan Road / A4304	T-Junction	Two-way		2.87	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	OY 2025 Without Development	AM	ONE HOUR	06:45	08:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	352	100.000
B		✓	149	100.000
C		✓	378	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	100	252
	B	70	0	79
	C	295	83	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	12
	B	8	0	3
	C	8	1	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.33	11.20	0.5	B
C-AB	0.21	6.33	0.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	547	0.205	111	0.3	8.678	A
C-AB	91	704	0.130	90	0.2	6.046	A
C-A	193			193			
A-B	75			75			
A-C	190			190			

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	134	528	0.254	134	0.4	9.594	A
C-AB	118	724	0.163	118	0.3	6.132	A
C-A	222			222			
A-B	90			90			
A-C	227			227			

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	164	503	0.326	163	0.5	11.158	B
C-AB	161	754	0.214	161	0.4	6.304	A
C-A	255			255			
A-B	110			110			
A-C	277			277			

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	164	502	0.327	164	0.5	11.198	B
C-AB	161	754	0.214	161	0.4	6.330	A
C-A	255			255			
A-B	110			110			
A-C	277			277			

**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	134	528	0.254	135	0.4	9.643	A
C-AB	118	725	0.163	119	0.3	6.181	A
C-A	221			221			
A-B	90			90			
A-C	227			227			

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	547	0.205	113	0.3	8.740	A
C-AB	92	704	0.130	92	0.2	6.087	A
C-A	193			193			
A-B	75			75			
A-C	190			190			

# OY 2025 Without Development, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxton Road / A4304	T-Junction	Two-way		4.61	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	OY 2025 Without Development	PM	ONE HOUR	16:45	18:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	425	100.000
B		✓	221	100.000
C		✓	377	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	73	352
	B	97	0	124
	C	261	116	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	6
	B	2	0	0
	C	1	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.51	15.40	1.0	C
C-AB	0.30	7.29	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	166	533	0.312	165	0.5	9.812	A
C-AB	123	675	0.182	122	0.3	6.516	A
C-A	161			161			
A-B	55			55			
A-C	265			265			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	199	510	0.389	198	0.6	11.592	B
C-AB	158	691	0.229	158	0.4	6.785	A
C-A	180			180			
A-B	66			66			
A-C	316			316			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	243	479	0.508	242	1.0	15.209	C
C-AB	215	712	0.302	214	0.6	7.263	A
C-A	200			200			
A-B	80			80			
A-C	388			388			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	243	479	0.508	243	1.0	15.401	C
C-AB	215	713	0.302	215	0.6	7.287	A
C-A	200			200			
A-B	80			80			
A-C	388			388			

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	199	510	0.389	200	0.7	11.765	B
C-AB	159	691	0.230	160	0.4	6.824	A
C-A	180			180			
A-B	66			66			
A-C	316			316			

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	166	533	0.312	167	0.5	9.959	A
C-AB	124	676	0.183	124	0.3	6.561	A
C-A	160			160			
A-B	55			55			
A-C	265			265			



# OY 2025 With Development, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxtan Road / A4304	T-Junction	Two-way		3.70	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	OY 2025 With Development	AM	ONE HOUR	06:45	08:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	392	100.000
B		✓	158	100.000
C		✓	428	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	140	252
	B	74	0	84
	C	295	133	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	12
	B	8	0	3
	C	8	1	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.36	12.22	0.6	B
C-AB	0.35	7.74	0.8	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	119	535	0.222	118	0.3	9.055	A
C-AB	147	698	0.210	145	0.4	6.710	A
C-A	175			175			
A-B	105			105			
A-C	190			190			

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	514	0.276	142	0.4	10.169	B
C-AB	190	718	0.265	190	0.5	7.049	A
C-A	194			194			
A-B	126			126			
A-C	227			227			

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	484	0.359	173	0.6	12.161	B
C-AB	261	746	0.349	259	0.8	7.685	A
C-A	211			211			
A-B	154			154			
A-C	277			277			

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	484	0.359	174	0.6	12.224	B
C-AB	261	746	0.350	261	0.8	7.742	A
C-A	210			210			
A-B	154			154			
A-C	277			277			

**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	514	0.277	143	0.4	10.240	B
C-AB	191	719	0.266	192	0.5	7.134	A
C-A	194			194			
A-B	126			126			
A-C	227			227			

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	119	535	0.222	119	0.3	9.132	A
C-AB	148	699	0.211	148	0.4	6.778	A
C-A	175			175			
A-B	105			105			
A-C	190			190			

# OY 2025 With Development, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxton Road / A4304	T-Junction	Two-way		10.49	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	OY 2025 With Development	PM	ONE HOUR	16:45	18:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	425	100.000
B		✓	334	100.000
C		✓	377	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	73	352
	B	146	0	188
	C	261	116	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	6
	B	1	0	0
	C	1	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.77	31.73	3.1	D
C-AB	0.30	7.29	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	251	533	0.472	248	0.9	12.527	B
C-AB	123	675	0.182	122	0.3	6.516	A
C-A	161			161			
A-B	55			55			
A-C	265			265			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	300	511	0.588	298	1.4	16.842	C
C-AB	158	691	0.229	158	0.4	6.785	A
C-A	180			180			
A-B	66			66			
A-C	316			316			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	368	479	0.767	362	2.9	29.211	D
C-AB	215	712	0.302	214	0.6	7.263	A
C-A	200			200			
A-B	80			80			
A-C	388			388			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	368	479	0.767	367	3.1	31.735	D
C-AB	215	713	0.302	215	0.6	7.287	A
C-A	200			200			
A-B	80			80			
A-C	388			388			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	300	511	0.588	307	1.5	18.235	C
C-AB	159	691	0.230	160	0.4	6.822	A
C-A	180			180			
A-B	66			66			
A-C	316			316			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	251	533	0.472	254	0.9	13.055	B
C-AB	124	676	0.183	124	0.3	6.558	A
C-A	160			160			
A-B	55			55			
A-C	265			265			

# 2025 Cumulative, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxtan Road / A4304	T-Junction	Two-way		3.78	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2025 Cumulative	AM	ONE HOUR	06:45	08:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	394	100.000
B		✓	159	100.000
C		✓	432	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	142	252
	B	74	0	85
	C	295	137	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	12
	B	8	0	3
	C	8	1	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.36	12.29	0.6	B
C-AB	0.36	7.88	0.9	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	120	535	0.224	119	0.3	9.073	A
C-AB	151	698	0.217	150	0.4	6.765	A
C-A	174			174			
A-B	107			107			
A-C	190			190			

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	514	0.278	143	0.4	10.203	B
C-AB	196	718	0.273	195	0.5	7.131	A
C-A	192			192			
A-B	128			128			
A-C	227			227			

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	175	483	0.362	174	0.6	12.227	B
C-AB	269	746	0.360	267	0.9	7.819	A
C-A	207			207			
A-B	156			156			
A-C	277			277			

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	175	483	0.362	175	0.6	12.293	B
C-AB	269	746	0.361	269	0.9	7.881	A
C-A	207			207			
A-B	156			156			
A-C	277			277			



**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	513	0.279	144	0.4	10.276	B
C-AB	197	718	0.274	198	0.6	7.218	A
C-A	192			192			
A-B	128			128			
A-C	227			227			

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	120	535	0.224	120	0.3	9.153	A
C-AB	152	698	0.218	153	0.4	6.841	A
C-A	173			173			
A-B	107			107			
A-C	190			190			

# 2025 Cumulative, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxtan Road / A4304	T-Junction	Two-way		11.51	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2025 Cumulative	PM	ONE HOUR	16:45	18:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	425	100.000
B		✓	343	100.000
C		✓	377	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	73	352
	B	150	0	193
	C	261	116	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	6
	B	1	0	0
	C	1	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.79	34.58	3.4	D
C-AB	0.30	7.29	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	258	533	0.484	255	0.9	12.815	B
C-AB	123	675	0.182	122	0.3	6.516	A
C-A	161			161			
A-B	55			55			
A-C	265			265			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	308	511	0.604	306	1.5	17.475	C
C-AB	158	691	0.229	158	0.4	6.785	A
C-A	180			180			
A-B	66			66			
A-C	316			316			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	378	479	0.788	371	3.2	31.339	D
C-AB	215	712	0.302	214	0.6	7.263	A
C-A	200			200			
A-B	80			80			
A-C	388			388			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	378	479	0.788	377	3.4	34.578	D
C-AB	215	713	0.302	215	0.6	7.287	A
C-A	200			200			
A-B	80			80			
A-C	388			388			

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	308	511	0.604	316	1.6	19.187	C
C-AB	159	691	0.230	160	0.4	6.824	A
C-A	180			180			
A-B	66			66			
A-C	316			316			

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	258	533	0.485	261	1.0	13.407	B
C-AB	124	676	0.183	124	0.3	6.558	A
C-A	160			160			
A-B	55			55			
A-C	265			265			

## P.2. Network Peak Hour

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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**Filename:** FoxtonRd\_A4304\_PICADY\_v0.2.j9  
**Path:** \\wsatkins.com\project\GBBMA\HandTCS\Projects\5200124-MACE\_Prisoners\_ROGE6351  
 \05\_Technical\6\_Raven\Junction Models\02\_FoxtonRd\_A4304  
**Report generation date:** 06/07/2021 12:00:02

- »2021 Baseline, AM
- »2021 Baseline, PM
- »OY 2025 Without Development, AM
- »OY 2025 Without Development, PM
- »OY 2025 With Development, AM
- »OY 2025 With Development, PM
- »2025 Cumulative, AM
- »2025 Cumulative, PM

**Summary of junction performance**

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
<b>2021 Baseline</b>								
Stream B-AC	0.6	11.59	0.39	B	0.9	14.76	0.48	B
Stream C-AB	0.6	7.50	0.29	A	0.5	6.79	0.24	A
<b>OY 2025 Without Development</b>								
Stream B-AC	0.7	12.59	0.43	B	1.1	16.58	0.53	C
Stream C-AB	0.7	7.74	0.32	A	0.5	6.93	0.26	A
<b>OY 2025 With Development</b>								
Stream B-AC	0.8	13.06	0.44	B	1.5	19.27	0.60	C
Stream C-AB	1.0	8.88	0.41	A	0.6	7.15	0.29	A
<b>2025 Cumulative</b>								
Stream B-AC	0.8	13.10	0.44	B	1.5	19.79	0.61	C
Stream C-AB	1.0	8.97	0.41	A	0.6	7.21	0.29	A

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

## File summary

### File Description

<b>Title</b>	Raven
<b>Location</b>	Foxton Road / A4304
<b>Site number</b>	
<b>Date</b>	12/04/2021
<b>Version</b>	V0.1
<b>Status</b>	(new file)
<b>Identifier</b>	CR
<b>Client</b>	MACE (on behalf of MoJ)
<b>Jobnumber</b>	5200124
<b>Enumerator</b>	WSATKINSCART5172
<b>Description</b>	

## Units

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

## Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

## Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	07:45	09:15	15
D2	2021 Baseline	PM	ONE HOUR	15:45	17:15	15
D3	OY 2025 Without Development	AM	ONE HOUR	07:45	09:15	15
D4	OY 2025 Without Development	PM	ONE HOUR	15:45	17:15	15
D5	OY 2025 With Development	AM	ONE HOUR	07:45	09:15	15
D6	OY 2025 With Development	PM	ONE HOUR	15:45	17:15	15
D7	2025 Cumulative	AM	ONE HOUR	07:45	09:15	15
D8	2025 Cumulative	PM	ONE HOUR	15:45	17:15	15

## Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2021 Baseline, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxton Road / A4304	T-Junction	Two-way		3.60	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	A4304 (West)		Major
B	Foxton Road		Minor
C	A4304 (East)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.60			58.3	✓	0.00

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

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.80	32	70

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	564	0.096	0.242	0.152	0.345
1	B-C	722	0.103	0.260	-	-
1	C-B	608	0.219	0.219	-	-

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

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

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

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	07:45	09:15	15



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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	399	100.000
B		✓	183	100.000
C		✓	369	100.000

## Origin-Destination Data

### Demand (PCU/hr)

From	To		
	A	B	C
A	0	86	313
B	62	0	121
C	256	113	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	4	10
B	3	0	0
C	9	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.39	11.59	0.6	B
C-AB	0.29	7.50	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	138	563	0.245	136	0.3	8.508	A
C-AB	119	677	0.176	118	0.3	6.723	A
C-A	159			159			
A-B	65			65			
A-C	236			236			

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	165	543	0.303	164	0.4	9.587	A
C-AB	153	692	0.221	152	0.4	6.997	A
C-A	179			179			
A-B	77			77			
A-C	281			281			

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	201	515	0.391	201	0.6	11.533	B
C-AB	206	714	0.289	206	0.6	7.457	A
C-A	200			200			
A-B	95			95			
A-C	345			345			

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	201	515	0.391	201	0.6	11.595	B
C-AB	207	714	0.290	207	0.6	7.497	A
C-A	200			200			
A-B	95			95			
A-C	345			345			

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	165	543	0.303	165	0.4	9.655	A
C-AB	153	692	0.221	154	0.4	7.058	A
C-A	179			179			
A-B	77			77			
A-C	281			281			

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	138	562	0.245	138	0.3	8.582	A
C-AB	119	677	0.176	120	0.3	6.787	A
C-A	158			158			
A-B	65			65			
A-C	236			236			

# 2021 Baseline, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxtan Road / A4304	T-Junction	Two-way		4.52	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Baseline	PM	ONE HOUR	15:45	17:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	343	100.000
B		✓	207	100.000
C		✓	345	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	78	265
	B	124	0	83
	C	248	97	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	4
	B	2	0	1
	C	4	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.48	14.76	0.9	B
C-AB	0.24	6.79	0.5	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	522	0.299	154	0.4	9.897	A
C-AB	101	681	0.148	100	0.2	6.348	A
C-A	159			159			
A-B	59			59			
A-C	200			200			

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	186	503	0.370	185	0.6	11.507	B
C-AB	129	696	0.185	128	0.3	6.506	A
C-A	182			182			
A-B	70			70			
A-C	238			238			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	228	476	0.479	227	0.9	14.609	B
C-AB	173	719	0.240	172	0.5	6.771	A
C-A	207			207			
A-B	86			86			
A-C	292			292			

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	228	476	0.479	228	0.9	14.758	B
C-AB	173	719	0.241	173	0.5	6.789	A
C-A	207			207			
A-B	86			86			
A-C	292			292			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	186	502	0.370	187	0.6	11.653	B
C-AB	129	697	0.185	129	0.3	6.533	A
C-A	181			181			
A-B	70			70			
A-C	238			238			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	522	0.299	157	0.4	10.033	B
C-AB	101	681	0.148	101	0.2	6.383	A
C-A	159			159			
A-B	59			59			
A-C	200			200			

# OY 2025 Without Development, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxtan Road / A4304	T-Junction	Two-way		3.88	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	OY 2025 Without Development	AM	ONE HOUR	07:45	09:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	428	100.000
B		✓	196	100.000
C		✓	395	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	92	336
	B	66	0	130
	C	274	121	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	10
	B	3	0	0
	C	9	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.43	12.59	0.7	B
C-AB	0.32	7.74	0.7	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	556	0.265	146	0.4	8.843	A
C-AB	131	682	0.192	129	0.3	6.815	A
C-A	167			167			
A-B	69			69			
A-C	253			253			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	176	535	0.330	176	0.5	10.116	B
C-AB	169	698	0.241	168	0.5	7.128	A
C-A	186			186			
A-B	83			83			
A-C	302			302			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	216	505	0.428	215	0.7	12.505	B
C-AB	230	722	0.318	229	0.7	7.691	A
C-A	205			205			
A-B	101			101			
A-C	370			370			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	216	504	0.428	216	0.7	12.592	B
C-AB	230	722	0.319	230	0.7	7.738	A
C-A	205			205			
A-B	101			101			
A-C	370			370			

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	176	534	0.330	177	0.5	10.207	B
C-AB	169	699	0.242	170	0.5	7.200	A
C-A	186			186			
A-B	83			83			
A-C	302			302			

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	556	0.266	148	0.4	8.936	A
C-AB	131	682	0.192	132	0.3	6.878	A
C-A	166			166			
A-B	69			69			
A-C	253			253			



# OY 2025 Without Development, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxton Road / A4304	T-Junction	Two-way		5.00	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	OY 2025 Without Development	PM	ONE HOUR	15:45	17:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	368	100.000
B		✓	222	100.000
C		✓	370	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	84	284
	B	133	0	89
	C	266	104	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	4
	B	2	0	1
	C	4	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.53	16.58	1.1	C
C-AB	0.26	6.93	0.5	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	515	0.325	165	0.5	10.403	B
C-AB	111	686	0.161	109	0.3	6.396	A
C-A	168			168			
A-B	63			63			
A-C	214			214			

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	200	494	0.404	199	0.7	12.357	B
C-AB	142	703	0.202	142	0.4	6.580	A
C-A	191			191			
A-B	76			76			
A-C	255			255			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	244	465	0.526	243	1.1	16.341	C
C-AB	192	728	0.264	192	0.5	6.906	A
C-A	215			215			
A-B	92			92			
A-C	313			313			

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	244	465	0.526	244	1.1	16.579	C
C-AB	193	728	0.265	193	0.5	6.931	A
C-A	215			215			
A-B	92			92			
A-C	313			313			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	200	494	0.404	201	0.7	12.571	B
C-AB	142	704	0.202	143	0.4	6.616	A
C-A	190			190			
A-B	76			76			
A-C	255			255			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	515	0.325	168	0.5	10.579	B
C-AB	111	687	0.162	111	0.3	6.432	A
C-A	168			168			
A-B	63			63			
A-C	214			214			

# OY 2025 With Development, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxtan Road / A4304	T-Junction	Two-way		4.39	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	OY 2025 With Development	AM	ONE HOUR	07:45	09:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	452	100.000
B		✓	196	100.000
C		✓	426	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	116	336
	B	66	0	130
	C	274	152	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	10
	B	3	0	0
	C	9	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.44	13.06	0.8	B
C-AB	0.41	8.88	1.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	549	0.269	146	0.4	8.982	A
C-AB	164	678	0.242	163	0.4	7.252	A
C-A	156			156			
A-B	87			87			
A-C	253			253			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	176	527	0.335	176	0.5	10.329	B
C-AB	213	694	0.306	212	0.6	7.779	A
C-A	170			170			
A-B	104			104			
A-C	302			302			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	216	494	0.437	215	0.8	12.957	B
C-AB	290	717	0.405	289	1.0	8.795	A
C-A	179			179			
A-B	128			128			
A-C	370			370			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	216	494	0.437	216	0.8	13.063	B
C-AB	291	718	0.405	291	1.0	8.883	A
C-A	178			178			
A-B	128			128			
A-C	370			370			

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	176	526	0.335	177	0.5	10.450	B
C-AB	213	695	0.307	215	0.7	7.897	A
C-A	170			170			
A-B	104			104			
A-C	302			302			

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	549	0.269	148	0.4	9.082	A
C-AB	165	679	0.243	166	0.5	7.346	A
C-A	156			156			
A-B	87			87			
A-C	253			253			

# OY 2025 With Development, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxton Road / A4304	T-Junction	Two-way		6.08	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	OY 2025 With Development	PM	ONE HOUR	15:45	17:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	374	100.000
B		✓	252	100.000
C		✓	378	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	90	284
	B	146	0	106
	C	266	112	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	4
	B	1	0	1
	C	4	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.60	19.27	1.5	C
C-AB	0.29	7.15	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	190	517	0.367	187	0.6	10.973	B
C-AB	119	686	0.174	118	0.3	6.500	A
C-A	165			165			
A-B	68			68			
A-C	214			214			

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	227	495	0.457	226	0.8	13.424	B
C-AB	153	702	0.218	153	0.4	6.724	A
C-A	187			187			
A-B	81			81			
A-C	255			255			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	277	466	0.596	275	1.4	18.831	C
C-AB	207	727	0.285	207	0.6	7.122	A
C-A	209			209			
A-B	99			99			
A-C	313			313			

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	277	466	0.596	277	1.5	19.273	C
C-AB	208	727	0.286	208	0.6	7.147	A
C-A	209			209			
A-B	99			99			
A-C	313			313			



16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	227	495	0.458	229	0.9	13.772	B
C-AB	153	703	0.218	154	0.4	6.762	A
C-A	186			186			
A-B	81			81			
A-C	255			255			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	190	516	0.368	191	0.6	11.212	B
C-AB	120	686	0.174	120	0.3	6.544	A
C-A	165			165			
A-B	68			68			
A-C	214			214			

# 2025 Cumulative, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxtan Road / A4304	T-Junction	Two-way		4.43	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2025 Cumulative	AM	ONE HOUR	07:45	09:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	454	100.000
B		✓	196	100.000
C		✓	428	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	118	336
	B	66	0	130
	C	274	154	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	10
	B	3	0	0
	C	9	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.44	13.10	0.8	B
C-AB	0.41	8.97	1.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	549	0.269	146	0.4	8.992	A
C-AB	167	678	0.246	165	0.4	7.284	A
C-A	156			156			
A-B	89			89			
A-C	253			253			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	176	526	0.335	176	0.5	10.361	B
C-AB	215	694	0.310	215	0.6	7.831	A
C-A	169			169			
A-B	106			106			
A-C	302			302			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	216	493	0.437	215	0.8	12.991	B
C-AB	294	717	0.410	293	1.0	8.877	A
C-A	177			177			
A-B	130			130			
A-C	370			370			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	216	493	0.438	216	0.8	13.097	B
C-AB	295	718	0.411	295	1.0	8.974	A
C-A	176			176			
A-B	130			130			
A-C	370			370			

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	176	526	0.335	177	0.5	10.465	B
C-AB	216	695	0.311	218	0.7	7.950	A
C-A	169			169			
A-B	106			106			
A-C	302			302			

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	549	0.269	148	0.4	9.093	A
C-AB	167	679	0.247	168	0.5	7.380	A
C-A	155			155			
A-B	89			89			
A-C	253			253			

# 2025 Cumulative, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Foxton Road / A4304	T-Junction	Two-way		6.27	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2025 Cumulative	PM	ONE HOUR	15:45	17:15	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	376	100.000
B		✓	256	100.000
C		✓	380	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	92	284
	B	148	0	108
	C	266	114	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	4
	B	1	0	1
	C	4	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.61	19.79	1.5	C
C-AB	0.29	7.21	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	516	0.373	190	0.6	11.080	B
C-AB	121	685	0.177	120	0.3	6.528	A
C-A	165			165			
A-B	69			69			
A-C	214			214			

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	495	0.465	229	0.9	13.623	B
C-AB	156	702	0.222	155	0.4	6.765	A
C-A	186			186			
A-B	83			83			
A-C	255			255			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	282	465	0.606	279	1.5	19.306	C
C-AB	211	726	0.291	210	0.6	7.180	A
C-A	207			207			
A-B	101			101			
A-C	313			313			

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	282	465	0.606	282	1.5	19.792	C
C-AB	211	726	0.291	211	0.6	7.208	A
C-A	207			207			
A-B	101			101			
A-C	313			313			

**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	495	0.465	233	0.9	13.999	B
C-AB	156	703	0.222	157	0.4	6.804	A
C-A	185			185			
A-B	83			83			
A-C	255			255			

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	516	0.374	194	0.6	11.334	B
C-AB	122	686	0.178	122	0.3	6.573	A
C-A	164			164			
A-B	69			69			
A-C	214			214			

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