

Cliffe Lane, Gomersal

Transport Assessment



Control Sheet

PROJECT TITLE: Cliffe Lane, Gomersal
REPORT TITLE: Transport Assessment
PROJECT REFERENCE: 152130
DOCUMENT NUMBER: 001
ISSUE NUMBER: 02
DATE: July 2023

Issue & Approval Schedule	Issue 01 Draft		Name		Signature		Date
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Issue Record	Issue	Date	Status	Description	Signature		
	02	08/07/2023	Issue	Final	Prepared		
					Checked		
					Approved		
	03				Prepared		
					Checked		
Approved							

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Acknowledgements

Google 'My Maps' has been used to create figures for illustrative purposes only.

OpenRouteService has been utilised to generate indicative walking and cycling isochrones.

The Crashmap Pro Collision Analysis System has been used to investigate accident history on the local highway network.

JUNCTIONS9 and LinSig v3 have been used to undertake junction capacity modelling at strategic junctions on the surrounding network.

2011 Census 'Origin Destination Statistics' have been extracted from the Office for National Statistics [NOMIS] to estimate the distribution of development traffic.

Information from the approved Transport Assessment prepared by Bryan G Hall (ref: 15-398-001.03, January 2019) to support the previous application has been used including approved residential trip rates to calculate traffic generation.

TemPRO has been used to generate growth rates in order to provide a future year assessment of the traffic impacts arising from the development.

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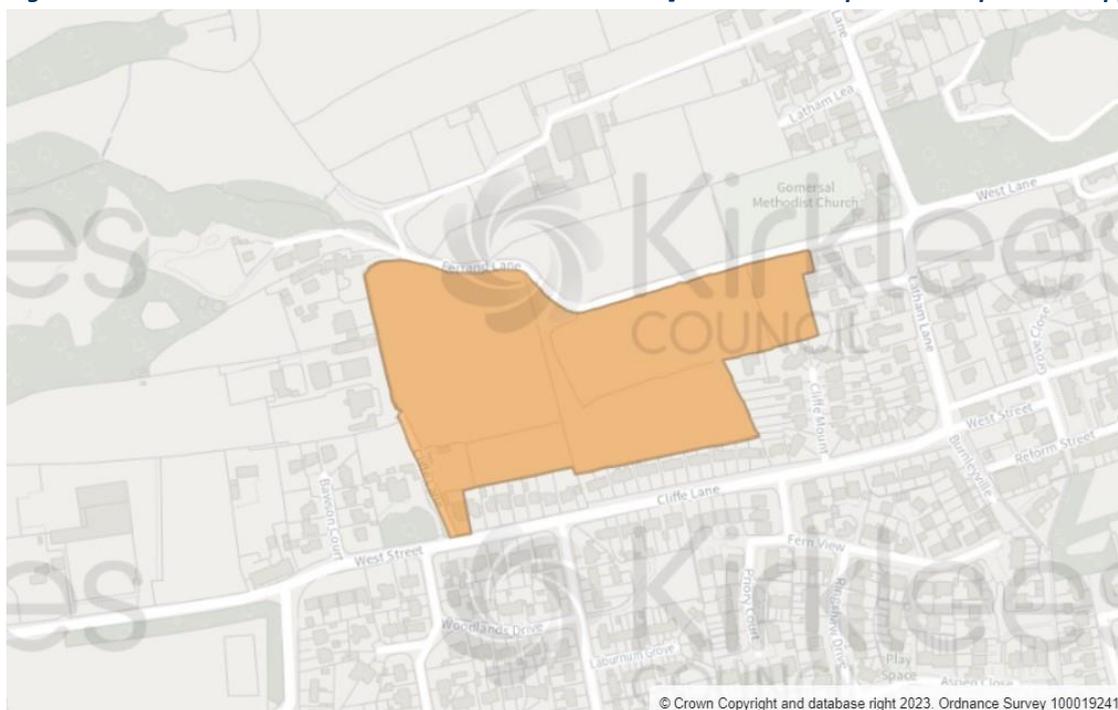
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1. Introduction

- 1.1 Sanderson Associates Consulting Engineers (SACE) has been appointed to provide Highways Consultancy Services in relation to proposals for the residential development of 87 dwellings on land to the west of Cliffe Mount, Ferrand Lane, Gomersal.
- 1.2 The site is identified within Kirklees Council's 'Local Plan Allocations and Designations' document (Adopted 27th February 2019) as a site allocated for housing (ref: HS116) with an area of 3.87Ha and an indicative capacity of 135 dwellings. The site extents are illustrated by the extract from the Council's Development Plan policies map shown in **Figure 1**.

Figure 1 – Site Extents

[Kirklees Development Plan policies map]



- 1.3 The current application follows a previous outline application (ref: 2019/90902) for the erection of 98 dwellings which was refused by the local planning authority, Kirklees Council, and subsequently dismissed at Appeal. It should be noted that the Council supported the proposal, subject to a planning obligation to secure affordable housing and contributions towards various facilities and services. However, in the absence of the required signatures to the S106 Agreement, on 9 July 2021 the Council formally resolved to refuse outline planning permission.
- 1.4 The National Planning Policy Framework (NPPF) paragraph 113 states that: *“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.”*

- 1.5 The 2019 application was supported by a Transport Assessment (TA) prepared by Bryan G Hall (ref: 15-398-001.03, January 2019). The scope of the TA was informed by a series of pre-application discussions held with the Council from August 2017 onwards.
- 1.6 This TA has been prepared in general accordance with the previously agreed scope of assessment, and, in line with national guidance on transport assessments includes;
- information about the proposed development, site layout, (particularly proposed transport access and layout across all modes of transport)
 - information about neighbouring uses, amenity and character, existing functional classification of the nearby road network;
 - data about existing public transport provision, including provision/frequency of services and proposed public transport changes;
 - a qualitative and quantitative description of the travel characteristics of the proposed development, including movements across all modes of transport that would result from the development and in the vicinity of the site;
 - an assessment of trips from all directly relevant committed developments in the area;
 - data about current traffic flows on links and at junctions (including by different modes of transport and the volume and type of vehicles) within the study area and identification of critical links and junctions on the highways network;
 - an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent 3-year period, or 5-year period if the proposed site has been identified as within a high accident area;
 - an assessment of the likely associated environmental impacts of transport related to the development, particularly in relation to proximity to environmentally sensitive areas (such as air quality management areas or noise sensitive areas);
 - measures to improve the accessibility of the location (such as provision/enhancement of nearby footpath and cycle path linkages) where these are necessary to make the development acceptable in planning terms;
 - a description of parking facilities in the area and the parking strategy of the development;
 - ways of encouraging environmental sustainability by reducing the need to travel; and
 - measures to mitigate the residual impacts of development (such as improvements to the public transport network, introducing walking and cycling facilities, physical improvements to existing roads.
- 1.7 The report seeks to demonstrate that the residual cumulative impacts of the proposed development on the local road network are not severe, and therefore, in the context of NPPF paragraph 111 should not be prevented on highways grounds.
- 1.8 For the benefit of this assessment a site visit was undertaken by SACE on 28 March 2023 to observe the prevailing highway conditions in the vicinity of the site and to take critical highway measurements. A site meeting was also attended with Mark Berry of Kirklees Council on 15 May 2023 during which various aspects of the project were discussed.

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- 1.9 A Residential Travel Plan (RTP) has also been prepared under separate cover which sets out measures to encourage the uptake of sustainable travel amongst future residents and to reduce the number of car-borne trips generated by the site. This TA and the RTP should be read in conjunction.

2. Existing Situation

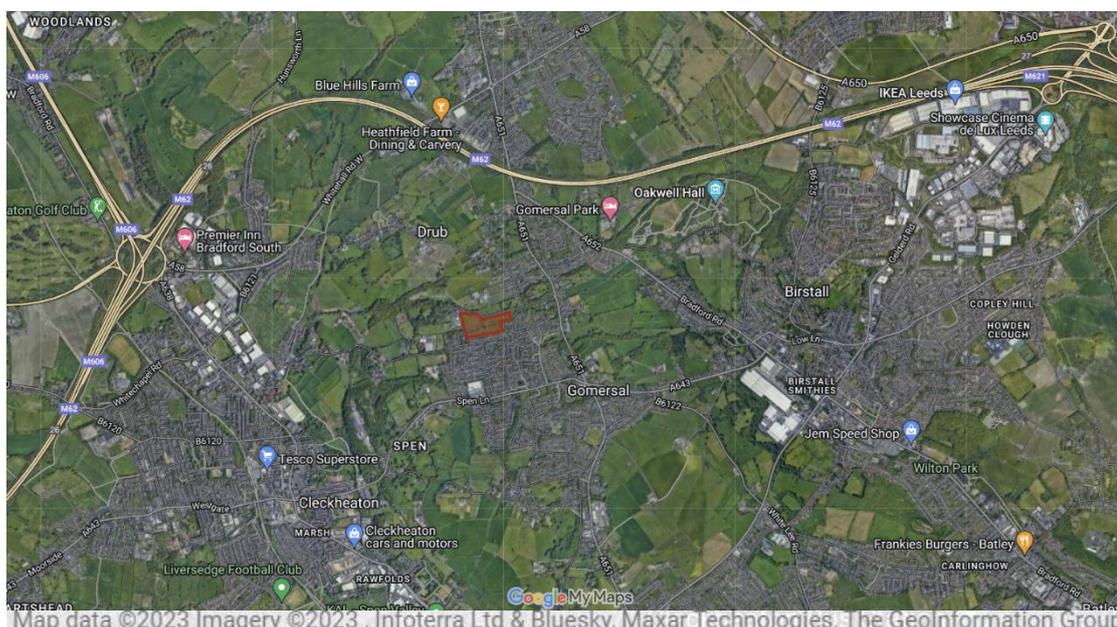
2.1 Site and Surrounding Area

2.1.1 The application site, identified within **Figure 2**, is currently managed agricultural land and its boundaries can be broadly summarised as follows:

- North: Ferrand Lane
- East: Residential developments from Cliffe Mount and Thatchers Way
- South: Cliffe Lane and the rear of fronting residential properties
- West: Holmfield, agricultural land, Fanwood Campsite and Archer Construction

Figure 2 – Site Location – Wider Context

[Google 'My Maps']



2.1.2 In a wider sense the site is located to the north-west of the village of Gomersal, Kirkles. The nearest town centre, Cleckheaton, is situated approximately 1.9km to the west of the site and Birstall Retail Park is situated approximately 4.7km to the east. The site also benefits from proximity to the strategic road network, namely the M62 and M606, via “Chain Bar Roundabout” (M62 junction 26) which is located approximately 2.5km / 6 minute drive to the west.

2.1.3 Existing means of vehicle access to the site are provided from Cliffe Lane, via a dropped vehicle crossover arrangement which provides access to the agricultural land to the west, known as Holmfield. There is also a gated access to the proposed development located along Ferrand Lane to the north.

2.1.4 The existing access track is listed as a public footpath (ref SPE/56/10). The public footpath continues along the length of Ferrand Lane, ending at the staggered crossroads to the east of the site. An extract of Kirkles’ Definitive Public Rights of Way map is provided at **Figure 3**. Additional public footpaths (ref: SPE/57/20 and SPE/57/30) are accessible to the south-east of the proposed development.

Figure 3 – Extract of Kirkles Council Definitive PRoW Map

[Kirkles Council]



2.2 Local Highway Network

- 2.2.1 Cliffe Lane is approximately 6.5m in width and is subject to a 30mph speed limit across the site access. Footways are present on both sides of the carriageway and there is street lighting present.
- 2.2.2 Approximately 190m to the west of the site access there is a traffic calming feature present in the form of a single lane working chicane, with priority given to eastbound travelling vehicles. Beyond this traffic calming measure, Cliffe Lane heads towards Cleckheaton and becomes Balme Road which forms the minor arm of a priority crossroads junction with the A638 Bradford Road. The A638 allows for further onward connection to be made to the M62 and M606 motorways, to the north via Chain Bar Roundabout.
- 2.2.3 East of the site access, Cliffe Lane provides direct frontage access to residential properties along its length. Approximately 75m to the east, Woodlands Road forms a priority T-junction with Cliffe Road. Woodlands Road, which is approximately 340m in length, heads south and connects via a priority T-junction to the A643 Spen Lane. To the west the A643 connects to Cleckheaton, before continuing south-west to Huddersfield. To the east, the A643 heads to Birstall, before continuing to Beeston, in Leeds.
- 2.2.4 Further east of Woodlands Road, approximately 350m after the existing access, Cliffe Lane turns through 90 degrees, to the north, where it becomes Latham Lane. Latham Lane has a footway present along the length of the western side of the carriageway. Approximately 160m north, Latham Lane forms the minor arm of a priority T-junction with West Lane.

- 2.2.5 Approximately 210m to the east of the junction, West Lane forms the minor arm of a priority controlled staggered crossroad junction with the A651 Oxford Road (major arm) and Cambridge Chase (opposite minor arm); a residential cul-de-sac serving 12 dwellings.
- 2.2.6 To the north, the A651 provides access to Birkenshaw and to the south, approximately 550m of the junction with West Lane, the A651 Oxford Road meets the A643 Spen Lane and the A643 Church Lane at a signalised crossroads junction. The arrangement of the junction can be seen from the satellite image shown in **Figure 4**.

Figure 4 –A651/ A643 Spen Ln/ A643 Church Lane Signalised Junction [Google]



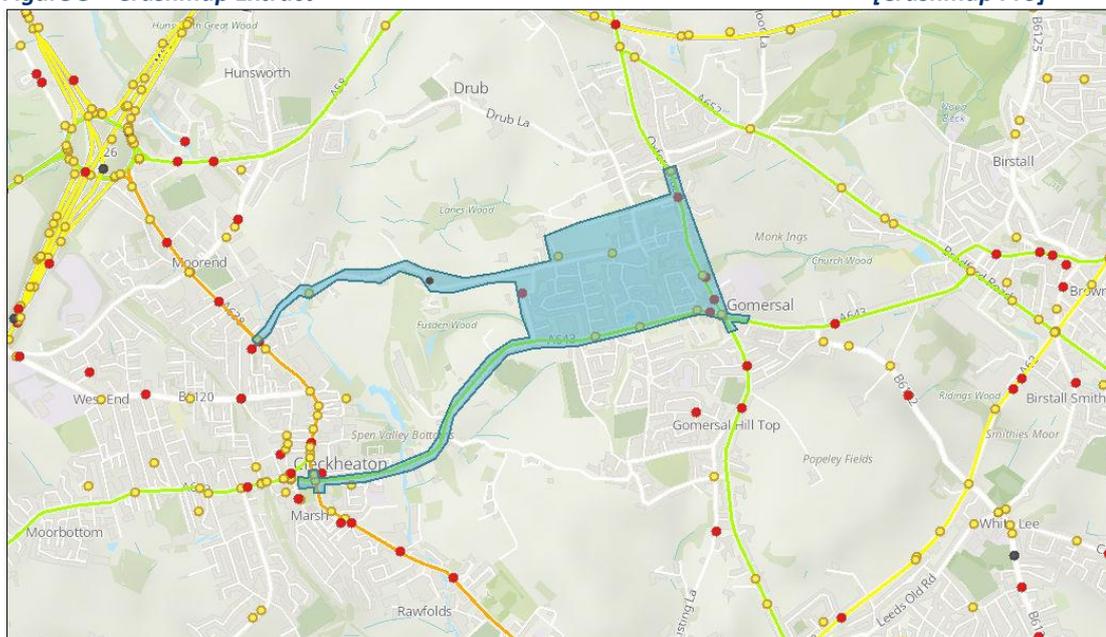
- 2.2.7 All four arms of the junction feature single lane approaches, however, advisory advanced right turn holding areas are present towards the centre of the junction to provide additional capacity for ‘ahead’ and left-turning traffic. Controlled puffin crossing facilities with tactile paving are also included on each arm of the junction.

2.3 Road Safety Review

- 2.3.1 National guidance states that transport assessments should include; “an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent 3-year period, or 5-year period if the proposed site has been identified as within a high accident area.”
- 2.3.2 While the surrounding area, including Cliffe Lane, A643 Spen Lane and A651 Oxford Road have not been identified as “high accident” roads, the A638 Bradford Road has been identified as a “medium risk road.” Due to the size of the assessment area and the A638 Bradford Road being identified as a “medium risk road,” the most recent 5-year period has been considered to ensure a robust assessment.
- 2.3.3 Road traffic collision data has been obtained using the Crashmap Pro collision analysis system for the most recent five year period available (2017-2021). The incident plot diagram within the vicinity of the site is shown in **Figure 5** and the full Crashmap Pro output report can be found in **Appendix A**.

Figure 5 – Crashmap Extract

[Crashmap Pro]



2.3.4 Within the assessment period a total of 23 accidents have occurred; of which, 16 were classified as being 'slight' in severity and 7 were classed as 'serious'. No fatal incidents have been recorded within the study area during the latest five year period.

2.3.5 In order to identify any recurring accident trends or cluster locations, the recorded incidents have been split up into different sections including: Balme Road/ A638 Bradford Road; Cliffe Lane; Fusden Lane; A641 Oxford Road; A651/A643 signalised junction; A643 Spen Lane; and A643/ A638 Dewsbury Road signalised junction.

Balme Road/ A638 Bradford Road

- Incident Reference: 2019136CM0609 – occurred Sunday 22nd December, 2019 at 12:35AM in wet conditions. This was a serious accident whereby a car was proceeding normally along the carriageway and collided with six pedestrians all of whom were on the footway or verge resulting in all six of them experiencing serious injuries.
- Incident Reference: 2021131122018 – occurred Thursday 16th December 2021 at 4:45PM in dry conditions. A vehicle was in the act of turning right and collided with a pedestrian crossing elsewhere, sustaining slight injuries. The car which was turning right also collided with the offside of a vehicle parked in the carriageway.

Cliffe Lane

- Incident Reference: 2018135B31817 – occurred Saturday 3rd November, 2018 at 7:30PM in dry conditions. The incident involved a motorcycle (>50cc and <125cc) which failed to negotiate a bend and the rider was unseated resulting in slight injuries.
- Incident Reference: 2020137BF1101 – occurred on Sunday 15th November, 2020 at 3:00PM in dry conditions, along the existing site access road. The incident involved a car reversing which then collided with a cyclist in the act of slowing down or stopping. The driver of the car sustained slight injuries.

- Incident Reference: 2021131083839 – occurred on Friday 3rd September, 2021 at 1:22PM in dry conditions. Vehicle was in the act of turning left and collided with the front of a car proceeding normally along the carriageway. The driver of the car turning left received slight injuries.

Fusden Lane

- Incident Reference: 2021131067026 – occurred Saturday 7th July at 1:35AM in dry conditions. A vehicle was proceeding normally along the carriageway, on a right hand bend and collided with a wall or fence on their nearside. This resulted in the driver of the car experiencing serious injuries.

A641 Oxford Road

- Incident Reference: 20171343R1290 – occurred Monday 27th March, 2017 at 5:27PM in dry conditions. A car was in the act of turning right and collided with a pedal cycle, which was proceeding normally along the carriageway. The rider of the bike experienced slight injuries.
- Incident Reference: 20181358H1770 – occurred Friday 17th August, 2018 at 7:30PM in dry conditions. A car and another vehicle, whether motorised or not, were both proceeding normally along the carriageway. It is unclear what occurred, but the driver or rider of the other vehicle experienced serious injuries.
- Incident Reference: 2019136A21066 – occurred Wednesday 2nd October 2019, at 3:30PM in dry conditions. A car was moving off and collided with a pedestrian, in the centre of the carriageway, not on a refuge. The pedestrian was crossing from the driver's offside and was masked by a parked or stationary vehicle. The pedestrian experienced slight injuries
- Incident Reference: 20211381C1209 – occurred Tuesday 12th January 2021 at 5:20PM in wet or damp conditions. This was a serious incident whereby a car was in the act of turning right when they collided with a motorcycle proceeding normally along the carriageway. The rider of the motorcycle experienced serious injuries.
- Incident Reference: 2021138381223 – occurred Monday 8th March, 2021 at 4:54PM in dry conditions. A car was proceeding normally along the carriageway and collided on their offside with a pedestrian crossing elsewhere and was masked by a parked or stationary vehicle. The pedestrian sustained serious injuries.

A651/A643 signalised junction

- Incident Reference: 20181355K1279 – occurred Sunday 20th May at 4:16PM in dry conditions. This was a rear shunt incident between a van, a motorcycle and a car. The passenger on the motorcycle which was shunted into experienced slight injuries.
- Incident Reference: 20181352L0054 – occurred Wednesday 21st February 2018 at 1:05AM in dry conditions. This was a side on collision whereby a car was slowing down or stopping and a car was proceeding normally. The driver of the slowing down car experienced slight injuries.

A643 Spen Lane

- Incident Reference 20171346L1184 – occurred Wednesday 21st June, 2017 at 1:50PM in dry conditions. It is unclear how the incident occurred as the bus or coach and car did not impact. One of the passengers on the bus sustained slight injuries
- Incident Reference: 20171347E0673 – occurred Friday 14th July, 2017 at 5:20PM in dry conditions. A car proceeding normally along the carriageway collided with a pedestrian crossing elsewhere in the carriageway. The pedestrian experienced slight injuries.
- Incident Reference: 20191366S1055 – occurred Friday 28th June 2019 at 2:53PM in dry conditions. It is unclear how this serious incident occurred as it only involved a mobility scooter, with the driver experiencing the serious injuries.
- Incident Reference: 20211383V1057 – occurred Wednesday 31st March, 2021 at 11:10AM in dry conditions. A pedal cycle in the act of turning left collided with the offside of a car whom was waiting to turn left. The cyclist experienced slight injuries.

A643/ A638 Dewsbury Road signalised junction

- Incident Reference: 2018135740425 – occurred Wednesday 4th July, 2018 at 8:00AM in dry conditions. A vehicle in the act of turning right collided with a motorcycle proceeding normally. The rider of the motorcycle experienced slight injuries.
- Incident Reference: 2018135751189 – occurred Thursday 5th July at 3:50PM in dry conditions. A car in the act of turning right collided with a pedestrian, who subsequently experienced slight injuries.
- Incident Reference: 2019136B51163 – occurred Tuesday 5th November, 2019 at 3:35PM in dry conditions. A van was passing another moving vehicle on its offside and collided with a pedestrian crossing elsewhere. The pedestrian sustained slight injuries.
- Incident Reference: 20201371J0812 – occurred Sunday 19th January 2020 at 1:00PM in dry conditions. This resulted in a serious accident whereby a car was in the act of turning left collided with a pedestrian who was crossing elsewhere, within 50m of a pedestrian crossing.
- Incident Reference: 2020137211404 – occurred Saturday 1st February 2020 at 5:15PM in wet or damp conditions. This was a shunt incident whereby a taxi was slowing down or stopping and a car was proceeding normally along the highway. The driver of the taxi experienced slight injuries.
- Incident Reference: 2021131087284 – occurred Monday 13th September, 2021 at 11:20PM in dry conditions. A car collided with a bollard or refuge in the carriageway, which then caused the car behind to crash. Two passengers and the driver of the second car experienced slight injuries.

2.3.6 Following a review of the personal injury data within the five year assessment period, there were no discernible accident trends identified. The most significant concentration of accidents occurred at the A643/ A638 Dewsbury Road junction, with six accidents occurring. This is less than two accidents/ year and is no more than would be expected for an urban traffic signalised junction.

2.3.7 It is therefore concluded that there are no major road safety issues on the highway network that surrounds the proposed development. Furthermore, the frequency of accidents is unlikely to increase as a result of the proposed development.

2.4 *Accessibility by Sustainable Modes of Travel*

2.4.1 This section of the Transport Assessment includes an assessment of the accessibility of the site by sustainable modes of transport.

2.4.2 This section considers the accessibility of the development by the following modes of transport;

- Walking
- Cycling
- Public Transport

Accessibility by Walking

2.4.3 At the local level walking is the most important mode of transport which can replace short car trips which contribute to congestion and pollution. Walking is the most sustainable form of transport which gives people a greater connection with their surroundings whilst also reducing pressure on the environment.

2.4.4 The IHT publication “Providing for Journeys on Foot” has produced guidelines on suggested acceptable walking distances for varying journey purposes (see below).

Figure 6 - Extract from Providing for Journeys on Foot, Walking Distances

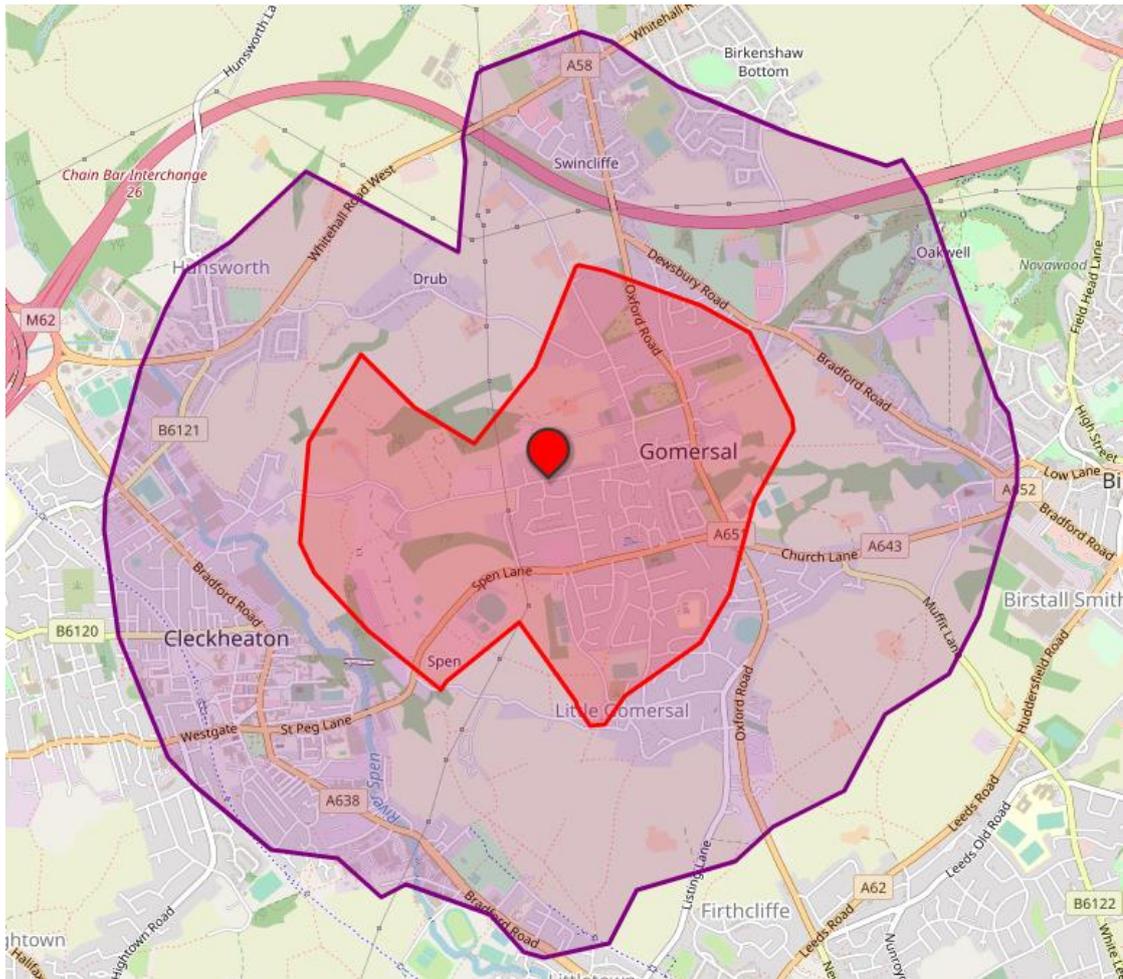
Table 3.2: Suggested Acceptable Walking Distance.

	Town centres (m)	Commuting/School Sight-seeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred maximum	800	2000	1200

2.4.5 **Figure 7** identifies 1000m and 2000m walking isochrones centred on the site which provides an illustration of the areas that fall within ‘acceptable’ and ‘preferred maximum’ walking distance for the purposes of commuting, school and sight-seeing.

Figure 7 – Indicative Walking Isochrones

[OpenRouteService]



2.4.6 The entire village of Gomersal can be reached within the preferred maximum walking distance of 2km as well as parts of Cleckheaton including the town centre to the west and Birkenshaw to the north. Within a 1km walking distance of the site, the following local services and amenities are available:

→ Gomersal Local Convenience Store	140m
→ West End (Public House)	375m
→ Bus Stops on Spen Lane	470/520m
→ Morrisons Daily and Post Office	475m
→ Happy Garden Chinese Takeaway	490m
→ Gomersal Public Hall	640m
→ St. Mary's The Blessed Virgin, Gomersal	640m
→ Gomersal Primary School	940m
→ Sainsbury's Local	960m
→ Gomersal St. Mary's CE Primary School	1000m

2.4.7 While there are local services and amenities within 1000m of the proposed development, it is important to consider the quality of the pedestrian infrastructure when determining the accessibility.

- 2.4.8 Footways are present on both sides of Cliffe Lane, in the vicinity of the site, and there is street lighting present. These footways continue both east towards Latham Lane and South onto Woodlands Road, which continues onto the A643 Spen Lane. Heading east on Spen Lane, there is a zebra crossing to aid pedestrians crossing the street safely.
- 2.4.9 The footways continue east on the A643, towards the 4-armed signalised junction, with each arm having signalised pedestrian crossing facilities, with associated tactile paving and dropped kerbs. The signalised junction allows pedestrians to safely access the facilities within the centre of Gomersal.

Accessibility by Cycling

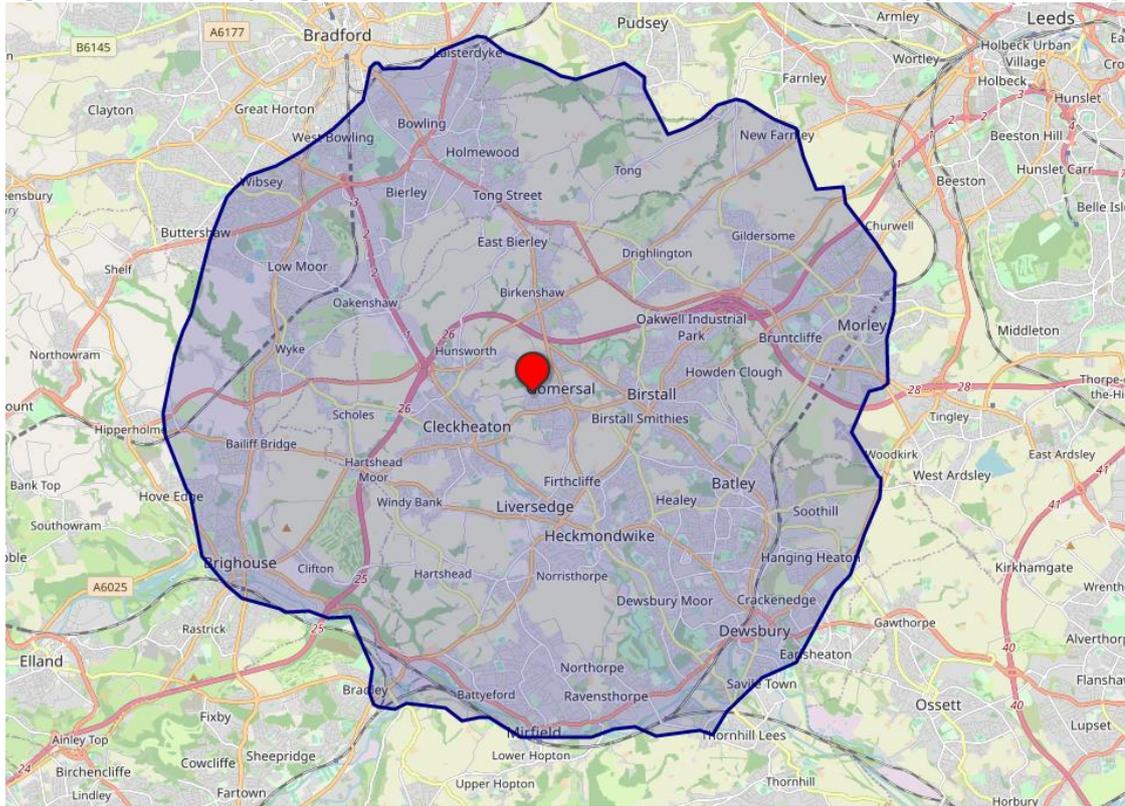
- 2.4.10 Like walking, cycling has an important part to play in reducing congestion, improving accessibility and reducing pollution. Cycling may also allow people without cars to reach destinations that they may otherwise be unable to reach. CIHT's Planning for Cycling (2014) states that:

"The majority of cycling trips are for short distances, with 80% being less than five miles and with 40% being less than two miles. However, the majority of trips by all modes are also short distances (67% are less than five miles, and 38% are less than two miles); therefore, the bicycle is a potential mode for many of these trips. Electric bicycles extend the range that can be cycled comfortably, and combined cycle-rail or cycle-bus journeys offer an alternative to car travel for many longer trips."

- 2.4.11 **Figure 8** identifies destinations that lie within 8km (5 miles of the site access).

Figure 8 – Indicative Cycling Isochrone

[OpenRouteService]



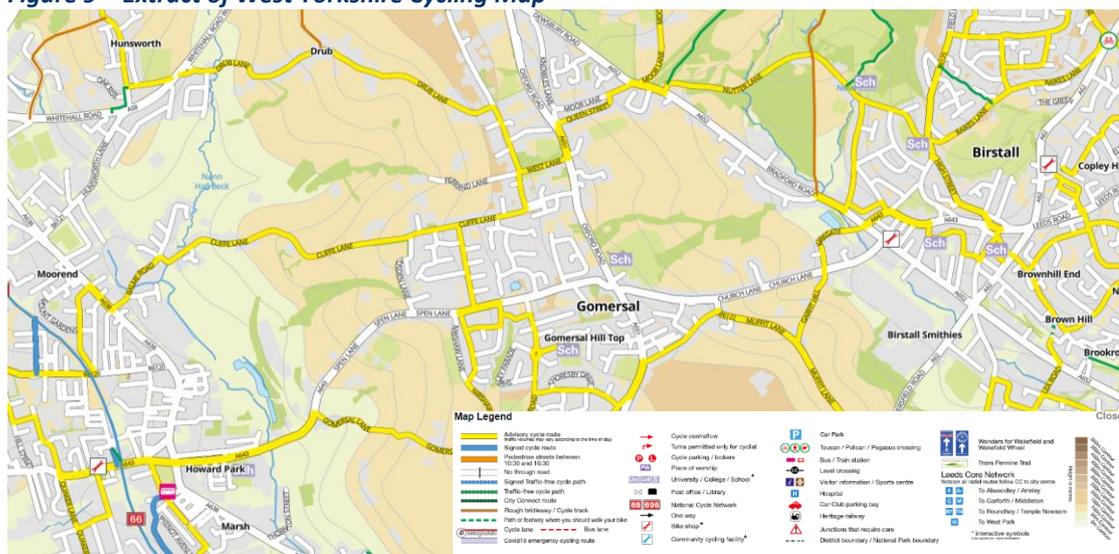
2.4.12 Figure 8 shows that many surrounding areas are accessible by cycling, including the centre of Gomersal, Cleckheaton, Liversedge, Batley, Birstall, Birkenshaw, Gildersome, Morley, Dewsbury, Heckmondwike and the southern extents of Bradford are all accessible within the 8km cycling isochrone. These areas include a number of retail facilities and employment opportunities along with Dewsbury, Batley and Morley railway stations.

2.4.13 As with walking, it is considered that the quality of the available cycling infrastructure is an important factor when it comes to accessibility. West Yorkshire provide an online interactive cycling map. An extract of the map for Gomersal is shown in **Figure 9**, overleaf.

2.4.14 While there is no formal cycling infrastructure within the immediate vicinity of the site, Cliffe Lane is considered an advisory cycle route. To the north east of the site, there are traffic-free cycle paths and a rough bridleway/ cycle track. To the west of the site, there is a signed cycle route – this is part of the National Cycle Route 66, which runs from Manchester City Centre to Spur Head.

2.4.15 In general, the majority of the roads in Gomersal in the vicinity of the site are suitable for cycling. The signalised junction of the A643/ A651 has existing advanced cycle stop lanes on all arms.

Figure 9 – Extract of West Yorkshire Cycling Map



Public Transport – Bus

2.4.16 The Buses in Urban Developments Guidance (January 2018), published by CIHT outlines that, “the planning of development sites should consider the walking distance to bus stops and the corresponding bus catchment areas.” **Figure 10**, an extract from the guidance outlines the recommended maximum walking distance for different situations.

Figure 10 – Recommended Maximum Walking Distances to Bus Stops

Situation	Maximum walking distance
Core bus corridors with two or more high-frequency services	500 metres
Single high-frequency routes (every 12 minutes or better)	400 metres
Less frequent routes	300 metres
Town/city centres	250 metres

2.4.17 The closest bus stops to the site are located along the A643 Spen Lane and A651 Oxford Road at a distance approximately 475m from the site vehicle site access onto Cliffe Lane, and pedestrian access onto Ferrand Lane, respectively. Oxford Road is part of the Core Bus Network (as identified in the WY Bus Service Improvement Plan). Bus stops are present on Cliffe Lane, which used to be served by 255 (Halifax – Leeds) but are currently not in use.

2.4.18 **Figure 11**, overleaf, shows the location of the nearest bus stops.

Figure 11 – Location of Nearest Bus Stops

[Google 'MyMaps']



2.4.19 Table 1 shows a summary of the bus services available from the above stops.

Table 1 – Bus Service Information

Number	Route	Approximate Peak Frequency		
		Mon – Sat Daytime	Mon- Sat Evening	Sunday
200	Heckmondwike – Leeds via Cleckheaton and Morley	30 minutes	120 minutes	60 minutes
254*	(Brighouse) – Cleckheaton – Leeds via Birkenshaw	15 minutes	60 minutes	30 minutes
255	Halifax – Leeds via Scholes and Cleckheaton	60 minutes	No Service	120 minutes
263	Bradford – Dewsbury	1AM/ 1PM Service	No Service	No Service
271^	Cleckheaton – Batley via Heckmondwike	60 minutes	No Service	120 minutes
AL1	Gomersal – St. John Fisher School	1AM/ 1PM Service	No Service	No Service

* - Service 254 operates three services per hour, with one extending from Brighouse Bus Station. The service combines with 255 to provide a 15-minute frequency between Cleckheaton and Leeds.

^ - Service 271 only operates between Heckmondwike and Batley on Sundays

2.4.20 In terms of bus services, there is significant potential for public transport trips to destinations including Leeds, Dewsbury, Cleckheaton and Dewsbury which all allow for further onward connections to be made.

Public Transport – Rail Services

- 2.4.21 The nearest railway station to the site is Dewsbury, which is located approximately 7km to the southeast of the site and is therefore within an acceptable cycling distance from the proposed development. The station has 70 secure cycle spaces available, has staff present throughout the day and step free access coverage is available across the station.
- 2.4.22 Dewsbury railway station sees four trains per hour to Leeds (with onward connections to Redcar Central and Newcastle) and four trains per hour to Manchester (with onward connections to Manchester and Wigan Wallgate).

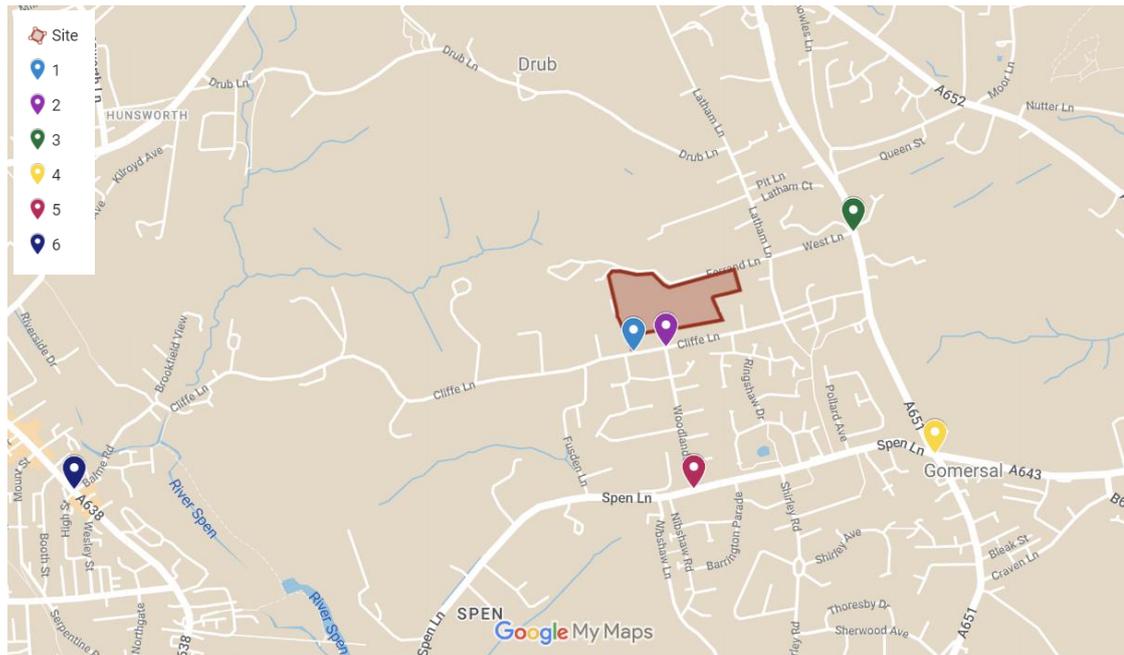
Accessibility Summary

- 2.4.23 The site can be considered accessible by sustainable modes as there are adequate connections to existing services and amenities by walking and cycling. There is also regular public transport services, from stops located within 500m from the site. Therefore, the accessible nature of the site should help to reduce vehicular trips to and from the site, reducing the associated impact on the local road network.

2.5 Traffic Flows

- 2.5.1 Nationwide Data Collection were commissioned to undertake manual, fully classified counts at the following junctions on 27th March 2023. The scope and timing of the surveys were agreed with Kirklees prior to their undertaking.
1. Site Access/Cliffe Lane (priority junction)
 2. Woodlands Road/Cliffe Lane (priority junction)
 3. West Lane/A651 Oxford Road/Cambridge Chase (staggered crossroads junction)
 4. A643 Spen Lane/A651 Oxford Road/A643 Church Lane (signal-controlled junction)
 5. Woodlands Road/A643 Spen Lane (priority junction)
 6. Balme Road/A638 Bradford Road/High Street (staggered crossroads junction)
- 2.5.2 The following figure illustrates the location of the above junctions on the local highway network.

Figure 12 – Survey Locations



2.5.3 The traffic count data has been analysed and the network peak hours have been established as 07:30-08:30 in the AM and 16:30-17:30 in the PM. A full copy of the traffic survey data is included at **Appendix B** and the surveyed peak hour traffic flows are presented on **Traffic Figure Diagram 1** at **Appendix C**.

3. Development Proposals

3.1 Overview

3.1.1 The proposed development is for 87 dwellings with vehicular access to be provided from Cliffe Lane. A secondary pedestrian access will be provided from Ferrand Lane. A copy of the proposed site layout plan is attached at **Appendix D**.

3.2 Vehicle Access

3.2.1 Vehicle access to the site is proposed via a new priority junction onto Cliffe Lane, as per the approved junction design put forward as part of the 2019 application. The access road will feature a 6.0m wide carriageway with 6m junction radii and 2.0m wide footways on both sides tying in with the existing footway provisions on the north side of Cliffe Lane.

3.2.2 The proposed new access will replace the existing vehicular dropped crossing access to Holmfield, with a new access to Holmfield to be provided from within the site via an existing gate, as illustrated on the proposed site layout plan.

3.2.3 The access achieves visibility splays of 2.4m x 53m to the east and 2.4m x 52m to the west, measured 0.5m into the carriageway to represent the nearside vehicle track, as per guidance contained within Manual for Streets 2. The visibility provisions exceed the recommended minimum stopping sight distances (SSD) based on the recorded 85th percentile speed of approaching vehicles (32mph) which require a SSD of 47m.

3.2.4 In order to achieve the above visibility splays it is necessary to construct a minor build-out of the northern edge of carriageway to allow the advancement of the access give-way line. Subsequently, so that a 6m carriageway width can be maintained along Cliffe Lane through the site access junction, a minor realignment of the southern edge of carriageway is also required. The proposed access arrangement and local highway improvements are detailed on Drawing 152130-001 at **Appendix E**.

3.2.5 All of the land required to construct the access and achieve the required visibility splays is either within the applicant's control or public highway.

3.3 Pedestrian Access

3.3.1 Access to the site for pedestrians will be provided via 2m wide footways to both sides of the proposed vehicular access junction, which will link to the existing footway provision on the northern side of Cliffe Lane.

3.3.2 A secondary pedestrian access is to be provided via a link to Ferrand Lane at the north-eastern corner of the site, as shown on the proposed site layout plan.

3.4 **Parking**

3.4.1 Parking within the development is to be provided in line with the Council’s Highway Design Guide (adopted November 2019) which states the following in relation to residential parking standards:

“Kirklees Council has not set local parking standards for residential and non-residential development. However, as an initial point of reference for residential developments (unless otherwise evidenced using the criteria in Para. 5.1), it is considered that new:

- *2 to 3 bedroom dwellings provide a minimum of two off-street car parking spaces*
- *4+ bedroom dwellings provide three off-street spaces.*
- *1-2 bedroom apartments provide one space (3+ bed two spaces)*

In most circumstances, one visitor space per 4 dwellings is considered appropriate. One cycle space per unit is recommended.”

3.4.2 Each dwelling will also provide infrastructure to assist with electric vehicle charging, usually in the form of an external plug socket.

3.5 **Internal Layout**

3.5.1 The internal layout has been designed to accommodate the swept path of an 11.85m large refuse vehicle (the largest vehicle expected to turn within the site) as demonstrated on Drawing 152130-002 at **Appendix D**. The turning heads provided are also sufficient to accommodate the movement of smaller servicing, delivery, and emergency service vehicles.

3.5.2 Where the layout features private drives, refuse storage areas are provided towards the end of each drive, within the recommended carry distance for residents (30m) and within acceptable distance of the servicing position of a refuse vehicle (25m).

3.5.3 Adequate forward visibility and junction visibility has been incorporated into the design in line with the Council’s highway design guide as demonstrated on Drawing 152130-003 at **Appendix D**.

4. Trip Generations and Distribution

4.1 Vehicle Trip Generations

4.1.1 The 2019 TA prepared by Bryan G Hall (BGH) set out 85th percentile vehicle trip rates derived from the TRICS database to estimate the number of vehicle trips likely to be generated by the proposed development during the typical weekday AM and PM peak periods. The trips rates, approved by Kirklees Council, are set out in **Table 2** below along with the resulting traffic generations based on the proposed development quantum of 87 dwellings.

Table 2 – Approved 85th %ile Trip Rates and Generations

	Trip Rates		Trip Generations		
	Arr	Dep	Arr	Dep	Total
AM	0.086	0.529	7	46	53
PM	0.388	0.233	34	20	54

4.1.2 In addition to the above, Kirklees requested BGH to undertake a sensitivity assessment using a higher trip rate of 0.8 per dwelling, with a 25/75 split between arrivals and departures. The trip rates and resulting generations for the sensitivity assessment are set out in **Table 3**.

Table 3 – Kirklees Trip Rates and Generations

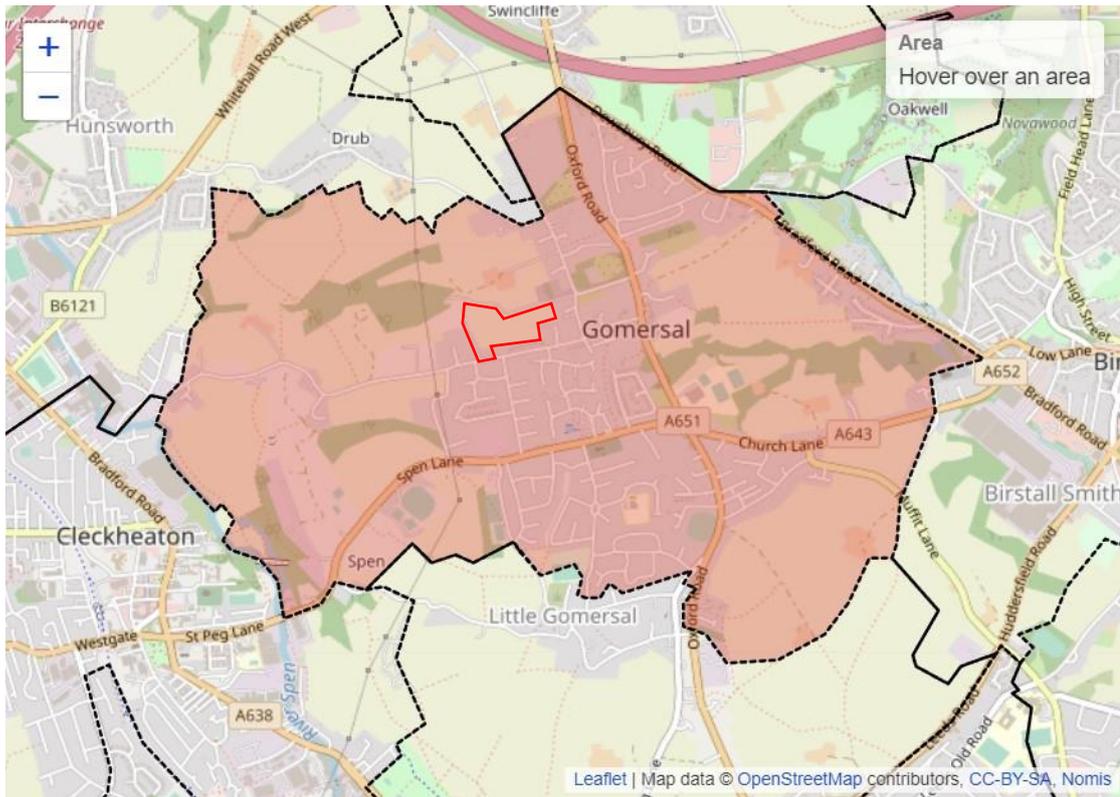
	Trip Rates		Trip Generations		
	Arr	Dep	Arr	Dep	Total
AM	0.200	0.600	17	52	69
PM	0.600	0.200	52	17	69

4.2 Vehicle Trip Distributions

4.2.1 In order to estimate the likely distribution of development traffic on the local highway network, a Census-based distribution assessment has been undertaken using 2011 Census: Origin Destination Statistics (dataset WU03EW) which identifies the location of usual residence and place of work by method of travel to work at Middle Super Output Area (MSOA) level. For the purpose of this assessment, the location of usual residence was determined as the 'Kirklees 004' MSOA (within which the site is located), the extent of which is depicted overleaf in **Figure 13**.

Figure 13 – Kirklees 004 MSOA

[NOMIS]



- 4.2.2 As the Census data includes all nationwide MSOA destinations, the results of the search have been refined to exclude all MSOA's which generate less than 9 trips, which equates to less than 0.5% of the overall sample. It is considered that this excluded information is not critical in terms of establishing a 'likely' distribution of traffic.
- 4.2.3 The likely traffic route assignments between the site and the identified MSOA's have been determined using online route mapping and Population Centroid Data which identifies the centre of each MSOA based upon its residential population.
- 4.2.4 The table included at **Appendix F** details the percentage draw from each surrounding MSOA and identifies the suggested route assignment on the local highway network. A summary of the predicted route assignment is provided within **Table 4**.

Table 4 – Predicted Traffic Distribution %

Origin / Destination	%
Bradford Rd (A638) (N)	18.5%
Bradford Rd (A638) (S)	0.0%
Spenn Lane (A643) (W)	16.3%
Oxford Road (A651) (S)	6.7%
Oxford Road (A651) (N)	41.3%
Church Lane (A643) (E)	17.1%
High Street	0.0%

4.2.5 The predicted peak hour vehicle trips identified in Tables 2 and 3 have been assigned to the local road network based on the predicted distribution proportions set out within Table 4. The resulting traffic flows are presented through a series of Traffic Figure Diagrams (TFD) at **Appendix C**.

5. Traffic Impact Assessment

5.1 Base Traffic Flows

- 5.1.1 The base traffic flows are taken from the surveys undertaken by Nationwide Data Collection during the observed network peak periods of 07:30-08:30 in the AM and 16:30-17:30 in the PM.
- 5.1.2 For priority-controlled junctions the flows are presented as total vehicles, and HGV %. At the A643/A651 signal-controlled junction the traffic flows are presented as Passenger Car Units (PCU).

5.2 Traffic Growth

- 5.2.1 To account for the potential growth in background traffic flows, a future year assessment for the year 2028 (5 years post application) has been undertaken by applying growth factors for the local area (Kirklees 004 MSOA) generated using the TEMPro v7.2b database (adjusted against RTF18). The applied factors are as follows:

- AM = 1.0367
- PM = 1.0375

5.3 Committed Development Traffic

- 5.3.1 Following a review of Kirklees Council's Planning Register, it is considered that there are no significant committed development sites in the local area that are likely to be delivered within the next 3 years, that would have a material cumulative impact on the operation of the local road network.

5.4 Proposed Development Traffic Flows

- 5.4.1 Traffic impact assessments have been undertaken using both the approved 85th percentile trip rates from the 2019 application as set out in the BGH TA, and for the purpose of sensitivity, the Kirklees trip rates. Each set of traffic flows have been distributed as described in the previous chapter of this report.

5.5 Junction Modelling

- 5.5.1 In order to quantify the cumulative impacts of the proposed development traffic upon the operation of the local highway network, detailed junction capacity assessments have been undertaken at the following junctions;

1. Site Access/Cliffe Lane (priority junction)
2. Woodlands Road/Cliffe Lane (priority junction)
3. West Lane/A651 Oxford Road/Cambridge Chase (staggered crossroads junction)
4. A643 Spen Lane/A651 Oxford Road/A643 Church Lane (signal-controlled junction)
5. Woodlands Road/A643 Spen Lane (priority junction)
6. Balme Road/A638 Bradford Road/High Street (staggered crossroads junction)

5.5.2 The priority-controlled junctions have been assessed using the traffic modelling program 'JUNCTIONS 9'. The results are expressed in terms of Ratio of Flow to Capacity (RFC), Average Delay, and Average Vehicle Queues. It should be noted that the threshold of practical capacity at priority-controlled junctions is typically represented by an RFC value of 0.85 (85%). Absolute capacity is represented by an RFC value of 1.0 (100%).

5.5.3 The signal-controlled junction has been assessed using 'LinSig v3'. The results are expressed in terms of Degree off Saturation (Deg Sat %) and Mean Max Queues. It should be noted that the threshold of practical capacity at signal-controlled junctions is typically represented by a Degree of Saturation value of 90%. Absolute capacity is represented by a Degree of Saturation value of 100%.

5.5.4 The following assessment scenarios have been considered;

- **2023 Base** – To establish the existing levels of capacity on the local highway network;
- **2028 Base** – To establish the impacts of forecast levels of background traffic growth;
- **2023 Base + Development (Approved and Kirklees Trip Rates)** – To establish the impacts of the development above existing traffic levels; and,
- **2028 Base + Development (Approved and Kirklees Trip Rates)** – To establish the cumulative impacts of both proposed development traffic and background traffic growth.

1. Site Access / Cliffe Lane

5.5.5 The junction capacity results for the proposed site access junction are summarised in **Table 5**, whilst the full Junctions 9 output report is included at **Appendix G**.

Table 5 – Site Access / Cliffe Lane capacity summary

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
Site Access - Cliffe Lane - 2023 Base										
Stream B-AC	D1	0.0	0.00	0.00	A	D2	0.0	0.00	0.00	A
Stream C-AB		0.0	5.37	0.00	A		0.0	5.26	0.01	A
Site Access - Cliffe Lane - 2028 Base										
Stream B-AC	D3	0.0	0.00	0.00	A	D4	0.0	0.00	0.00	A
Stream C-AB		0.0	5.36	0.00	A		0.0	5.25	0.01	A
Site Access - Cliffe Lane - 2023 Base + Dev Approved Rates										
Stream B-AC	D9	0.1	7.47	0.10	A	D10	0.1	7.21	0.05	A
Stream C-AB		0.0	5.42	0.01	A		0.1	5.48	0.06	A
Site Access - Cliffe Lane - 2023 Base + Dev Kirklees Rates										
Stream B-AC	D11	0.1	7.58	0.11	A	D12	0.0	7.15	0.04	A
Stream C-AB		0.0	5.48	0.03	A		0.1	5.65	0.09	A
Site Access - Cliffe Lane - 2028 Base + Dev Approved Rates										
Stream B-AC	D13	0.1	7.50	0.10	A	D14	0.1	7.24	0.05	A
Stream C-AB		0.0	5.41	0.01	A		0.1	5.47	0.06	A
Site Access - Cliffe Lane - 2028 Base + Dev Kirklees Rates										
Stream B-AC	D15	0.1	7.61	0.11	A	D16	0.0	7.19	0.04	A
Stream C-AB		0.0	5.47	0.03	A		0.1	5.63	0.10	A

5.5.6 The modelling results predict that the proposed site access would operate comfortably in all assessment scenarios with a maximum RFC value of 0.11 and maximum average vehicle queues of 0.1 vehicles.

2. Woodlands Road / Cliffe Lane

5.5.7 The junction capacity results for the Woodlands Road / Cliffe Lane junction are summarised in **Table 6**, whilst the full Junctions 9 output report is included at **Appendix H**.

Table 6 – Woodlands Road / Cliffe Lane capacity summary

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
Woodlands Road - Cliffe Lane - 2023 Base										
Stream B-AC	D1	0.4	11.44	0.29	B	D2	0.2	9.02	0.17	A
Stream C-AB		0.1	5.38	0.05	A		0.2	5.86	0.13	A
Woodlands Road - Cliffe Lane - 2028 Base										
Stream B-AC	D3	0.4	11.69	0.31	B	D4	0.2	9.15	0.18	A
Stream C-AB		0.1	5.37	0.05	A		0.2	5.88	0.13	A
Woodlands Road - Cliffe Lane - 2023 Base + Dev Approved Rates										
Stream B-AC	D9	0.4	11.79	0.31	B	D10	0.2	9.21	0.20	A
Stream C-AB		0.1	5.30	0.09	A		0.2	5.94	0.14	A
Woodlands Road - Cliffe Lane - 2023 Base + Dev Kirklees Rates										
Stream B-AC	D11	0.5	11.90	0.31	B	D12	0.3	9.30	0.21	A
Stream C-AB		0.1	5.30	0.09	A		0.2	5.96	0.14	A
Woodlands Road - Cliffe Lane - 2028 Base + Dev Approved Rates										
Stream B-AC	D13	0.5	12.06	0.32	B	D14	0.3	9.35	0.21	A
Stream C-AB		0.1	5.30	0.09	A		0.2	5.97	0.15	A
Woodlands Road - Cliffe Lane - 2028 Base + Dev Kirklees Rates										
Stream B-AC	D15	0.5	12.18	0.33	B	D16	0.3	9.44	0.22	A
Stream C-AB		0.1	5.30	0.09	A		0.2	5.98	0.15	A

5.5.8 The modelling results predict that the Woodlands Road / Cliffe Lane junction would operate comfortably in all assessment scenarios with a maximum RFC value of 0.33 and maximum average vehicle queues of 0.5 vehicles.

3. West Lane/A651 Oxford Road / Cambridge Chase

5.5.9 The junction capacity results for the West Lane / Oxford Road / Cambridge Chase staggered crossroad junction are summarised in **Table 7**, whilst the full Junctions 9 output report is included at **Appendix I**.

Table 7 – West Lane / Oxford Road / Cambridge Chase capacity summary

	AM				PM			
	Set ID	Queue (Veh)	Delay (s)	RFC	Set ID	Queue (Veh)	Delay (s)	RFC
Oxford Road - West Lane - Cambridge Chase - 2023 Base								
Stream B-ACD	D1	0.0	13.68	0.04	D2	0.0	12.12	0.03
Stream A-BCD		1.2	7.87	0.44		2.3	10.91	0.61
Stream D-AB		2.7	26.46	0.74		0.5	10.32	0.33
Stream D-BC		0.8	35.76	0.44		0.4	20.96	0.30
Stream C-ABD		0.0	5.29	0.02		0.0	4.85	0.01
Oxford Road - West Lane - Cambridge Chase - 2028 Base								
Stream B-ACD	D3	0.0	14.24	0.05	D4	0.0	12.56	0.03
Stream A-BCD		1.3	8.19	0.46		2.7	11.99	0.65
Stream D-AB		3.5	33.19	0.79		0.5	10.88	0.35
Stream D-BC		1.0	46.53	0.52		0.5	22.75	0.32
Stream C-ABD		0.0	5.24	0.02		0.0	4.82	0.01
Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Approved Rates								
Stream B-ACD	D9	0.0	13.90	0.04	D10	0.0	14.29	0.05
Stream A-BCD		1.2	7.98	0.45		2.8	12.16	0.65
Stream D-AB		3.4	31.55	0.79		0.5	10.66	0.35
Stream D-BC		0.9	42.63	0.49		0.4	21.93	0.31
Stream C-ABD		0.0	5.29	0.02		0.0	4.88	0.01
Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Kirklees Rates								
Stream B-ACD	D11	0.0	13.98	0.04	D12	0.0	12.41	0.03
Stream A-BCD		1.3	8.14	0.46		2.9	12.91	0.67
Stream D-AB		3.5	32.70	0.79		0.5	10.63	0.34
Stream D-BC		0.9	44.56	0.50		0.4	22.20	0.31
Stream C-ABD		0.0	5.30	0.02		0.0	4.89	0.01
Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Approved Rates								
Stream B-ACD	D13	0.1	14.49	0.05	D14	0.1	14.87	0.05
Stream A-BCD		1.4	8.31	0.47		3.3	13.61	0.69
Stream D-AB		4.5	41.50	0.84		0.6	11.29	0.37
Stream D-BC		1.3	60.60	0.59		0.5	23.93	0.33
Stream C-ABD		0.0	5.24	0.02		0.0	4.85	0.01
Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Kirklees Rates								
Stream B-ACD	D15	0.1	14.58	0.05	D16	0.0	12.88	0.03
Stream A-BCD		1.4	8.49	0.48		3.5	14.57	0.71
Stream D-AB		4.8	43.51	0.85		0.6	11.26	0.36
Stream D-BC		1.4	64.85	0.61		0.5	24.26	0.34
Stream C-ABD		0.0	5.24	0.02		0.0	4.85	0.01

5.5.10 The modelling results for the West Lane / Oxford Road / Cambridge Chase staggered crossroad junction show that the junction currently operates with relatively comfortable levels of reserve capacity in both the AM and PM network peak periods.

- 5.5.11 The results indicate that the junction experiences maximum RFC values of 0.74 for the West Lane to Oxford Road (N) movement in the AM peak period, at which time average vehicle queuing equates to 2.7 vehicles. During the PM peak period, maximum RFC values of 0.61 occur on the Oxford Road (N) arm of the junction with average vehicle queues of 2.3 vehicles.
- 5.5.12 Queue surveys undertaken at this junction at the same time as the classified turning counts recorded average queue lengths of 1.9 vehicles along West Lane during the AM peak period and 0.5 vehicles along Oxford Road (N) during the PM peak period. It is therefore considered that the modelling results are representative of the existing junction performance.
- 5.5.13 The results for the 2028 Base scenario predict that the maximum RFC during the AM peak period will increase from 0.74 to 0.79 RFC, with average vehicle queues increasing from 2.7 to 3.5 (+0.8 vehicles). During the PM peak, the maximum RFC value is predicted to increase from 0.61 to 0.65 RFC with average vehicle queues increasing from 2.3 to 2.7 (+0.4 vehicles).
- 5.5.14 The results for the 2023 Base + Development scenario predict that with the addition of development traffic (using either the approved trip rates or Kirklees trip rates), in the AM peak period the maximum RFC would be 0.79, which is equal to the impact of background traffic growth. In the PM peak, the maximum RFC is 0.65 when using the approved trip rates, which is equal to the impact of background traffic growth. Using the Kirklees trip rates, the maximum RFC increases to 0.67 with average vehicle queues increasing to 2.9. From the above, the addition of development traffic is considered to have a negligible impact on the existing operation of the junction.
- 5.5.15 The results for the 2028 Base + Development predict that the cumulative impacts of both forecast background traffic growth and the addition of development traffic would see maximum RFC values increase to 0.84 (approved trip rates) / 0.85 (Kirklees trip rates) in the AM peak with average vehicle queues along West Lane increasing from 2.7 (2023 Base) to 4.5/4.8 vehicles respectively. In the PM peak, maximum RFC values are predicted to increase to 0.69 (approved trip rates) / 0.71 (Kirklees trip rates) along Oxford Road (N) with average vehicle queues increasing from 2.3 (2023 Base) to 3.3/3.5 vehicles respectively.
- 5.5.16 It is considered that even in the worst-case scenario, applying Kirklees' higher trip rates and background traffic growth to 2028 the junction is predicted to operate within the threshold of practical reserve capacity and without any material exacerbation of existing vehicle queue lengths on any given arm of the junction.

4. A643 Spen Lane/A651 Oxford Road/A643 Church Lane

5.5.17 The junction capacity results for the Spen Lane / Oxford Road / Church Lane signal-controlled junction are summarised in **Tables 8 to 13**, whilst the full LinSig output report is included at **Appendix J**.

Table 8 - Spen Lane / Oxford Road / Church Lane – 2023 Base summary

Item	Lane Description	2023 AM Base		2023 PM Base	
		Deg Sat (%)	Mean Max Queue (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: Oxford Rd - Spen Ln - Church	-	96.30%	-	98.60%	-
Oxford Rd - Spen Ln - Church In Gomersal	-	96.30%	-	98.60%	-
1/1	A651 North Ahead Left Right	94.60%	17.2	98.60%	22.1
2/1	A643 Church Lane Left Right Ahead	94.60%	14.3	97.40%	18.4
3/1	A651 South Right Ahead Left	91.00%	15.3	90.10%	15.7
4/1	Spen Lane Right Ahead Left	96.30%	19.1	96.30%	16
		Cycle Time (s): 180		Cycle Time (s): 180	
		PRC Over All Lanes (%): -7.0		PRC Over All Lanes (%): -9.6	

Table 9 - Spen Lane / Oxford Road / Church Lane – 2028 Base summary

Item	Lane Description	2028 AM Base		2028 PM Base	
		Deg Sat (%)	Mean Max Queue (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: Oxford Rd - Spen Ln - Church	-	99.70%	-	102.40%	-
Oxford Rd - Spen Ln - Church In Gomersal	-	99.70%	-	102.40%	-
1/1	A651 North Ahead Left Right	98.20%	20.5	102.40%	29
2/1	A643 Church Lane Left Right Ahead	98.20%	17.3	101.10%	22.8
3/1	A651 South Right Ahead Left	94.30%	17.3	93.50%	17.8
4/1	Spen Lane Right Ahead Left	99.70%	23	99.70%	18.9
		Cycle Time (s): 180		Cycle Time (s): 180	
		PRC Over All Lanes (%): -10.8		PRC Over All Lanes (%): -13.8	

Table 10 - Spen Lane / Oxford Road / Church Lane – 2023 Base+Dev (Approved) summary

Item	Lane Description	2023 AM Base + Dev (Approved)		2023 PM Base + Dev (Approved)	
		Deg Sat (%)	Mean Max Queue (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: Oxford Rd - Spen Ln - Church	-	96.80%	-	99.00%	-
Oxford Rd - Spen Ln - Church In Gomersal	-	96.80%	-	99.00%	-
1/1	A651 North Ahead Left Right	96.80%	18.9	98.60%	22.1
2/1	A643 Church Lane Left Right Ahead	94.90%	14.6	99.00%	19.9
3/1	A651 South Right Ahead Left	93.40%	16.6	90.50%	15.9
4/1	Spen Lane Right Ahead Left	96.50%	19.7	97.50%	17
		Cycle Time (s): 180		Cycle Time (s): 180	
		PRC Over All Lanes (%): -7.6		PRC Over All Lanes (%): -10.0	

Table 11 - Spen Lane / Oxford Road / Church Lane – 2023 Base+Dev (Kirklees) summary

Item	Lane Description	2023 AM Base + Dev (Kirklees)		2023 PM Base + Dev (Kirklees)	
		Deg Sat (%)	Mean Max Queue (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: Oxford Rd - Spen Ln - Church	-	96.80%	-	99.80%	-
Oxford Rd - Spen Ln - Church In Gomersal	-	96.80%	-	99.80%	-
1/1	A651 North Ahead Left Right	96.80%	18.7	98.60%	22.1
2/1	A643 Church Lane Left Right Ahead	95.60%	15	99.80%	20.8
3/1	A651 South Right Ahead Left	93.40%	16.3	90.70%	16.1
4/1	Spen Lane Right Ahead Left	96.70%	19.9	97.50%	17
		Cycle Time (s): 180		Cycle Time (s): 180	
		PRC Over All Lanes (%): -7.6		PRC Over All Lanes (%): -10.9	

Table 12 - Spen Lane / Oxford Road / Church Lane – 2028 Base+Dev (Approved) summary

Item	Lane Description	2028 AM Base + Dev (Approved)		2028 PM Base + Dev (Approved)	
		Deg Sat (%)	Mean Max Queue (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: Oxford Rd - Spen Ln - Church	-	100.50%	-	102.60%	-
Oxford Rd - Spen Ln - Church In Gomersal	-	100.50%	-	102.60%	-
1/1	A651 North Ahead Left Right	100.50%	23.2	102.40%	28.9
2/1	A643 Church Lane Left Right Ahead	98.50%	17.5	102.60%	25.6
3/1	A651 South Right Ahead Left	96.70%	19	93.90%	18
4/1	Spen Lane Right Ahead Left	99.80%	23.5	100.90%	20.5
		Cycle Time (s): 180		Cycle Time (s): 180	
		PRC Over All Lanes (%): -11.7		PRC Over All Lanes (%): -14.0	

Table 13 - Spen Lane / Oxford Road / Church Lane – 2028 Base+Dev (Kirklees) summary

Item	Lane Description	2028 AM Base + Dev (Kirklees)		2028 PM Base + Dev (Kirklees)	
		Deg Sat (%)	Mean Max Queue (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: Oxford Rd - Spen Ln - Church	-	100.50%	-	103.50%	-
Oxford Rd - Spen Ln - Church In Gomersal	-	100.50%	-	103.50%	-
1/1	A651 North Ahead Left Right	100.50%	23.2	102.40%	28.9
2/1	A643 Church Lane Left Right Ahead	99.20%	18.2	103.50%	27
3/1	A651 South Right Ahead Left	96.70%	19	94.20%	18.1
4/1	Spen Lane Right Ahead Left	100.10%	24	100.90%	20.5
		Cycle Time (s): 180		Cycle Time (s): 180	
		PRC Over All Lanes (%): -11.7		PRC Over All Lanes (%): -15.0	

5.5.18 The modelling results indicate that the junction currently operates over the threshold of practical capacity (90% Deg Sat) on all arms of the junction, but under the threshold of absolute capacity (100%), in both the AM and PM peak periods. Existing mean max vehicle queues are modelled to be in the order of 14.3-19.1 PCU's in the AM and 15.7-22.1 PCU's in the PM.

- 5.5.19 The addition of background traffic growth to 2028 increases the degree of saturation in both peak periods. In the AM peak the maximum Deg Sat % increases from 96.3 to 99.7 and in the PM, the maximum Deg Sat % increases from 98.6 to 102.4, which is over the threshold of absolute capacity.
- 5.5.20 For comparison it should be noted that the addition of development traffic to the 2023 base traffic flows also increases the degree of saturation, however, neither the approved trip rate, nor Kirklees trip rate scenarios trip the threshold of absolute capacity. It can therefore be stated that background traffic growth is the main contributing factor towards any adverse impacts upon the operation of the junction.
- 5.5.21 In the 2028 Base + Development scenarios, using either the approved or Kirklees trip rate scenarios, the junction is predicted to operate over the threshold of absolute capacity during both AM and PM peak periods, with maximum Deg Sat % levels of 102.6 and 103.5, respectively.
- 5.5.22 Whilst it is acknowledged that the junction is predicted to operate marginally over capacity, it should be noted that a similar conclusion was drawn in the 2019 application and the Council were content that the impacts of development traffic (98 dwellings) upon the operation of the junction were not severe.
- 5.5.23 For comparison, the modelling assessment included in the BGH TA predicted maximum Deg Sat % levels of 110.2% in the future year (without development) scenario, and 112.7% in the future year (with development) scenario.
- 5.5.24 To express the impacts of the current proposal in simpler terms, using the higher Kirklees trip rates for example, the development is predicted to generate a total of 16 vehicle movements through the junction during the AM and PM peak periods split between 3 different arms of the junction. Altogether this equates to approximately 1 vehicle movement every 4 minutes and represents a ~1% increase to existing traffic levels at the junction in both peaks. This level of intensification is considered to be negligible and would not be discernible amongst typical daily fluctuations in traffic flows.

5. Woodlands Road/A643 Spen Lane

5.5.25 The junction capacity results for the Woodlands Road / Spen Lane junction are summarised in **Table 14**, whilst the full Junctions 9 output report is included at **Appendix K**.

Table 14 – Woodlands Road / Spen Lane capacity summary

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
Woodlands Road - Spen Lane - 2023 Base										
Stream B-AC	D1	0.3	10.69	0.22	B	D2	0.5	11.52	0.32	B
Stream C-AB		0.3	5.91	0.14	A		0.4	5.72	0.19	A
Woodlands Road - Spen Lane - 2028 Base										
Stream B-AC	D3	0.3	10.94	0.23	B	D4	0.5	11.89	0.33	B
Stream C-AB		0.3	5.94	0.15	A		0.4	5.75	0.19	A
Woodlands Road - Spen Lane - 2023 Base + Dev Approved Rates										
Stream B-AC	D9	0.4	11.38	0.27	B	D10	0.5	11.96	0.34	B
Stream C-AB		0.3	5.94	0.15	A		0.4	5.87	0.20	A
Woodlands Road - Spen Lane - 2023 Base + Dev Kirklees Rates										
Stream B-AC	D11	0.4	11.50	0.28	B	D12	0.5	11.98	0.34	B
Stream C-AB		0.3	5.98	0.15	A		0.4	5.97	0.22	A
Woodlands Road - Spen Lane - 2028 Base + Dev Approved Rates										
Stream B-AC	D13	0.4	11.67	0.28	B	D14	0.5	12.35	0.36	B
Stream C-AB		0.3	5.97	0.15	A		0.4	5.90	0.21	A
Woodlands Road - Spen Lane - 2028 Base + Dev Kirklees Rates										
Stream B-AC	D15	0.4	11.79	0.29	B	D16	0.5	12.38	0.35	B
Stream C-AB		0.3	6.01	0.16	A		0.5	6.00	0.23	A

5.5.26 The modelling results predict that the Woodlands Road / Spen Lane junction would operate comfortably in all assessment scenarios with a maximum RFC value of 0.29 in the AM / 0.36 in the PM, and maximum average vehicle queues of 0.4/0.5 vehicles, respectively.

6. Balme Road/A638 Bradford Road/High Street

5.5.27 The junction capacity results for the Balme Road/A638 Bradford Road/High Street junction are summarised in **Table 15**, whilst the full Junctions 9 output report is included at **Appendix L**.

Table 15 – Balme Road/A638 Bradford Road/High Street capacity summary

	AM				PM			
	Set ID	Queue (Veh)	Delay (s)	RFC	Set ID	Queue (Veh)	Delay (s)	RFC
Bradford Road - Balme Road - High Street - 2023 Base								
Stream B-ACD	D1	0.7	16.79	0.43	D2	1.1	21.41	0.52
Stream A-BCD		0.0	5.30	0.01		0.0	3.91	0.04
Stream D-ABC		0.1	13.92	0.06		0.1	13.98	0.06
Stream C-ABD		0.7	4.87	0.26		0.9	6.02	0.31
Bradford Road - Balme Road - High Street - 2028 Base								
Stream B-ACD	D3	0.8	17.99	0.45	D4	1.2	23.92	0.56
Stream A-BCD		0.0	5.25	0.01		0.1	3.87	0.04
Stream D-ABC		0.1	14.43	0.06		0.1	14.56	0.06
Stream C-ABD		0.8	4.94	0.28		1.0	6.17	0.34
Bradford Road - Balme Road - High Street - 2023 Base + Dev Approved Rates								
Stream B-ACD	D9	0.8	18.07	0.46	D10	1.1	22.50	0.54
Stream A-BCD		0.0	5.29	0.01		0.0	3.89	0.04
Stream D-ABC		0.1	13.95	0.06		0.1	14.02	0.06
Stream C-ABD		0.7	4.88	0.26		0.9	6.04	0.32
Bradford Road - Balme Road - High Street - 2023 Base + Dev Kirklees Rates								
Stream B-ACD	D11	0.8	18.24	0.46	D12	1.1	22.31	0.53
Stream A-BCD		0.0	5.28	0.01		0.0	3.89	0.04
Stream D-ABC		0.1	13.96	0.06		0.1	14.03	0.06
Stream C-ABD		0.7	4.88	0.26		0.9	6.05	0.32
Bradford Road - Balme Road - High Street - 2028 Base + Dev Approved Rates								
Stream B-ACD	D13	0.9	19.45	0.49	D14	1.3	25.28	0.57
Stream A-BCD		0.0	5.24	0.01		0.1	3.86	0.04
Stream D-ABC		0.1	14.47	0.06		0.1	14.60	0.06
Stream C-ABD		0.8	4.94	0.28		1.0	6.19	0.34
Bradford Road - Balme Road - High Street - 2028 Base + Dev Kirklees Rates								
Stream B-ACD	D15	0.9	19.65	0.49	D16	1.3	25.04	0.57
Stream A-BCD		0.0	5.23	0.01		0.1	3.85	0.04
Stream D-ABC		0.1	14.48	0.06		0.1	14.61	0.07
Stream C-ABD		0.8	4.94	0.28		1.0	6.20	0.34

5.5.28 The modelling results predict that the Balme Road/A638 Bradford Road/High Street junction would operate comfortably in all assessment scenarios with a maximum RFC value of 0.49 in the AM / 0.57 in the PM, and maximum average vehicle queues of 0.9/1.3 vehicles, respectively.

5.6 Traffic Impact Summary

- 5.6.1 The junction capacity assessments have demonstrated that the impacts of the proposed development upon the operation of the local highway network are likely to be negligible and that all junctions would continue to operate with reserve capacity except for the A643 Spen Lane/A651 Oxford Road/A643 Church Lane signal-controlled junction which already operates over the threshold of practical capacity and close to absolute capacity.
- 5.6.2 However, the impacts of the current development proposal on the operation of this junction are less severe than those associated with the 2019 application for 98 dwellings, which the Council, in its role as Highway Authority, deemed to be acceptable, without the need for any off-site highway improvements.
- 5.6.3 It is there considered that overall, in the context of the National Planning Policy Framework paragraph 111, the residual cumulative impacts upon the operation of the local road network are not severe and should not be prevented on highways grounds.

6. Planning Policy Context

6.1 National Planning Policy

National Planning Policy Framework

6.1.1 With regards to the planning policy context of the development, Paragraph 110 of the National Planning Policy Framework (NPPF), revised in July 2021, states that:

“In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- a) Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, give the type of development and its location;*
- b) Safe and suitable access to the site can be achieved for all people;*
- c) 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; and*
- d) 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.”*

6.1.2 Paragraph 111 goes on to say;

‘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.’

6.1.3 NPPF paragraph 112 states in relation to paragraph 111 that:

‘Within this context, applications for development should:

- a) 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;*
- b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- c) 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;*
- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.’*

6.1.4 NPPF paragraph 113 concludes that:

'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.'

6.1.5 This Transport Assessment has demonstrated that the site is sustainably located, safe and suitable access can be achieved, has been designed in accordance with the Council's Highway Design Guide, and will not have significant adverse impacts on the local road network.

6.1.6 The scheme provides quality pedestrian infrastructure which connects with the surrounding area and provides infrastructure for cycle parking and electric vehicle charging. The layout also allows for the efficient movement of servicing, delivery and emergency service vehicles.

6.1.7 A Travel Plan has also been prepared in support of the development proposals, and is submitted under separate cover.

6.1.8 The development proposal is therefore considered to be in accordance with the transport related aspects of the National Planning Policy Framework.

6.2 Local Planning Policy

Kirklees Local Plan, 2013 – 2031, adopted 27 February 2019

6.2.1 The current adopted Local Plan is the Kirklees Local Plan and is the statutory development plan for the area, covering the period 2013-2031. **Policy LP1: Presumption in favour of sustainable development** which outlines that the Council will work pro-actively with applicants to allow for their proposal to be approved.

6.2.2 Chapter 10 outlines the policies relating to Transport. **Policy LP20: Sustainable Travel** which outlines the following:

New development will be located in accordance with the spatial development strategy to ensure the need to travel is reduced and that essential travel needs can be met by forms of sustainable transport other than the private car. The council will support development proposals that can be served by alternative modes of transport such as public transport, cycling and walking and in the case of new residential development is located close to local facilities or incorporates opportunities for day to day activities on site and will accept that variations in opportunity for this will vary between larger and smaller settlements in the area.

Travel plans will normally be required for all major planning applications in accordance with current guidance and should set targets and monitoring arrangements to ensure sustainable travel patterns are maintained. Travel plans should include agreed and defined outcomes related to a package of specified measures to be implemented including an approach to lower carbon emissions where applicable.

The requirement of a travel plan will also be considered on case by case basis where the proposed development falls below the major application category where it has the potential to generate significant transport movements and/or has insufficient off-street parking within the vicinity of a stressed part of the highway network.

6.2.3 **Policy LP21: Highways and Access** will also be key to this development as work will need to be completed to Barnsley Road to allow for a right-turn lane to be constructed. The policy outlines:

Proposals shall demonstrate that they can accommodate sustainable modes of transport and be accessed effectively and safely by all users.

New development will normally be permitted where safe and suitable access to the site can be achieved for all people and where the residual cumulative impacts of development are not severe.

All proposals shall:

- *ensure the safe and efficient flow of traffic within the development and on the surrounding highway network;*
- *where needed, provide new infrastructure or improvements on or off site to ensure safe access from the highway network for pedestrians, cyclists, public transport users and private vehicles;*
- *be accompanied by a supporting Transport Assessment or Transport Statement where the development would generate significant trip generation, providing detail as to the impact on highway safety, air quality, noise and light restrictions;*
- *take into account changes in site levels and topography to ensure the development can be accessed easily and safely by all sections of the community and by different modes of transport;*
- *take into account the features of surrounding roads and footpaths and provide adequate layout and visibility to allow the development to be accessed safely;*
- *take into account access for emergency, service and refuse collection vehicles;*
- *provide on-site safe, secure and convenient cycle parking/storage facilities to encourage sustainable travel modes.*

6.2.4 The Council's aforementioned Local Plan policy criteria are considered to echo those set out in NPPF paragraphs 110-113, as such, for the reasons already set out, the development proposal is considered to align with local planning policy.

7. Summary and Conclusions

- 7.1 Sanderson Associates Consulting Engineers (SACE) has been appointed to provide Highways Consultancy Services in relation to proposals for the residential development of 87 dwellings on land to the west of Cliffe Mount, Ferrand Lane, Gomersal.
- 7.2 The site is identified within Kirklees Council's 'Local Plan Allocations and Designations' document (Adopted 27th February 2019) as a site allocated for housing (ref: HS116) with an area of 3.87Ha and an indicative capacity of 135 dwellings.
- 7.3 The current application follows a previous outline application (ref: 2019/90902) for the erection of 98 dwellings which was refused by the local planning authority, Kirklees Council, and subsequently dismissed at Appeal. It should be noted that the Council supported the proposal, subject to a planning obligation to secure affordable housing and contributions towards various facilities and services. However, in the absence of the required signatures to the S106 Agreement, on 9 July 2021 the Council formally resolved to refuse outline planning permission.
- 7.4 A review of road traffic collision data has been undertaken and it is concluded that there are no existing accident trends or cluster locations on the local highway network that are likely to be exacerbated by traffic associated with the proposed development.
- 7.5 The site is accessible by both active travel modes (walking and cycling) and by public transport, with a range of amenities located in proximity of the site which will reduce the need to travel by car. A Travel Plan has also been prepared under separate cover which contains measures to promote sustainable travel behaviours amongst future residents and reduce the number of car-borne trips generated by the development.
- 7.6 The site shall be accessed via a new priority junction onto Cliffe Lane which shall replace the existing vehicle crossover. The junction arrangement is as per the design approved as part of the 2019 application.
- 7.7 The internal layout has been designed in accordance with Kirklees' adopted Highway Design Guide.
- 7.8 Detailed traffic impact assessments have been conducted at various junctions on the local highway network using the approved 85th percentile trip rates and distribution principles, and for sensitivity, Kirklees 'higher' trip rates. The results of the traffic impact assessments show that the development will have negligible adverse impacts on the operation of the local highway network, and would indeed provide a betterment over the 2019 application which was considered acceptable by the Council.
- 7.9 The development accords with National and Local transport planning policies and therefore it is considered that the development should be supported on highways grounds.



Appendix A

CrashMap Pro Report

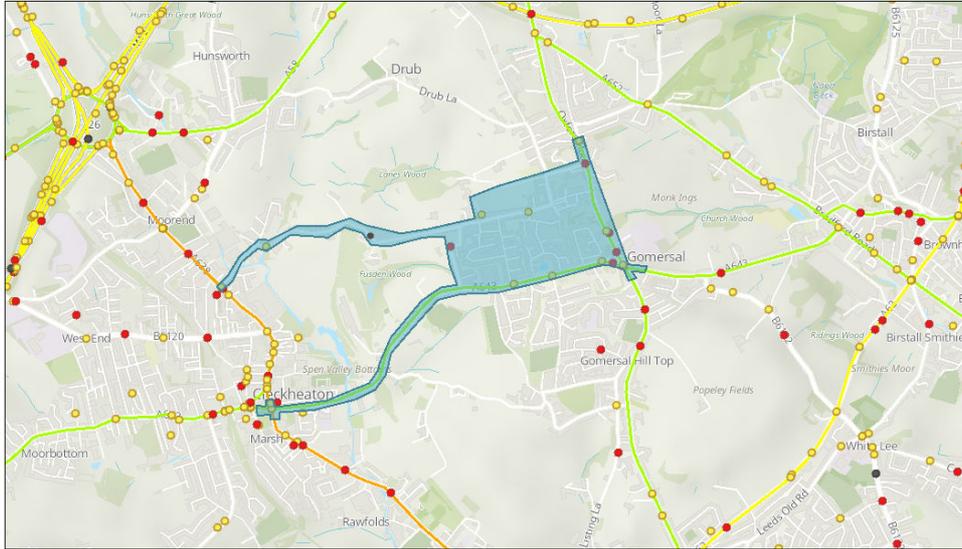


Crash Report

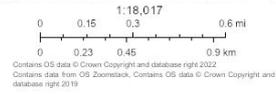
Area of Interest (AOI) Information

Area : 583,787.2 m²

Mar 30 2023 16:12:39 British Summer Time



- Crashes
- Fatal
 - Slight
 - Serious
- RSF EuroRAP Risk Rating 2022
- Low-Medium Risk Roads
 - Medium Risk Roads
 - Low Risk (Safest) Roads



Summary

Name	Count	Area(m ²)	Length(m)
Crashes	23	N/A	N/A

Crashes

#	Carriageway_Hazards	Severity	Officer_Attended	Accident_DateTime	Year	Number_of_vehicles	Number_of_casualties	Easting
1	None	Slight	Police officer attended crash scene	November 15, 2020	2020	2	1	420207
2	None	Serious	Police officer attended crash scene	January 12, 2021	2021	2	1	420745
3	None	Slight	Police officer attended crash scene	November 3, 2018	2018	1	1	419086
4	None	Slight	Police officer attended crash scene	February 1, 2020	2020	2	1	419114
5	None	Serious	Police officer attended crash scene	December 22, 2019	2019	1	6	418863
6	None	Slight	No officer attended crash scene	March 31, 2021	2021	2	1	420575
7	None	Slight	Police officer attended crash scene	July 4, 2018	2018	2	1	419107
8	None	Serious	Police officer attended crash scene	March 8, 2021	2021	1	1	420906
9	None	Serious	Police officer attended crash scene	July 17, 2021	2021	1	1	420043
10	None	Serious	Police officer attended crash scene	August 17, 2018	2018	2	1	420869
11	None	Serious	No officer attended crash scene	January 19, 2020	2020	1	1	419117
12	None	Slight	Police officer attended crash scene	July 5, 2018	2018	1	1	419108
13	None	Slight	Police officer attended crash scene	September 14, 2021	2021	2	3	419117
14	None	Slight	Police officer attended crash scene	December 16, 2021	2021	2	1	418853
15	None	Slight	No officer attended crash scene	September 3, 2021	2021	2	1	420450
16	None	Serious	Police officer attended crash scene	June 28, 2019	2019	1	1	420889
17	None	Slight	No officer attended crash scene	June 21, 2017	2017	2	1	420833
18	None	Slight	Police officer attended crash scene	March 27, 2017	2017	2	1	420713
19	None	Slight	Police officer attended crash scene	February 21, 2018	2018	2	1	420948
20	None	Slight	Police officer attended crash scene	November 5, 2019	2019	1	1	419109
21	None	Slight	Police officer attended crash scene	October 2, 2019	2019	1	1	420855

22	None	Slight	No officer attended crash scene	July 14, 2017	2017	1	1	420373
23	None	Slight	Police officer attended crash scene	May 20, 2018	2018	3	1	420942

#	Northing	Highway_Authority	Road_Number	Weather_conditions	Road_Type	Road_surface	Speed_Limit	Light_conditions
1	426250	Kirklees	U0	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
2	426519	Kirklees	A651	Fine without high winds	Single carriageway	Wet or Damp	30	Darkness: street lights present and lit
3	426081	Kirklees	U0	Fine without high winds	Single carriageway	Dry	30	Darkness: street lights present and lit
4	425239	Kirklees	A638	Fine without high winds	Single carriageway	Wet or Damp	30	Darkness: street lights present and lit
5	425863	Kirklees	A638	Fine without high winds	Single carriageway	Wet or Damp	30	Darkness: street lights present and lit
6	425933	Kirklees	U0	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
7	425263	Kirklees	U0	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
8	426057	Kirklees	A651	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
9	426081	Kirklees	U0	Fine without high winds	Single carriageway	Dry	30	Darkness: street lights present and lit
10	426156	Kirklees	A651	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
11	425233	Kirklees	A638	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
12	425264	Kirklees	A638	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
13	425234	Kirklees	A643	Fine without high winds	Single carriageway	Dry	30	Darkness: street lights present and lit
14	425875	Kirklees	A638	Fine without high winds	Dual carriageway	Dry	30	Darkness: street lights present and lit
15	426266	Kirklees	U0	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
16	425997	Kirklees	A643	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
17	426005	Kirklees	U0	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
18	426634	Kirklees	A651	Fine without high winds	Single carriageway	Dry	30	Darkness: street lighting unknown

19	425978	Kirklees	A651	Fine without high winds	Single carriageway	Dry	30	Darkness: street lights present and lit
20	425264	Kirklees	A638	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
21	426166	Kirklees	U0	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
22	425890	Kirklees	U0	Fine without high winds	Single carriageway	Dry	30	Darkness: street lighting unknown
23	425987	Kirklees	A651	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights

#	Junction_detail	Pedestrian_Crossing	Involved_pedalcycle	Involved_Motorcycle	Pedestrian_casualty	Child_casualty	Pedal_cycleuser_casualty	Motorcycle_user_casualty
1	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	1	0	0	0	0	0
2	T or staggered junction	No physical crossing facility within 50 metres	0	1	0	0	0	1
3	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	1	0	0	0	1
4	Crossroads	Pelican, puffin, toucan or similar non-junction pedestrian light crossing	0	0	0	0	0	0
5	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	1	0	0	0
6	T or staggered junction	No physical crossing facility within 50 metres	1	0	0	1	1	0
7	T or staggered junction	No physical crossing facility within 50 metres	0	1	0	0	0	1
8	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	1	1	0	0
9	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
10	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
11	Crossroads	Pelican, puffin, toucan or similar non-junction pedestrian light crossing	0	0	1	0	0	0
12	T or staggered junction	No physical crossing facility within 50 metres	0	0	1	0	0	0
13	Crossroads	Pedestrian phase at traffic signal junction	0	0	0	0	0	0
14	T or staggered junction	Pelican, puffin, toucan or similar non-junction pedestrian light crossing	0	0	1	0	0	0
15	Other junction	No physical crossing facility within 50 metres	0	0	0	0	0	0

16	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
17	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
18	T or staggered junction	No physical crossing facility within 50 metres	1	0	0	0	1	0
19	Crossroads	No physical crossing facility within 50 metres	0	0	0	0	0	0
20	T or staggered junction	No physical crossing facility within 50 metres	0	0	1	0	0	0
21	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	1	1	0	0
22	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	1	1	0	0
23	Crossroads	No physical crossing facility within 50 metres	0	1	0	0	0	1

#	Involved_car	Involved_goodsvehicle	Involved_Bus	Involved_young_driver	Local_Authority_District	Junction_control	Is_Provisional	Is_Amended	Web_Link	Count
1	1	0	0	0	Kirklees	Not Applicable	No	No	https://www.crashmap.co.uk/reports/prereportservice?reportId=2020137BF1101	1
2	1	0	0	1	Kirklees	Give way or uncontrolled	No	No	https://www.crashmap.co.uk/reports/prereportservice?reportId=20211381C1209	1
3	0	0	0	1	Kirklees	Not Applicable	No	No	https://www.crashmap.co.uk/reports/prereportservice?reportId=2018135B31817	1
4	1	0	0	0	Kirklees	Auto traffic signal	No	No	https://www.crashmap.co.uk/reports/prereportservice?reportId=2020137211404	1
5	1	0	0	0	Kirklees	Not Applicable	No	No	https://www.crashmap.co.uk/reports/prereportservice?reportId=2019136CM0609	1
6	1	0	0	0	Kirklees	Give way or uncontrolled	No	No	https://www.crashmap.co.uk/reports/prereportservice?reportId=20211383V1057	1
7	1	0	0	0	Kirklees	Give way or uncontrolled	No	No	https://www.crashmap.co.uk/reports/prereportservice?reportId=2018135740425	1
8	1	0	0	0	Kirklees	Not Applicable	No	No	https://www.crashmap.co.uk/reports/prereportservice?reportId=2021138381223	1

9	1	0	0	0	Kirklees	Not Applicable	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2021131067026	1
10	1	0	0	0	Kirklees	Not Applicable	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=20181358H1770	1
11	1	0	0	0	Kirklees	Auto traffic signal	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=20201371J0812	1
12	1	0	0	0	Kirklees	Give way or uncontrolled	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2018135751189	1
13	1	0	0	0	Kirklees	Auto traffic signal	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2021131087284	1
14	1	0	0	0	Kirklees	Give way or uncontrolled	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2021131122018	1
15	1	0	0	0	Kirklees	Give way or uncontrolled	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2021131083839	1
16	0	0	0	0	Kirklees	Not Applicable	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=20191366S1055	1
17	1	0	1	0	Kirklees	Not Applicable	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=20171346L1184	1

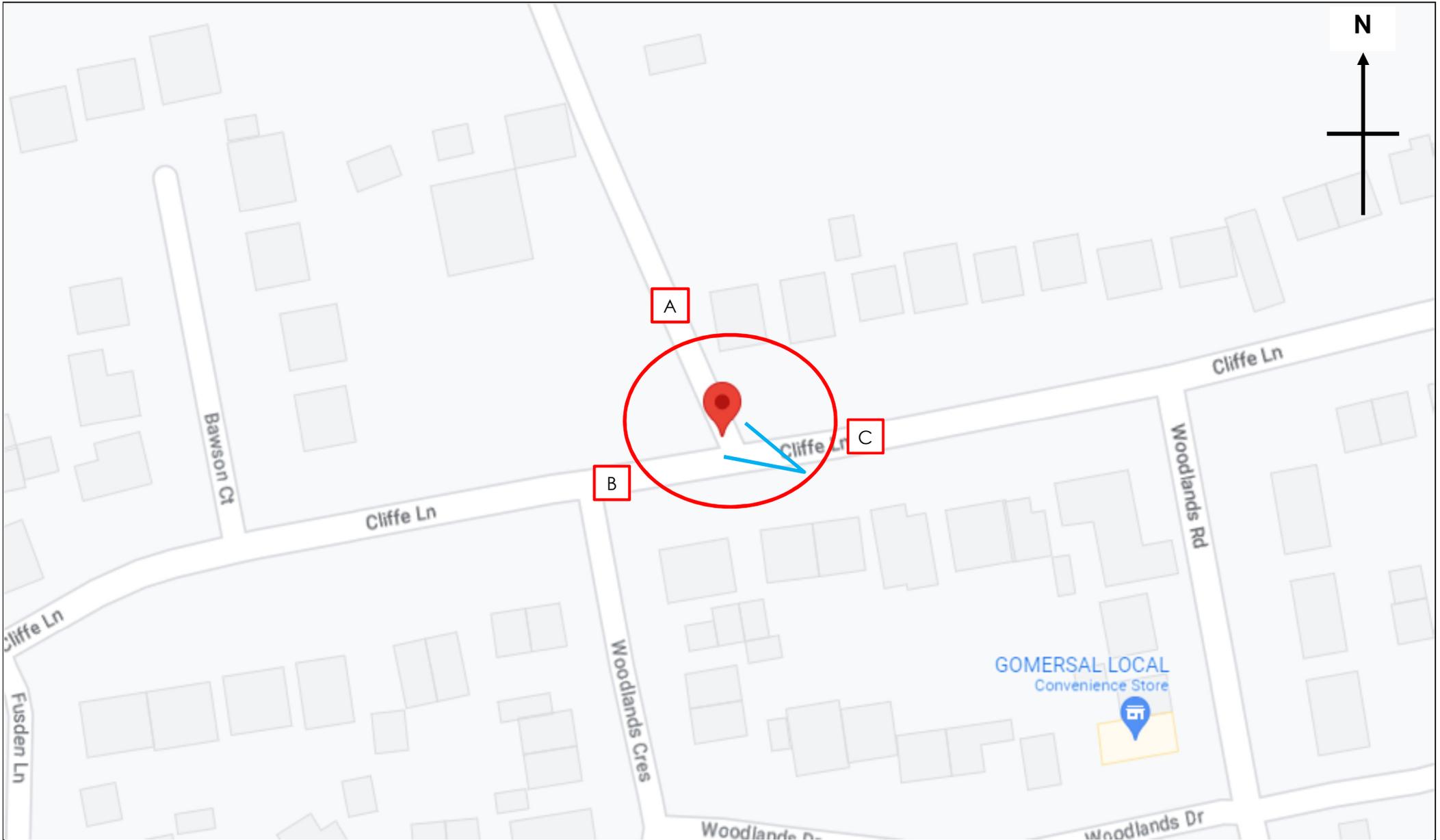
18	1	0	0	0	Kirklees	Give way or uncontrolled	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=20171343R1290	1
19	1	0	0	0	Kirklees	Auto traffic signal	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=20181352L0054	1
20	0	1	0	0	Kirklees	Give way or uncontrolled	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2019136B51163	1
21	1	0	0	0	Kirklees	Not Applicable	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2019136A21066	1
22	1	0	0	0	Kirklees	Not Applicable	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=20171347E0673	1
23	1	1	0	0	Kirklees	Auto traffic signal	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=20181355K1279	1

Report produced from CrashMap Pro



Appendix B

Traffic Data



	Site / Location: Site 1 – Access/Cliffe Lane	Project No: 13882	Drawing No: 13882-01	Drawn By: DC
	Survey Date: Tuesday 28th March 2023	Project Name: KIRKLEES		
	Survey Times: 07:00 – 09:30 & 15:00 – 19:00	Drawing Title: Site Layout and Observed Movements		



SITE: 1

DATE: 28/03/2023

LOCATION: Access/Cliffe Lane

DAY: Tuesday

TIME	A to C							TOT	A to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
P/TOT	0																

TIME	A to C							TOT	A to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	0	0	2	1	0	1						
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0								
17:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
17:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	1	0	1						
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
18:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2	0								
P/TOT	5	1	0	0	0	0	0	6	2	0	2						



SITE: 1

DATE: 28/03/2023

LOCATION: Access/Cliffe Lane

DAY: Tuesday

TIME	A to A							TOT	B to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
P/TOT	0																

TIME	A to A							TOT	B to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	0	1								
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	0	1								
P/TOT	0	2	0	0	0	0	0	0	2								



SITE: 1

DATE: 28/03/2023

LOCATION: Access/Cliffe Lane

DAY: Tuesday

TIME	B to C							TOT	B to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	18	4	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0
07:15	31	5	1	0	0	0	0	37	0	0	0	0	0	0	0	0	0
07:30	43	6	2	0	1	0	0	52	0	0	0	0	0	0	0	0	0
07:45	47	9	0	1	1	0	0	58	0	0	0	0	0	0	0	0	0
H/TOT	139	24	3	1	2	0	0	169	0								
08:00	36	8	1	0	0	0	0	45	0	0	0	0	0	0	0	0	0
08:15	27	1	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0
08:30	33	3	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0
08:45	30	1	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0
H/TOT	126	13	1	0	0	0	0	140	0								
09:00	19	2	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0
09:15	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
H/TOT	32	3	0	0	0	0	0	35	0								
P/TOT	297	40	4	1	2	0	0	344	0								

TIME	B to C							TOT	B to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	28	1	1	0	0	0	0	30	0	0	0	0	0	0	0	0	0
15:15	31	3	0	1	0	0	1	36	0	0	0	0	0	0	0	0	0
15:30	34	4	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0
15:45	18	9	1	1	1	0	0	30	0	0	0	0	0	0	0	0	0
H/TOT	111	17	2	2	1	0	1	134	0								
16:00	23	3	1	0	0	0	0	27	0	0	0	0	0	0	0	0	0
16:15	22	7	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0
16:30	47	5	0	1	0	0	0	53	0	0	0	0	0	0	0	0	0
16:45	26	3	0	0	0	0	2	31	0	0	0	0	0	0	0	0	0
H/TOT	118	18	1	1	0	0	2	140	0								
17:00	52	7	1	0	0	0	0	60	0	0	0	0	0	0	0	0	0
17:15	40	2	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0
17:30	18	1	0	0	0	0	1	20	0	0	0	0	0	0	0	0	0
17:45	28	2	0	0	0	0	1	31	0	0	0	0	0	0	0	0	0
H/TOT	138	12	1	0	0	0	2	153	0								
18:00	21	2	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0
18:15	24	1	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0
18:30	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
18:45	13	3	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0
H/TOT	68	7	0	0	0	0	0	75	0								
P/TOT	435	54	4	3	1	0	5	502	0								



SITE: 1

DATE: 28/03/2023

LOCATION: Access/Cliffe Lane

DAY: Tuesday

TIME	C to B							TOT	C to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	6	3	1	0	0	0	0	10	0	0	0	0	0	0	0	0	0
07:15	16	2	0	0	1	0	0	19	0	0	0	0	0	0	0	0	0
07:30	21	1	1	0	0	0	0	23	0	0	0	0	0	0	0	0	0
07:45	26	3	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0
H/TOT	69	9	2	0	1	0	0	81	0								
08:00	33	0	0	0	1	0	0	34	0	1	0	0	0	0	0	0	1
08:15	32	2	2	0	0	0	0	36	0	0	0	0	0	0	0	0	0
08:30	21	1	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0
08:45	32	1	1	0	0	0	0	34	0	0	0	0	0	0	0	0	0
H/TOT	118	4	3	0	1	0	0	126	0	1	0	0	0	0	0	0	1
09:00	27	5	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0
09:15	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
H/TOT	40	6	0	0	0	0	0	46	0								
P/TOT	227	19	5	0	2	0	0	253	0	1	0	0	0	0	0	0	1

TIME	C to B							TOT	C to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	15	3	0	0	0	0	0	18	1	0	0	0	0	0	0	0	1
15:15	23	1	0	2	0	0	1	27	0	0	0	0	0	0	0	0	0
15:30	30	4	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0
15:45	16	3	0	0	0	0	1	20	0	0	0	0	0	0	0	0	0
H/TOT	84	11	0	2	0	0	2	99	1	0	1						
16:00	15	4	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0
16:15	33	5	0	0	1	1	0	40	0	0	0	0	0	0	0	0	0
16:30	21	5	0	0	0	0	0	26	3	0	0	0	0	0	0	0	3
16:45	38	4	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0
H/TOT	107	18	0	0	1	1	0	127	3	0	3						
17:00	35	2	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0
17:15	42	4	0	0	0	0	0	46	0	0	0	0	0	0	0	0	0
17:30	37	4	0	0	0	0	1	42	0	0	0	0	0	0	0	0	0
17:45	28	3	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0
H/TOT	142	13	0	0	0	0	1	156	0								
18:00	41	3	0	0	0	0	1	45	0	0	0	0	0	0	0	0	0
18:15	26	2	0	0	0	0	0	28	1	0	0	0	0	0	0	0	1
18:30	21	2	0	0	0	0	1	24	0	0	0	0	0	0	0	0	0
18:45	29	1	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0
H/TOT	117	8	0	0	0	0	2	127	1	0	1						
P/TOT	450	50	0	2	1	1	5	509	5	0	5						

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	1	0	0	0	0	0	1
H/TOT	0	1	0	0	0	0	0	1
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	1	0	0	0	0	0	1

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0



SITE: 1

DATE: 28/03/2023

LOCATION: Access/Cliffe Lane

DAY: Tuesday

TIME	TO ARM A							TOT	FROM ARM A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0								
08:00	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0								
P/TOT	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0

TIME	TO ARM A							TOT	FROM ARM A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
H/TOT	1	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	3
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
H/TOT	4	0	0	0	0	0	0	4	1	0	1						
17:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	2	0	2													
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
18:30	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2	2	0	2						
P/TOT	7	0	0	0	0	0	0	7	7	1	0	0	0	0	0	0	8



SITE: 1

DATE: 28/03/2023

LOCATION: Access/Cliffe Lane

DAY: Tuesday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	6	3	1	0	0	0	0	10	18	4	0	0	0	0	0	22
07:15	16	2	0	0	1	0	0	19	31	5	1	0	0	0	0	37
07:30	21	1	1	0	0	0	0	23	43	6	2	0	1	0	0	52
07:45	26	3	0	0	0	0	0	29	47	9	0	1	1	0	0	58
H/TOT	69	9	2	0	1	0	0	81	139	24	3	1	2	0	0	169
08:00	33	0	0	0	1	0	0	34	36	8	1	0	0	0	0	45
08:15	32	2	2	0	0	0	0	36	27	1	0	0	0	0	0	28
08:30	21	1	0	0	0	0	0	22	33	3	0	0	0	0	0	36
08:45	32	1	1	0	0	0	0	34	30	1	0	0	0	0	0	31
H/TOT	118	4	3	0	1	0	0	126	126	13	1	0	0	0	0	140
09:00	27	5	0	0	0	0	0	32	19	2	0	0	0	0	0	21
09:15	13	1	0	0	0	0	0	14	13	1	0	0	0	0	0	14
H/TOT	40	6	0	0	0	0	0	46	32	3	0	0	0	0	0	35
P/TOT	227	19	5	0	2	0	0	253	297	40	4	1	2	0	0	344

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	15	3	0	0	0	0	0	18	28	1	1	0	0	0	0	30
15:15	24	1	0	2	0	0	1	28	31	3	0	1	0	0	1	36
15:30	30	4	0	0	0	0	0	34	34	4	0	0	0	0	0	38
15:45	16	3	0	0	0	0	1	20	18	9	1	1	1	0	0	30
H/TOT	85	11	0	2	0	0	2	100	111	17	2	2	1	0	1	134
16:00	15	4	0	0	0	0	0	19	23	3	1	0	0	0	0	27
16:15	33	5	0	0	1	1	0	40	22	7	0	0	0	0	0	29
16:30	21	5	0	0	0	0	0	26	48	5	0	1	0	0	0	54
16:45	38	4	0	0	0	0	0	42	26	3	0	0	0	0	2	31
H/TOT	107	18	0	0	1	1	0	127	119	18	1	1	0	0	2	141
17:00	36	2	0	0	0	0	0	38	52	7	1	0	0	0	0	60
17:15	42	4	0	0	0	0	0	46	40	2	0	0	0	0	0	42
17:30	37	4	0	0	0	0	1	42	18	1	0	0	0	0	1	20
17:45	28	3	0	0	0	0	0	31	28	2	0	0	0	0	1	31
H/TOT	143	13	0	0	0	0	1	157	138	12	1	0	0	0	2	153
18:00	41	3	0	0	0	0	1	45	21	2	0	0	0	0	0	23
18:15	26	2	0	0	0	0	0	28	24	1	0	0	0	0	0	25
18:30	21	2	0	0	0	0	1	24	11	1	0	0	0	0	0	12
18:45	29	1	0	0	0	0	0	30	13	3	0	0	0	0	0	16
H/TOT	117	8	0	0	0	0	2	127	69	7	0	0	0	0	0	76
P/TOT	452	50	0	2	1	1	5	511	437	54	4	3	1	0	5	504



SITE: 1

DATE: 28/03/2023

LOCATION: Access/Cliffe Lane

DAY: Tuesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	18	4	0	0	0	0	0	22	6	3	1	0	0	0	0	10
07:15	31	5	1	0	0	0	0	37	16	2	0	0	1	0	0	19
07:30	43	6	2	0	1	0	0	52	21	1	1	0	0	0	0	23
07:45	47	9	0	1	1	0	0	58	26	3	0	0	0	0	0	29
H/TOT	139	24	3	1	2	0	0	169	69	9	2	0	1	0	0	81
08:00	36	8	1	0	0	0	0	45	33	1	0	0	1	0	0	35
08:15	27	1	0	0	0	0	0	28	32	2	2	0	0	0	0	36
08:30	33	3	0	0	0	0	0	36	21	1	0	0	0	0	0	22
08:45	30	2	0	0	0	0	0	32	32	2	1	0	0	0	0	35
H/TOT	126	14	1	0	0	0	0	141	118	6	3	0	1	0	0	128
09:00	19	2	0	0	0	0	0	21	27	5	0	0	0	0	0	32
09:15	13	1	0	0	0	0	0	14	13	1	0	0	0	0	0	14
H/TOT	32	3	0	0	0	0	0	35	40	6	0	0	0	0	0	46
P/TOT	297	41	4	1	2	0	0	345	227	21	5	0	2	0	0	255

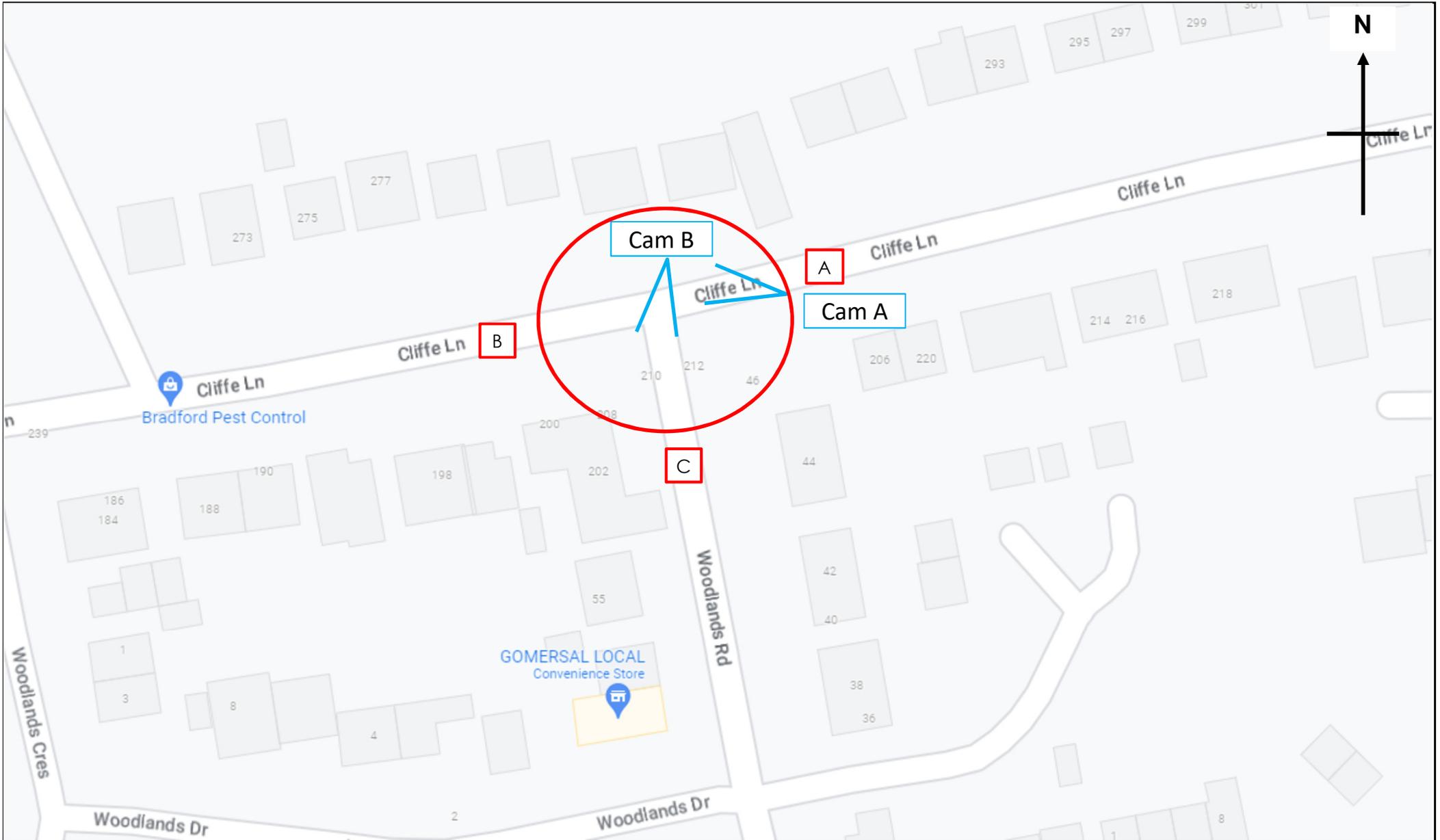
TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	28	1	1	0	0	0	0	30	16	3	0	0	0	0	0	19
15:15	31	4	0	1	0	0	1	37	23	1	0	2	0	0	1	27
15:30	34	4	0	0	0	0	0	38	30	4	0	0	0	0	0	34
15:45	19	9	1	1	1	0	0	31	16	3	0	0	0	0	1	20
H/TOT	112	18	2	2	1	0	1	136	85	11	0	2	0	0	2	100
16:00	23	3	1	0	0	0	0	27	15	4	0	0	0	0	0	19
16:15	22	7	0	0	0	0	0	29	33	5	0	0	1	1	0	40
16:30	47	5	0	1	0	0	0	53	24	5	0	0	0	0	0	29
16:45	27	3	0	0	0	0	2	32	38	4	0	0	0	0	0	42
H/TOT	119	18	1	1	0	0	2	141	110	18	0	0	1	1	0	130
17:00	52	7	1	0	0	0	0	60	35	2	0	0	0	0	0	37
17:15	41	2	0	0	0	0	0	43	42	4	0	0	0	0	0	46
17:30	18	1	0	0	0	0	1	20	37	4	0	0	0	0	1	42
17:45	28	2	0	0	0	0	1	31	28	3	0	0	0	0	0	31
H/TOT	139	12	1	0	0	0	2	154	142	13	0	0	0	0	1	156
18:00	21	2	0	0	0	0	0	23	41	3	0	0	0	0	1	45
18:15	25	1	0	0	0	0	0	26	27	2	0	0	0	0	0	29
18:30	11	1	0	0	0	0	0	12	21	2	0	0	0	0	1	24
18:45	13	3	0	0	0	0	0	16	29	1	0	0	0	0	0	30
H/TOT	70	7	0	0	0	0	0	77	118	8	0	0	0	0	2	128
P/TOT	440	55	4	3	1	0	5	508	455	50	0	2	1	1	5	514

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	24	7	1	0	0	0	0	32
07:15	47	7	1	0	1	0	0	56
07:30	64	7	3	0	1	0	0	75
07:45	73	12	0	1	1	0	0	87
H/TOT	208	33	5	1	3	0	0	250
08:00	69	9	1	0	1	0	0	80
08:15	59	3	2	0	0	0	0	64
08:30	54	4	0	0	0	0	0	58
08:45	62	3	1	0	0	0	0	66
H/TOT	244	19	4	0	1	0	0	268
09:00	46	7	0	0	0	0	0	53
09:15	26	2	0	0	0	0	0	28
H/TOT	72	9	0	0	0	0	0	81
P/TOT	524	61	9	1	4	0	0	599

PEAK HOUR CALCULATION	TOT
07:00 to 08:00	250
07:15 to 08:15	298
07:30 to 08:30	306
07:45 to 08:45	289
08:00 to 09:00	268
08:15 to 09:15	241
08:30 to 09:15	420
09:00 to 09:30	81
A.M. Peak	420

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	44	4	1	0	0	0	0	49
15:15	55	5	0	3	0	0	2	65
15:30	64	8	0	0	0	0	0	72
15:45	35	12	1	1	1	0	1	51
H/TOT	198	29	2	4	1	0	3	237
16:00	38	7	1	0	0	0	0	46
16:15	55	12	0	0	1	1	0	69
16:30	72	10	0	1	0	0	0	83
16:45	65	7	0	0	0	0	2	74
H/TOT	230	36	1	1	1	1	2	272
17:00	88	9	1	0	0	0	0	98
17:15	83	6	0	0	0	0	0	89
17:30	55	5	0	0	0	0	2	62
17:45	56	5	0	0	0	0	1	62
H/TOT	282	25	1	0	0	0	3	311
18:00	62	5	0	0	0	0	1	68
18:15	52	3	0	0	0	0	0	55
18:30	33	3	0	0	0	0	1	37
18:45	42	4	0	0	0	0	0	46
H/TOT	189	15	0	0	0	0	2	206
P/TOT	899	105	4	5	2	1	10	1024

PEAK HOUR CALCULATION	TOT
15:00 to 16:00	237
15:15 to 16:15	234
15:30 to 16:30	238
15:45 to 16:45	249
16:00 to 17:00	272
16:15 to 17:15	324
16:30 to 17:30	344
16:45 to 17:45	323
17:00 to 18:00	311
17:15 to 18:15	281
17:30 to 18:30	247
17:45 to 18:45	222
18:00 to 19:00	206
P.M. Peak	3488



	Site / Location: Site 2 – Woodlands Road/Cliffe Lane	Project No: 13882	Drawing No: 13882-02	Drawn By: DC
	Survey Date: Tuesday 28th March 2023	Project Name: KIRKLEES		
	Survey Times: 07:00 – 09:30 & 15:00 – 19:00	Drawing Title: Site Layout and Observed Movements		



SITE: 2

DATE: 28/03/2023

LOCATION: Woodlands Road/Cliffe Lane

DAY: Tuesday

TIME	A to C							TOT	A to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	3	1	0	0	0	0	0	4	4	3	0	0	0	0	0	7
07:15	4	1	0	0	0	0	0	5	12	1	0	0	0	0	0	13
07:30	9	3	0	0	0	0	0	12	19	0	1	0	0	0	0	20
07:45	5	0	0	0	1	0	0	6	20	2	0	0	0	0	0	22
H/TOT	21	5	0	0	1	0	0	27	55	6	1	0	0	0	0	62
08:00	10	0	0	0	0	0	0	10	26	1	0	0	1	0	0	28
08:15	12	2	0	0	0	0	0	14	23	0	1	0	0	0	0	24
08:30	2	2	0	0	0	0	0	4	16	0	0	0	0	0	0	16
08:45	7	0	1	0	0	0	0	8	28	1	0	0	0	0	0	29
H/TOT	31	4	1	0	0	0	0	36	93	2	1	0	1	0	0	97
09:00	3	1	0	0	0	0	0	4	20	2	0	0	0	0	0	22
09:15	8	1	0	0	0	0	0	9	10	1	0	0	0	0	0	11
H/TOT	11	2	0	0	0	0	0	13	30	3	0	0	0	0	0	33
P/TOT	63	11	1	0	1	0	0	76	178	11	2	0	1	0	0	192

TIME	A to C							TOT	A to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	10	2	0	0	0	0	0	12	12	2	0	0	0	0	0	14
15:15	8	0	0	0	0	0	0	8	18	1	0	2	0	0	1	22
15:30	6	3	0	0	0	0	0	9	23	4	0	0	0	0	0	27
15:45	6	1	0	0	0	0	0	7	14	2	0	0	0	0	1	17
H/TOT	30	6	0	0	0	0	0	36	67	9	0	2	0	0	2	80
16:00	13	3	0	0	0	0	0	16	10	3	0	0	0	0	0	13
16:15	12	0	0	0	0	0	0	12	25	4	0	0	1	1	0	31
16:30	18	2	0	0	0	0	0	20	18	1	0	0	0	0	0	19
16:45	15	3	0	0	0	0	0	18	29	4	0	0	0	0	0	33
H/TOT	58	8	0	0	0	0	0	66	82	12	0	0	1	1	0	96
17:00	15	2	0	0	0	0	0	17	27	2	0	0	0	0	0	29
17:15	17	0	0	0	0	0	0	17	33	4	0	0	0	0	0	37
17:30	12	1	0	0	0	0	0	13	30	3	0	0	0	0	0	33
17:45	10	2	0	0	0	1	0	13	23	2	0	0	0	0	0	25
H/TOT	54	5	0	0	0	1	0	60	113	11	0	0	0	0	0	124
18:00	16	1	0	0	0	0	0	17	30	3	0	0	0	0	1	34
18:15	13	1	0	0	0	0	0	14	22	2	0	0	0	0	0	24
18:30	13	1	0	0	0	0	0	14	15	1	0	0	0	0	1	17
18:45	8	0	0	0	0	0	0	8	17	1	0	0	0	0	0	18
H/TOT	50	3	0	0	0	0	0	53	84	7	0	0	0	0	2	93
P/TOT	192	22	0	0	0	1	0	215	346	39	0	2	1	1	4	393



SITE: 2

DATE: 28/03/2023

LOCATION: Woodlands Road/Cliffe Lane

DAY: Tuesday

TIME	A to A							TOT	B to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	10	3	0	0	0	0	0	13
07:15	0	0	0	0	0	0	0	0	27	3	1	0	0	0	0	31
07:30	0	0	0	0	0	0	0	0	35	7	0	0	1	0	0	43
07:45	0	0	0	0	0	0	0	0	45	7	0	1	1	0	0	54
H/TOT	0	117	20	1	1	2	0	0	141							
08:00	0	0	0	0	0	0	0	0	32	6	1	0	0	0	0	39
08:15	0	0	0	0	0	0	0	0	22	1	0	0	0	0	0	23
08:30	0	0	0	0	0	0	0	0	28	1	0	0	0	0	0	29
08:45	0	0	0	0	0	0	0	0	24	2	0	0	0	0	0	26
H/TOT	0	106	10	1	0	0	0	0	117							
09:00	0	0	0	0	0	0	0	0	16	1	0	0	0	0	0	17
09:15	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9
H/TOT	0	24	2	0	0	0	0	0	26							
P/TOT	0	247	32	2	1	2	0	0	284							

TIME	A to A							TOT	B to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	0	0	0	0	0	0	0	0	19	0	1	0	0	0	0	20
15:15	0	0	0	0	0	0	0	0	24	4	0	0	0	0	1	29
15:30	0	0	0	0	0	0	0	0	24	3	0	0	0	0	0	27
15:45	0	0	0	0	0	0	0	0	17	8	0	0	1	0	0	26
H/TOT	0	84	15	1	0	1	0	1	102							
16:00	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15
16:15	0	0	0	0	0	0	0	0	19	7	0	0	0	0	0	26
16:30	0	0	0	0	0	0	0	0	26	1	0	1	0	0	0	28
16:45	0	0	0	0	0	0	0	0	24	3	0	0	0	0	0	27
H/TOT	0	83	12	0	1	0	0	0	96							
17:00	0	0	0	0	0	0	0	0	32	4	0	0	0	0	0	36
17:15	0	0	0	0	0	0	0	0	21	1	0	0	0	0	0	22
17:30	0	0	0	0	0	0	0	0	19	1	0	0	0	0	0	20
17:45	0	0	0	0	0	0	0	0	21	1	0	0	0	0	1	23
H/TOT	0	93	7	0	0	0	0	1	101							
18:00	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10
18:15	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13
18:30	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7
18:45	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	12
H/TOT	0	38	4	0	0	0	0	0	42							
P/TOT	0	298	38	1	1	1	0	2	341							



SITE: 2

DATE: 28/03/2023

LOCATION: Woodlands Road/Cliffe Lane

DAY: Tuesday

TIME	B to C							TOT	B to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
07:15	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
07:30	7	0	2	0	0	0	0	9	0	0	0	0	0	0	0	0	0
07:45	3	2	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
H/TOT	25	4	2	0	0	0	0	31	0								
08:00	3	2	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
08:15	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
08:30	8	2	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
08:45	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
H/TOT	22	4	0	0	0	0	0	26	0								
09:00	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
09:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
H/TOT	8	1	0	0	0	0	0	9	0								
P/TOT	55	9	2	0	0	0	0	66	0								

TIME	B to C							TOT	B to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0
15:15	9	0	0	1	0	0	0	10	0	0	0	0	0	0	0	0	0
15:30	9	1	0	0	0	0	0	10	1	0	0	0	0	0	0	0	1
15:45	2	1	1	1	0	0	0	5	0	0	0	0	0	0	0	0	0
H/TOT	27	3	1	2	0	0	0	33	1	0	1						
16:00	7	2	1	0	0	0	0	10	0	0	0	0	0	0	0	0	0
16:15	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
16:30	19	4	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0
16:45	4	0	0	0	0	0	2	6	0	0	0	0	0	0	0	0	0
H/TOT	35	6	1	0	0	0	2	44	0								
17:00	20	2	1	0	0	0	0	23	0	0	0	0	0	0	0	0	0
17:15	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
17:30	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
17:45	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
H/TOT	46	4	1	0	0	0	0	51	0								
18:00	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0
18:15	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
18:30	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
18:45	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
H/TOT	33	3	0	0	0	0	0	36	0								
P/TOT	141	16	3	2	0	0	2	164	1	0	1						



SITE: 2

DATE: 28/03/2023

LOCATION: Woodlands Road/Cliffe Lane

DAY: Tuesday

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	1	1	1	0	0	0	0	3	5	0	0	0	0	1	0	6
07:15	4	0	0	0	1	0	0	5	9	3	0	0	0	0	0	12
07:30	4	1	0	0	0	0	0	5	24	4	0	0	0	1	1	30
07:45	4	1	0	0	0	0	0	5	25	4	0	0	0	1	0	30
H/TOT	13	3	1	0	1	0	0	18	63	11	0	0	0	3	1	78
08:00	7	0	0	0	0	0	0	7	10	1	0	0	0	0	0	11
08:15	9	2	1	0	0	0	0	12	18	0	1	0	0	0	0	19
08:30	6	1	0	0	0	0	0	7	10	2	0	0	0	0	0	12
08:45	4	1	1	0	0	0	0	6	14	2	0	0	0	0	0	16
H/TOT	26	4	2	0	0	0	0	32	52	5	1	0	0	0	0	58
09:00	8	3	0	0	0	0	0	11	4	1	0	0	0	0	0	5
09:15	2	0	0	0	0	0	0	2	6	0	0	0	0	0	0	6
H/TOT	10	3	0	0	0	0	0	13	10	1	0	0	0	0	0	11
P/TOT	49	10	3	0	1	0	0	63	125	17	1	0	0	3	1	147

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	4	0	0	0	0	0	0	4	5	1	0	0	0	0	0	6
15:15	7	1	0	0	0	0	0	8	4	0	0	0	0	0	0	4
15:30	6	0	0	0	0	0	0	6	5	0	0	0	0	0	0	5
15:45	2	1	0	0	0	0	0	3	6	1	0	0	0	0	0	7
H/TOT	19	2	0	0	0	0	0	21	20	2	0	0	0	0	0	22
16:00	5	1	0	0	0	0	0	6	6	2	0	0	0	0	0	8
16:15	9	1	0	0	0	0	0	10	8	0	0	0	0	0	0	8
16:30	6	4	0	0	0	0	0	10	8	1	0	0	0	0	0	9
16:45	11	0	0	0	0	0	0	11	4	2	0	0	0	0	0	6
H/TOT	31	6	0	0	0	0	0	37	26	5	0	0	0	0	0	31
17:00	9	0	0	0	0	0	0	9	9	0	0	0	0	0	0	9
17:15	9	0	0	0	0	0	0	9	12	0	0	0	0	0	0	12
17:30	8	2	0	0	0	0	0	10	7	1	0	0	0	0	0	8
17:45	5	0	0	0	0	0	0	5	6	0	0	0	0	0	0	6
H/TOT	31	2	0	0	0	0	0	33	34	1	0	0	0	0	0	35
18:00	11	0	0	0	0	0	0	11	3	0	0	0	0	0	0	3
18:15	6	0	0	0	0	0	0	6	5	0	0	0	0	0	0	5
18:30	7	1	0	0	0	0	0	8	6	0	0	0	0	0	0	6
18:45	11	0	0	0	0	0	0	11	9	1	0	0	0	0	0	10
H/TOT	35	1	0	0	0	0	0	36	23	1	0	0	0	0	0	24
P/TOT	116	11	0	0	0	0	0	127	103	9	0	0	0	0	0	112

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0



SITE: 2

DATE: 28/03/2023

LOCATION: Woodlands Road/Cliffe Lane

DAY: Tuesday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	15	3	0	0	0	1	0	19	7	4	0	0	0	0	0	11
07:15	36	6	1	0	0	0	0	43	16	2	0	0	0	0	0	18
07:30	59	11	0	0	1	1	1	73	28	3	1	0	0	0	0	32
07:45	70	11	0	1	1	1	0	84	25	2	0	0	1	0	0	28
H/TOT	180	31	1	1	2	3	1	219	76	11	1	0	1	0	0	89
08:00	42	7	1	0	0	0	0	50	36	1	0	0	1	0	0	38
08:15	40	1	1	0	0	0	0	42	35	2	1	0	0	0	0	38
08:30	38	3	0	0	0	0	0	41	18	2	0	0	0	0	0	20
08:45	38	4	0	0	0	0	0	42	35	1	1	0	0	0	0	37
H/TOT	158	15	2	0	0	0	0	175	124	6	2	0	1	0	0	133
09:00	20	2	0	0	0	0	0	22	23	3	0	0	0	0	0	26
09:15	14	1	0	0	0	0	0	15	18	2	0	0	0	0	0	20
H/TOT	34	3	0	0	0	0	0	37	41	5	0	0	0	0	0	46
P/TOT	372	49	3	1	2	3	1	431	241	22	3	0	2	0	0	268

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	24	1	1	0	0	0	0	26	22	4	0	0	0	0	0	26
15:15	28	4	0	0	0	0	1	33	26	1	0	2	0	0	1	30
15:30	29	3	0	0	0	0	0	32	29	7	0	0	0	0	0	36
15:45	23	9	0	0	1	0	0	33	20	3	0	0	0	0	1	24
H/TOT	104	17	1	0	1	0	1	124	97	15	0	2	0	0	2	116
16:00	20	3	0	0	0	0	0	23	23	6	0	0	0	0	0	29
16:15	27	7	0	0	0	0	0	34	37	4	0	0	1	1	0	43
16:30	34	2	0	1	0	0	0	37	36	3	0	0	0	0	0	39
16:45	28	5	0	0	0	0	0	33	44	7	0	0	0	0	0	51
H/TOT	109	17	0	1	0	0	0	127	140	20	0	0	1	1	0	162
17:00	41	4	0	0	0	0	0	45	42	4	0	0	0	0	0	46
17:15	33	1	0	0	0	0	0	34	50	4	0	0	0	0	0	54
17:30	26	2	0	0	0	0	0	28	42	4	0	0	0	0	0	46
17:45	27	1	0	0	0	0	1	29	33	4	0	0	0	1	0	38
H/TOT	127	8	0	0	0	0	1	136	167	16	0	0	0	1	0	184
18:00	12	1	0	0	0	0	0	13	46	4	0	0	0	0	1	51
18:15	18	0	0	0	0	0	0	18	35	3	0	0	0	0	0	38
18:30	12	1	0	0	0	0	0	13	28	2	0	0	0	0	1	31
18:45	19	3	0	0	0	0	0	22	25	1	0	0	0	0	0	26
H/TOT	61	5	0	0	0	0	0	66	134	10	0	0	0	0	2	146
P/TOT	401	47	1	1	1	0	2	453	538	61	0	2	1	2	4	608



SITE: 2

DATE: 28/03/2023

LOCATION: Woodlands Road/Cliffe Lane

DAY: Tuesday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	5	4	1	0	0	0	0	10	19	4	0	0	0	0	0	23
07:15	16	1	0	0	1	0	0	18	33	4	1	0	0	0	0	38
07:30	23	1	1	0	0	0	0	25	42	7	2	0	1	0	0	52
07:45	24	3	0	0	0	0	0	27	48	9	0	1	1	0	0	59
H/TOT	68	9	2	0	1	0	0	80	142	24	3	1	2	0	0	172
08:00	33	1	0	0	1	0	0	35	35	8	1	0	0	0	0	44
08:15	32	2	2	0	0	0	0	36	27	1	0	0	0	0	0	28
08:30	22	1	0	0	0	0	0	23	36	3	0	0	0	0	0	39
08:45	32	2	1	0	0	0	0	35	30	2	0	0	0	0	0	32
H/TOT	119	6	3	0	1	0	0	129	128	14	1	0	0	0	0	143
09:00	28	5	0	0	0	0	0	33	20	2	0	0	0	0	0	22
09:15	12	1	0	0	0	0	0	13	12	1	0	0	0	0	0	13
H/TOT	40	6	0	0	0	0	0	46	32	3	0	0	0	0	0	35
P/TOT	227	21	5	0	2	0	0	255	302	41	4	1	2	0	0	350

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	16	2	0	0	0	0	0	18	26	1	1	0	0	0	0	28
15:15	25	2	0	2	0	0	1	30	33	4	0	1	0	0	1	39
15:30	30	4	0	0	0	0	0	34	34	4	0	0	0	0	0	38
15:45	16	3	0	0	0	0	1	20	19	9	1	1	1	0	0	31
H/TOT	87	11	0	2	0	0	2	102	112	18	2	2	1	0	1	136
16:00	15	4	0	0	0	0	0	19	21	3	1	0	0	0	0	25
16:15	34	5	0	0	1	1	0	41	24	7	0	0	0	0	0	31
16:30	24	5	0	0	0	0	0	29	45	5	0	1	0	0	0	51
16:45	40	4	0	0	0	0	0	44	28	3	0	0	0	0	2	33
H/TOT	113	18	0	0	1	1	0	133	118	18	1	1	0	0	2	140
17:00	36	2	0	0	0	0	0	38	52	6	1	0	0	0	0	59
17:15	42	4	0	0	0	0	0	46	34	2	0	0	0	0	0	36
17:30	38	5	0	0	0	0	0	43	26	1	0	0	0	0	0	27
17:45	28	2	0	0	0	0	0	30	27	2	0	0	0	0	1	30
H/TOT	144	13	0	0	0	0	0	157	139	11	1	0	0	0	1	152
18:00	41	3	0	0	0	0	1	45	21	2	0	0	0	0	0	23
18:15	28	2	0	0	0	0	0	30	24	1	0	0	0	0	0	25
18:30	22	2	0	0	0	0	1	25	12	1	0	0	0	0	0	13
18:45	28	1	0	0	0	0	0	29	14	3	0	0	0	0	0	17
H/TOT	119	8	0	0	0	0	2	129	71	7	0	0	0	0	0	78
P/TOT	463	50	0	2	1	1	4	521	440	54	4	3	1	0	4	506



SITE: 2

DATE: 28/03/2023

LOCATION: Woodlands Road/Cliffe Lane

DAY: Tuesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	12	2	0	0	0	0	0	14	6	1	1	0	0	1	0	9
07:15	10	2	0	0	0	0	0	12	13	3	0	0	1	0	0	17
07:30	16	3	2	0	0	0	0	21	28	5	0	0	0	1	1	35
07:45	8	2	0	0	1	0	0	11	29	5	0	0	0	1	0	35
H/TOT	46	9	2	0	1	0	0	58	76	14	1	0	1	3	1	96
08:00	13	2	0	0	0	0	0	15	17	1	0	0	0	0	0	18
08:15	17	2	0	0	0	0	0	19	27	2	2	0	0	0	0	31
08:30	10	4	0	0	0	0	0	14	16	3	0	0	0	0	0	19
08:45	13	0	1	0	0	0	0	14	18	3	1	0	0	0	0	22
H/TOT	53	8	1	0	0	0	0	62	78	9	3	0	0	0	0	90
09:00	7	2	0	0	0	0	0	9	12	4	0	0	0	0	0	16
09:15	12	1	0	0	0	0	0	13	8	0	0	0	0	0	0	8
H/TOT	19	3	0	0	0	0	0	22	20	4	0	0	0	0	0	24
P/TOT	118	20	3	0	1	0	0	142	174	27	4	0	1	3	1	210

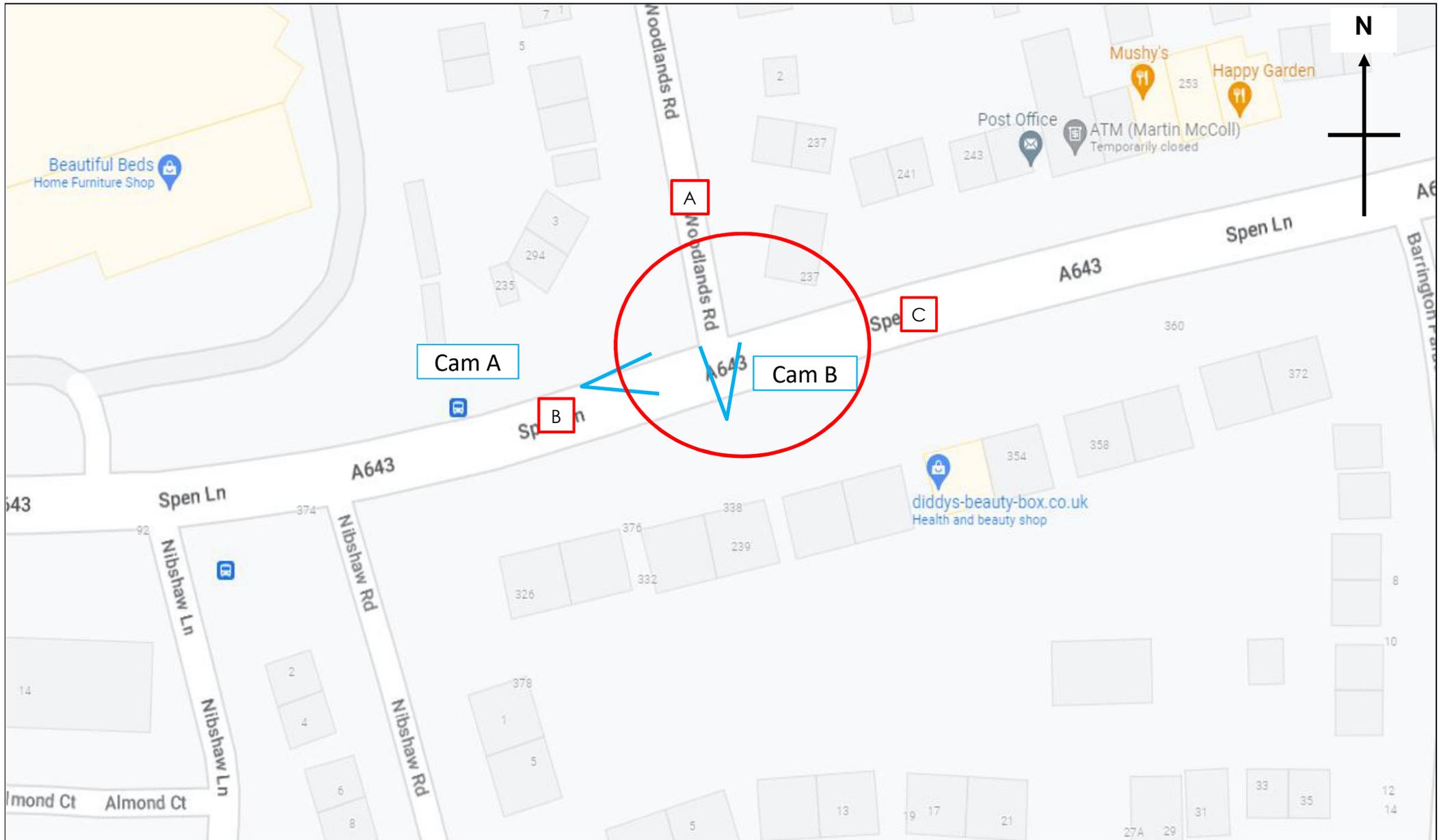
TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	17	3	0	0	0	0	0	20	9	1	0	0	0	0	0	10
15:15	17	0	0	1	0	0	0	18	11	1	0	0	0	0	0	12
15:30	15	4	0	0	0	0	0	19	11	0	0	0	0	0	0	11
15:45	8	2	1	1	0	0	0	12	8	2	0	0	0	0	0	10
H/TOT	57	9	1	2	0	0	0	69	39	4	0	0	0	0	0	43
16:00	20	5	1	0	0	0	0	26	11	3	0	0	0	0	0	14
16:15	17	0	0	0	0	0	0	17	17	1	0	0	0	0	0	18
16:30	37	6	0	0	0	0	0	43	14	5	0	0	0	0	0	19
16:45	19	3	0	0	0	0	2	24	15	2	0	0	0	0	0	17
H/TOT	93	14	1	0	0	0	2	110	57	11	0	0	0	0	0	68
17:00	35	4	1	0	0	0	0	40	18	0	0	0	0	0	0	18
17:15	30	1	0	0	0	0	0	31	21	0	0	0	0	0	0	21
17:30	19	1	0	0	0	0	0	20	15	3	0	0	0	0	0	18
17:45	16	3	0	0	0	1	0	20	11	0	0	0	0	0	0	11
H/TOT	100	9	1	0	0	1	0	111	65	3	0	0	0	0	0	68
18:00	28	2	0	0	0	0	0	30	14	0	0	0	0	0	0	14
18:15	24	2	0	0	0	0	0	26	11	0	0	0	0	0	0	11
18:30	19	1	0	0	0	0	0	20	13	1	0	0	0	0	0	14
18:45	12	1	0	0	0	0	0	13	20	1	0	0	0	0	0	21
H/TOT	83	6	0	0	0	0	0	89	58	2	0	0	0	0	0	60
P/TOT	333	38	3	2	0	1	2	379	219	20	0	0	0	0	0	239

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	32	9	1	0	0	1	0	43
07:15	62	9	1	0	1	0	0	73
07:30	98	15	3	0	1	1	1	119
07:45	102	16	0	1	2	1	0	122
H/TOT	294	49	5	1	4	3	1	357
08:00	88	10	1	0	1	0	0	100
08:15	89	5	3	0	0	0	0	97
08:30	70	8	0	0	0	0	0	78
08:45	83	6	2	0	0	0	0	91
H/TOT	330	29	6	0	1	0	0	366
09:00	55	9	0	0	0	0	0	64
09:15	38	3	0	0	0	0	0	41
H/TOT	93	12	0	0	0	0	0	105
P/TOT	717	90	11	1	5	3	1	828

PEAK HOUR CALCULATION	TOT
07:00 to 08:00	357
07:15 to 08:15	414
07:30 to 08:30	438
07:45 to 08:45	397
08:00 to 09:00	366
08:15 to 09:15	330
08:30 to 09:15	576
09:00 to 09:30	105
A.M. Peak	576

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	57	6	1	0	0	0	0	64
15:15	70	6	0	3	0	0	2	81
15:30	74	11	0	0	0	0	0	85
15:45	47	14	1	1	1	0	1	65
H/TOT	248	37	2	4	1	0	3	295
16:00	55	12	1	0	0	0	0	68
16:15	78	12	0	0	1	1	0	92
16:30	95	13	0	1	0	0	0	109
16:45	87	12	0	0	0	0	2	101
H/TOT	315	49	1	1	1	1	2	370
17:00	112	10	1	0	0	0	0	123
17:15	105	6	0	0	0	0	0	111
17:30	83	8	0	0	0	0	0	91
17:45	71	6	0	0	0	1	1	79
H/TOT	371	30	1	0	0	1	1	404
18:00	81	6	0	0	0	0	1	88
18:15	70	4	0	0	0	0	0	74
18:30	53	4	0	0	0	0	1	58
18:45	59	5	0	0	0	0	0	64
H/TOT	263	19	0	0	0	0	2	284
P/TOT	1197	135	4	5	2	2	8	1353

PEAK HOUR CALCULATION	TOT
15:00 to 16:00	295
15:15 to 16:15	299
15:30 to 16:30	310
15:45 to 16:45	334
16:00 to 17:00	370
16:15 to 17:15	425
16:30 to 17:30	444
16:45 to 17:45	426
17:00 to 18:00	404
17:15 to 18:15	369
17:30 to 18:30	332
17:45 to 18:45	299
18:00 to 19:00	284
P.M. Peak	4591



	Site / Location: Site 3 – Woodlands Road/A643 Spen Lane	Project No: 13882	Drawing No: 13882-03	Drawn By: DC	
	Survey Date: Tuesday 28th March 2023	Project Name: KIRKLEES			
	Survey Times: 07:00 – 09:30 & 15:00 – 19:00	Drawing Title: Site Layout and Observed Movements			



SITE: 3

DATE: 28/03/2023

LOCATION: Woodlands Road/A643 Spen Lane

DAY: Tuesday

TIME	A to C							TOT	A to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	14	1	0	0	0	0	0	15	5	1	0	0	0	0	0	6
07:15	10	3	0	0	0	0	0	13	5	0	0	0	0	0	1	6
07:30	15	2	1	0	0	0	0	18	10	3	0	0	0	0	0	13
07:45	11	2	1	0	0	0	0	14	5	0	0	0	1	0	0	6
H/TOT	50	8	2	0	0	0	0	60	25	4	0	0	1	0	1	31
08:00	7	2	0	0	0	0	0	9	6	0	0	0	0	0	0	6
08:15	11	2	0	0	0	0	0	13	7	0	0	0	0	0	0	7
08:30	15	1	0	0	0	0	0	16	5	1	0	0	0	0	0	6
08:45	10	0	1	0	0	0	0	11	5	0	1	0	0	0	0	6
H/TOT	43	5	1	0	0	0	0	49	23	1	1	0	0	0	0	25
09:00	9	1	0	0	0	0	0	10	4	1	0	0	0	0	0	5
09:15	10	1	0	0	0	0	0	11	5	1	1	0	0	0	0	7
H/TOT	19	2	0	0	0	0	0	21	9	2	1	0	0	0	0	12
P/TOT	112	15	3	0	0	0	0	130	57	7	2	0	1	0	1	68

TIME	A to C							TOT	A to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	9	2	0	0	0	0	0	11	7	1	0	0	0	0	0	8
15:15	14	0	0	0	0	0	0	14	7	1	0	1	0	0	0	9
15:30	10	1	0	0	0	0	0	11	5	2	1	0	0	0	0	8
15:45	9	1	1	0	0	0	0	11	5	1	0	1	0	0	0	7
H/TOT	42	4	1	0	0	0	0	47	24	5	1	2	0	0	0	32
16:00	13	4	1	0	0	0	0	18	4	0	0	0	0	0	0	4
16:15	10	0	0	0	0	0	0	10	7	0	0	0	0	0	0	7
16:30	18	5	0	0	0	0	0	23	9	1	0	0	0	0	0	10
16:45	10	3	0	0	0	0	2	15	10	1	0	0	0	0	0	11
H/TOT	51	12	1	0	0	0	2	66	30	2	0	0	0	0	0	32
17:00	23	2	1	0	0	0	0	26	12	2	0	0	0	0	0	14
17:15	25	1	0	0	0	0	0	26	8	0	0	0	0	0	0	8
17:30	8	1	0	0	0	0	0	9	7	1	0	0	0	0	0	8
17:45	13	1	0	0	0	0	0	14	10	2	0	0	0	0	0	12
H/TOT	69	5	1	0	0	0	0	75	37	5	0	0	0	0	0	42
18:00	19	1	0	0	0	0	0	20	10	1	0	0	0	0	0	11
18:15	16	3	0	0	0	0	0	19	9	1	0	0	0	0	0	10
18:30	17	0	0	0	0	0	0	17	9	1	0	0	0	0	0	10
18:45	7	1	0	0	0	0	0	8	6	0	0	0	0	0	0	6
H/TOT	59	5	0	0	0	0	0	64	34	3	0	0	0	0	0	37
P/TOT	221	26	3	0	0	0	2	252	125	15	1	2	0	0	0	143



SITE: 3

DATE: 28/03/2023

LOCATION: Woodlands Road/A643 Spen Lane

DAY: Tuesday

TIME	A to A							TOT	B to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	5
07:15	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10
07:30	0	0	0	0	0	0	0	0	15	1	0	0	0	0	1	17
07:45	0	0	0	0	0	0	0	0	15	2	0	0	0	0	0	17
H/TOT	0	42	5	1	0	0	0	1	49							
08:00	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
08:15	0	0	0	0	0	0	0	0	9	1	1	0	0	0	0	11
08:30	0	0	0	0	0	0	0	0	8	1	1	0	0	0	0	10
08:45	0	0	0	0	0	0	0	0	9	4	0	0	0	0	0	13
H/TOT	0	31	6	2	0	0	0	0	39							
09:00	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
09:15	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
H/TOT	0	9	0	0	0	0	0	0	9							
P/TOT	0	82	11	3	0	0	0	1	97							

TIME	A to A							TOT	B to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	0	0	0	0	0	0	0	0	5	0	0	0	0	0	1	6
15:15	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6
15:30	0	0	0	0	0	0	0	0	5	0	1	0	1	0	0	7
15:45	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
H/TOT	0	20	1	1	0	1	0	1	24							
16:00	0	0	0	0	0	0	0	0	6	2	0	0	0	0	0	8
16:15	0	0	0	0	0	0	0	0	7	2	0	0	0	0	0	9
16:30	0	0	0	0	0	0	0	0	13	4	0	0	0	0	0	17
16:45	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
H/TOT	0	29	8	0	0	0	0	0	37							
17:00	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8
17:15	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	12
17:30	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6
17:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
H/TOT	0	25	3	0	0	0	0	0	28							
18:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
18:15	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7
18:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
18:45	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9
H/TOT	0	18	2	0	0	0	0	0	20							
P/TOT	0	92	14	1	0	1	0	1	109							



SITE: 3

DATE: 28/03/2023

LOCATION: Woodlands Road/A643 Spen Lane

DAY: Tuesday

TIME	B to C							TOT	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	62	16	1	0	2	0	0	81	0	0	0	0	0	0	0	0
07:15	94	13	3	1	2	0	0	113	0	0	0	0	0	0	0	0
07:30	69	8	1	0	2	1	1	82	0	0	0	0	0	0	0	0
07:45	71	7	0	0	1	0	0	79	0	0	0	0	0	0	0	0
H/TOT	296	44	5	1	7	1	1	355	0							
08:00	66	6	3	0	1	0	0	76	0	0	0	0	0	0	0	0
08:15	56	10	1	2	1	2	0	72	0	0	0	0	0	0	0	0
08:30	73	12	0	1	2	0	0	88	0	0	0	0	0	0	0	0
08:45	60	3	1	1	0	0	0	65	0	0	0	0	0	0	0	0
H/TOT	255	31	5	4	4	2	0	301	0							
09:00	43	6	1	0	2	0	0	52	0	0	0	0	0	0	0	0
09:15	50	7	2	0	2	0	0	61	0	0	0	0	0	0	0	0
H/TOT	93	13	3	0	4	0	0	113	0							
P/TOT	644	88	13	5	15	3	1	769	0							

TIME	B to C							TOT	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	46	6	0	0	2	0	0	54	0	0	0	0	0	0	0	0
15:15	52	5	0	0	1	0	0	58	0	0	0	0	0	0	0	0
15:30	53	6	3	0	1	0	0	63	0	0	0	0	0	0	0	0
15:45	55	9	0	0	2	0	0	66	0	0	0	0	0	0	0	0
H/TOT	206	26	3	0	6	0	0	241	0							
16:00	60	8	2	0	5	1	0	76	0	0	0	0	0	0	0	0
16:15	65	7	2	0	3	0	1	78	0	0	0	0	0	0	0	0
16:30	55	12	0	0	1	0	0	68	0	0	0	0	0	0	0	0
16:45	44	3	1	0	2	0	0	50	0	0	0	0	0	0	0	0
H/TOT	224	30	5	0	11	1	1	272	0							
17:00	75	6	0	0	2	0	0	83	0	0	0	0	0	0	0	0
17:15	61	5	0	0	1	0	0	67	0	0	0	0	0	0	0	0
17:30	49	7	1	0	0	0	0	57	0	0	0	0	0	0	0	0
17:45	46	5	0	0	0	0	1	52	0	0	0	0	0	0	0	0
H/TOT	231	23	1	0	3	0	1	259	0							
18:00	50	4	0	0	2	0	0	56	0	0	0	0	0	0	0	0
18:15	35	3	0	0	2	0	0	40	0	0	0	0	0	0	0	0
18:30	36	2	0	0	0	0	2	40	0	0	0	0	0	0	0	0
18:45	46	3	1	0	1	0	0	51	0	0	0	0	0	0	0	0
H/TOT	167	12	1	0	5	0	2	187	0							
P/TOT	828	91	10	0	25	1	4	959	0							



SITE: 3

DATE: 28/03/2023

LOCATION: Woodlands Road/A643 Spen Lane

DAY: Tuesday

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	24	4	0	0	0	0	0	28	3	2	0	0	0	1	0	6
07:15	33	5	0	0	3	0	1	42	3	1	0	0	1	0	0	5
07:30	28	6	0	0	1	0	1	36	9	4	0	0	0	1	0	14
07:45	50	8	0	0	1	0	0	59	11	1	0	0	0	0	0	12
H/TOT	135	23	0	0	5	0	2	165	26	8	0	0	1	2	0	37
08:00	51	7	1	0	4	0	0	63	11	0	0	0	0	0	0	11
08:15	60	5	1	1	1	0	0	68	19	2	1	0	0	0	0	22
08:30	52	9	1	0	1	0	0	63	9	1	0	0	0	0	0	10
08:45	40	7	0	0	2	0	0	49	6	3	3	0	0	0	0	12
H/TOT	203	28	3	1	8	0	0	243	45	6	4	0	0	0	0	55
09:00	36	10	5	0	2	1	0	54	11	2	0	0	0	0	0	13
09:15	30	5	1	1	4	0	0	41	3	0	1	1	0	0	0	5
H/TOT	66	15	6	1	6	1	0	95	14	2	1	1	0	0	0	18
P/TOT	404	66	9	2	19	1	2	503	85	16	5	1	1	2	0	110

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	67	5	1	0	2	0	0	75	7	2	0	0	0	0	0	9
15:15	43	9	0	0	2	0	0	54	11	2	0	0	0	0	0	13
15:30	67	5	0	0	1	0	0	73	15	1	0	0	0	0	0	16
15:45	43	3	1	1	2	0	0	50	6	0	0	0	0	0	0	6
H/TOT	220	22	2	1	7	0	0	252	39	5	0	0	0	0	0	44
16:00	58	5	2	0	0	0	0	65	7	2	0	0	0	0	0	9
16:15	50	9	1	0	2	0	1	63	13	1	0	0	0	0	0	14
16:30	54	8	1	0	1	1	0	65	12	4	0	0	0	0	0	16
16:45	68	6	0	0	2	0	0	76	19	1	0	0	0	0	0	20
H/TOT	230	28	4	0	5	1	1	269	51	8	0	0	0	0	0	59
17:00	65	6	0	0	1	0	0	72	20	0	0	0	0	0	0	20
17:15	59	6	0	0	1	1	0	67	22	0	0	0	0	0	0	22
17:30	69	4	0	0	2	1	0	76	13	1	0	0	0	0	0	14
17:45	52	6	0	0	1	1	0	60	18	1	0	0	0	0	0	19
H/TOT	245	22	0	0	5	3	0	275	73	2	0	0	0	0	0	75
18:00	62	0	0	0	0	0	0	62	19	0	0	0	0	0	0	19
18:15	69	6	1	0	5	0	0	81	13	2	0	0	0	0	0	15
18:30	57	5	0	0	0	0	0	62	15	1	0	0	0	0	0	16
18:45	35	1	0	0	2	0	1	39	12	0	0	0	0	0	0	12
H/TOT	223	12	1	0	7	0	1	244	59	3	0	0	0	0	0	62
P/TOT	918	84	7	1	24	4	2	1040	222	18	0	0	0	0	0	240

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	1	0	0	0	0	0	0	1
07:45	1	0	0	0	0	0	0	1
H/TOT	2	0	0	0	0	0	0	2
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0							
09:00	0	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	1
H/TOT	1	0	0	0	0	0	0	1
P/TOT	3	0	0	0	0	0	0	3

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0
15:30	2	0	0	0	0	0	0	2
15:45	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0							
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0							
18:00	0	0	0	0	0	0	0	0
18:15	1	0	0	0	0	0	0	1
18:30	0	0	0	0	0	0	0	0
18:45	4	0	0	0	0	0	0	4
H/TOT	5	0	0	0	0	0	0	5
P/TOT	7	0	0	0	0	0	0	7



SITE: 3

DATE: 28/03/2023

LOCATION: Woodlands Road/A643 Spen Lane

DAY: Tuesday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	5	4	1	0	0	1	0	11	19	2	0	0	0	0	0	21
07:15	13	1	0	0	1	0	0	15	15	3	0	0	0	0	1	19
07:30	24	5	0	0	0	1	1	31	25	5	1	0	0	0	0	31
07:45	26	3	0	0	0	0	0	29	16	2	1	0	1	0	0	20
H/TOT	68	13	1	0	1	2	1	86	75	12	2	0	1	0	1	91
08:00	16	0	0	0	0	0	0	16	13	2	0	0	0	0	0	15
08:15	28	3	2	0	0	0	0	33	18	2	0	0	0	0	0	20
08:30	17	2	1	0	0	0	0	20	20	2	0	0	0	0	0	22
08:45	15	7	3	0	0	0	0	25	15	0	2	0	0	0	0	17
H/TOT	76	12	6	0	0	0	0	94	66	6	2	0	0	0	0	74
09:00	15	2	0	0	0	0	0	17	13	2	0	0	0	0	0	15
09:15	8	0	1	1	0	0	0	10	15	2	1	0	0	0	0	18
H/TOT	23	2	1	1	0	0	0	27	28	4	1	0	0	0	0	33
P/TOT	167	27	8	1	1	2	1	207	169	22	5	0	1	0	1	198

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	12	2	0	0	0	0	1	15	16	3	0	0	0	0	0	19
15:15	16	3	0	0	0	0	0	19	21	1	0	1	0	0	0	23
15:30	20	1	1	0	1	0	0	23	15	3	1	0	0	0	0	19
15:45	11	0	0	0	0	0	0	11	14	2	1	1	0	0	0	18
H/TOT	59	6	1	0	1	0	1	68	66	9	2	2	0	0	0	79
16:00	13	4	0	0	0	0	0	17	17	4	1	0	0	0	0	22
16:15	20	3	0	0	0	0	0	23	17	0	0	0	0	0	0	17
16:30	25	8	0	0	0	0	0	33	27	6	0	0	0	0	0	33
16:45	22	1	0	0	0	0	0	23	20	4	0	0	0	0	2	26
H/TOT	80	16	0	0	0	0	0	96	81	14	1	0	0	0	2	98
17:00	27	1	0	0	0	0	0	28	35	4	1	0	0	0	0	40
17:15	33	1	0	0	0	0	0	34	33	1	0	0	0	0	0	34
17:30	18	2	0	0	0	0	0	20	15	2	0	0	0	0	0	17
17:45	20	1	0	0	0	0	0	21	23	3	0	0	0	0	0	26
H/TOT	98	5	0	0	0	0	0	103	106	10	1	0	0	0	0	117
18:00	21	0	0	0	0	0	0	21	29	2	0	0	0	0	0	31
18:15	19	3	0	0	0	0	0	22	25	4	0	0	0	0	0	29
18:30	17	1	0	0	0	0	0	18	26	1	0	0	0	0	0	27
18:45	20	1	0	0	0	0	0	21	13	1	0	0	0	0	0	14
H/TOT	77	5	0	0	0	0	0	82	93	8	0	0	0	0	0	101
P/TOT	314	32	1	0	1	0	1	349	346	41	4	2	0	0	2	395



SITE: 3

DATE: 28/03/2023

LOCATION: Woodlands Road/A643 Spen Lane

DAY: Tuesday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	29	5	0	0	0	0	0	34	64	18	2	0	2	0	0	86
07:15	38	5	0	0	3	0	2	48	104	13	3	1	2	0	0	123
07:30	38	9	0	0	1	0	1	49	84	9	1	0	2	1	2	99
07:45	55	8	0	0	2	0	0	65	86	9	0	0	1	0	0	96
H/TOT	160	27	0	0	6	0	3	196	338	49	6	1	7	1	2	404
08:00	57	7	1	0	4	0	0	69	71	6	3	0	1	0	0	81
08:15	67	5	1	1	1	0	0	75	65	11	2	2	1	2	0	83
08:30	57	10	1	0	1	0	0	69	81	13	1	1	2	0	0	98
08:45	45	7	1	0	2	0	0	55	69	7	1	1	0	0	0	78
H/TOT	226	29	4	1	8	0	0	268	286	37	7	4	4	2	0	340
09:00	40	11	5	0	2	1	0	59	47	6	1	0	2	0	0	56
09:15	35	6	2	1	4	0	0	48	55	7	2	0	2	0	0	66
H/TOT	75	17	7	1	6	1	0	107	102	13	3	0	4	0	0	122
P/TOT	461	73	11	2	20	1	3	571	726	99	16	5	15	3	2	866

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	74	6	1	0	2	0	0	83	51	6	0	0	2	0	1	60
15:15	50	10	0	1	2	0	0	63	57	6	0	0	1	0	0	64
15:30	72	7	1	0	1	0	0	81	58	6	4	0	2	0	0	70
15:45	48	4	1	2	2	0	0	57	60	9	0	0	2	0	0	71
H/TOT	244	27	3	3	7	0	0	284	226	27	4	0	7	0	1	265
16:00	62	5	2	0	0	0	0	69	66	10	2	0	5	1	0	84
16:15	57	9	1	0	2	0	1	70	72	9	2	0	3	0	1	87
16:30	63	9	1	0	1	1	0	75	68	16	0	0	1	0	0	85
16:45	78	7	0	0	2	0	0	87	47	3	1	0	2	0	0	53
H/TOT	260	30	4	0	5	1	1	301	253	38	5	0	11	1	1	309
17:00	77	8	0	0	1	0	0	86	82	7	0	0	2	0	0	91
17:15	67	6	0	0	1	1	0	75	72	6	0	0	1	0	0	79
17:30	76	5	0	0	2	1	0	84	54	8	1	0	0	0	0	63
17:45	62	8	0	0	1	1	0	72	48	5	0	0	0	0	1	54
H/TOT	282	27	0	0	5	3	0	317	256	26	1	0	3	0	1	287
18:00	72	1	0	0	0	0	0	73	52	4	0	0	2	0	0	58
18:15	78	7	1	0	5	0	0	91	41	4	0	0	2	0	0	47
18:30	66	6	0	0	0	0	0	72	38	2	0	0	0	0	2	42
18:45	41	1	0	0	2	0	1	45	54	4	1	0	1	0	0	60
H/TOT	257	15	1	0	7	0	1	281	185	14	1	0	5	0	2	207
P/TOT	1043	99	8	3	24	4	2	1183	920	105	11	0	26	1	5	1068



SITE: 3

DATE: 28/03/2023

LOCATION: Woodlands Road/A643 Spen Lane

DAY: Tuesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	76	17	1	0	2	0	0	96	27	6	0	0	0	1	0	34
07:15	104	16	3	1	2	0	0	126	36	6	0	0	4	0	1	47
07:30	85	10	2	0	2	1	1	101	38	10	0	0	1	1	1	51
07:45	83	9	1	0	1	0	0	94	62	9	0	0	1	0	0	72
H/TOT	348	52	7	1	7	1	1	417	163	31	0	0	6	2	2	204
08:00	73	8	3	0	1	0	0	85	62	7	1	0	4	0	0	74
08:15	67	12	1	2	1	2	0	85	79	7	2	1	1	0	0	90
08:30	88	13	0	1	2	0	0	104	61	10	1	0	1	0	0	73
08:45	70	3	2	1	0	0	0	76	46	10	3	0	2	0	0	61
H/TOT	298	36	6	4	4	2	0	350	248	34	7	1	8	0	0	298
09:00	52	7	1	0	2	0	0	62	47	12	5	0	2	1	0	67
09:15	61	8	2	0	2	0	0	73	34	5	2	2	4	0	0	47
H/TOT	113	15	3	0	4	0	0	135	81	17	7	2	6	1	0	114
P/TOT	759	103	16	5	15	3	1	902	492	82	14	3	20	3	2	616

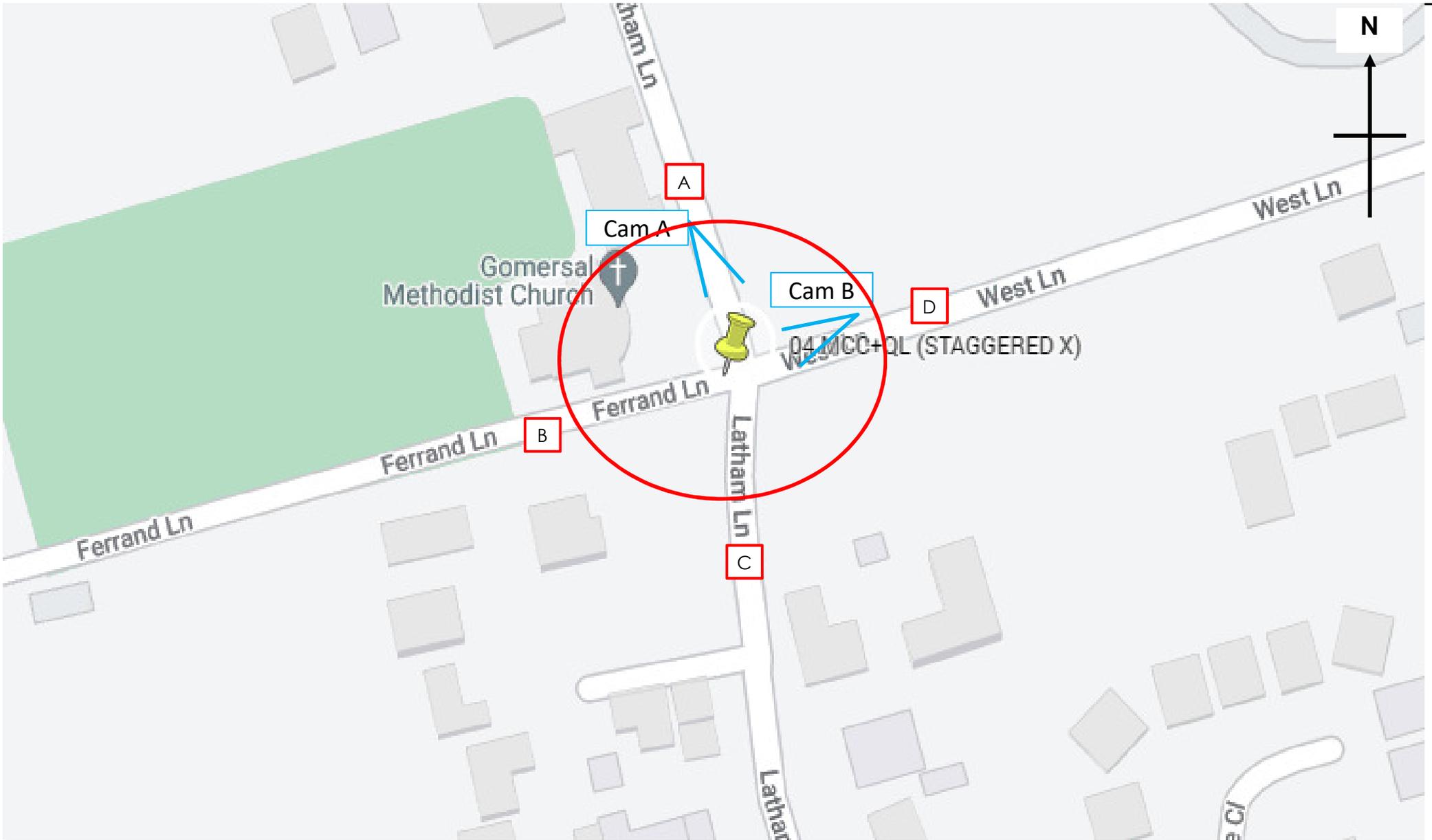
TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	55	8	0	0	2	0	0	65	74	7	1	0	2	0	0	84
15:15	66	5	0	0	1	0	0	72	54	11	0	0	2	0	0	67
15:30	65	7	3	0	1	0	0	76	84	6	0	0	1	0	0	91
15:45	64	10	1	0	2	0	0	77	49	3	1	1	2	0	0	56
H/TOT	250	30	4	0	6	0	0	290	261	27	2	1	7	0	0	298
16:00	73	12	3	0	5	1	0	94	65	7	2	0	0	0	0	74
16:15	75	7	2	0	3	0	1	88	63	10	1	0	2	0	1	77
16:30	73	17	0	0	1	0	0	91	66	12	1	0	1	1	0	81
16:45	54	6	1	0	2	0	2	65	87	7	0	0	2	0	0	96
H/TOT	275	42	6	0	11	1	3	338	281	36	4	0	5	1	1	328
17:00	98	8	1	0	2	0	0	109	85	6	0	0	1	0	0	92
17:15	86	6	0	0	1	0	0	93	81	6	0	0	1	1	0	89
17:30	57	8	1	0	0	0	0	66	82	5	0	0	2	1	0	90
17:45	59	6	0	0	0	0	1	66	70	7	0	0	1	1	0	79
H/TOT	300	28	2	0	3	0	1	334	318	24	0	0	5	3	0	350
18:00	69	5	0	0	2	0	0	76	81	0	0	0	0	0	0	81
18:15	52	6	0	0	2	0	0	60	83	8	1	0	5	0	0	97
18:30	53	2	0	0	0	0	2	57	72	6	0	0	0	0	0	78
18:45	57	4	1	0	1	0	0	63	51	1	0	0	2	0	1	55
H/TOT	231	17	1	0	5	0	2	256	287	15	1	0	7	0	1	311
P/TOT	1056	117	13	0	25	1	6	1218	1147	102	7	1	24	4	2	1287

JUNCTION TOTAL								
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	110	26	2	0	2	1	0	141
07:15	155	22	3	1	6	0	2	189
07:30	147	24	2	0	3	2	3	181
07:45	164	20	1	0	3	0	0	188
H/TOT	576	92	8	1	14	3	5	699
08:00	146	15	4	0	5	0	0	170
08:15	162	20	4	3	2	2	0	193
08:30	162	25	2	1	3	0	0	193
08:45	130	17	6	1	2	0	0	156
H/TOT	600	77	16	5	12	2	0	712
09:00	107	20	6	0	4	1	0	138
09:15	104	14	5	2	6	0	0	131
H/TOT	211	34	11	2	10	1	0	269
P/TOT	1387	203	35	8	36	6	5	1680

PEAK HOUR CALCULATION	TOT
07:00 to 08:00	699
07:15 to 08:15	728
07:30 to 08:30	732
07:45 to 08:45	744
08:00 to 09:00	712
08:15 to 09:15	680
08:30 to 09:15	1192
09:00 to 09:30	269
A.M. Peak	1192

JUNCTION TOTAL								
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	141	16	1	0	4	0	1	163
15:15	132	18	0	1	3	0	0	154
15:30	157	15	5	0	3	0	0	180
15:45	123	14	2	2	4	0	0	145
H/TOT	553	63	8	3	14	0	1	642
16:00	148	21	5	0	5	1	0	180
16:15	152	19	3	0	5	0	2	181
16:30	161	34	1	0	2	1	0	199
16:45	154	14	1	0	4	0	2	175
H/TOT	615	88	10	0	16	2	4	735
17:00	202	17	1	0	3	0	0	223
17:15	186	13	0	0	2	1	0	202
17:30	151	15	1	0	2	1	0	170
17:45	141	15	0	0	1	1	1	159
H/TOT	680	60	2	0	8	3	1	754
18:00	162	6	0	0	2	0	0	170
18:15	149	16	1	0	7	0	0	173
18:30	136	9	0	0	0	0	2	147
18:45	118	6	1	0	3	0	1	129
H/TOT	565	37	2	0	12	0	3	619
P/TOT	2413	248	22	3	50	5	9	2750

PEAK HOUR CALCULATION	TOT
15:00 to 16:00	642
15:15 to 16:15	659
15:30 to 16:30	686
15:45 to 16:45	705
16:00 to 17:00	735
16:15 to 17:15	778
16:30 to 17:30	799
16:45 to 17:45	770
17:00 to 18:00	754
17:15 to 18:15	701
17:30 to 18:30	672
17:45 to 18:45	649
18:00 to 19:00	619
P.M. Peak	9169



	Site / Location: Site 4 – West Lane/Ferrand Lane/Latham Lane	Project No: 13882	Drawing No: 13882-04	Drawn By: DC
	Survey Date: Tuesday 28th March 2023	Project Name: KIRKLEES		
	Survey Times: 07:00 – 09:30 & 15:00 – 19:00	Drawing Title: Site Layout and Observed Movements		



SITE: 4

DATE: 28/03/2023

LOCATION: West Lane/Ferrand Lane/Latham Lane

DAY: Tuesday

TIME	A to D							TOT	A to C							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0
07:15	23	3	0	0	0	0	0	26	3	1	0	0	0	0	0	0	4
07:30	15	3	0	0	0	0	0	18	2	0	0	0	0	0	0	0	2
07:45	15	3	0	0	0	0	0	18	4	0	0	0	0	0	0	0	4
H/TOT	59	11	0	0	0	0	0	70	9	1	0	0	0	0	0	0	10
08:00	23	3	0	0	0	0	0	26	7	1	0	0	0	0	0	0	8
08:15	11	2	2	0	0	0	0	15	8	1	0	0	0	0	0	0	9
08:30	16	5	0	0	0	0	0	21	3	0	0	0	0	0	0	0	3
08:45	18	1	1	1	0	0	0	21	3	0	1	0	0	0	0	0	4
H/TOT	68	11	3	1	0	0	0	83	21	2	1	0	0	0	0	0	24
09:00	13	2	1	0	0	1	0	17	4	0	0	0	0	0	0	0	4
09:15	8	2	0	0	1	0	0	11	6	0	0	0	0	0	0	0	6
H/TOT	21	4	1	0	1	1	0	28	10	0	10						
P/TOT	148	26	4	1	1	1	0	181	40	3	1	0	0	0	0	0	44

TIME	A to D							TOT	A to C							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	10	0	0	0	0	0	0	10	4	0	0	0	0	0	0	0	4
15:15	10	3	1	0	0	0	0	14	6	0	0	0	0	1	0	0	7
15:30	13	1	0	0	0	0	0	14	9	1	0	0	0	0	0	0	10
15:45	14	1	0	0	1	0	0	16	4	2	0	0	0	0	0	0	6
H/TOT	47	5	1	0	1	0	0	54	23	3	0	0	0	1	0	0	27
16:00	19	6	1	0	0	0	0	26	6	5	0	0	0	0	0	0	11
16:15	16	0	0	0	0	0	0	16	3	2	0	0	0	0	0	0	5
16:30	16	3	0	0	0	0	0	19	7	1	0	0	0	0	0	0	8
16:45	16	0	1	0	0	0	0	17	6	3	0	0	0	0	0	0	9
H/TOT	67	9	2	0	0	0	0	78	22	11	0	0	0	0	0	0	33
17:00	18	3	0	0	0	0	1	22	12	0	0	0	0	0	0	0	12
17:15	19	2	0	0	0	0	0	21	16	1	0	0	0	0	0	0	17
17:30	15	2	0	0	0	0	0	17	8	1	0	0	0	0	0	0	9
17:45	21	3	0	0	0	0	0	24	9	0	0	0	0	0	0	0	9
H/TOT	73	10	0	0	0	0	1	84	45	2	0	0	0	0	0	0	47
18:00	19	1	0	0	0	0	0	20	8	1	0	0	0	0	0	0	9
18:15	10	1	0	0	0	0	0	11	5	0	0	0	0	0	0	0	5
18:30	12	0	0	0	0	0	0	12	7	0	0	0	0	0	0	0	7
18:45	11	0	0	0	0	0	0	11	9	2	0	0	0	0	0	0	11
H/TOT	52	2	0	0	0	0	0	54	29	3	0	0	0	0	0	0	32
P/TOT	239	26	3	0	1	0	1	270	119	19	0	0	0	1	0	0	139



SITE: 4

DATE: 28/03/2023

LOCATION: West Lane/Ferrand Lane/Latham Lane

DAY: Tuesday

TIME	A to B							TOT	A to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0								
P/TOT	1	0	0	0	0	0	0	1	0								

TIME	A to B							TOT	A to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0								
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
P/TOT	1	0	0	0	0	0	0	1	0								



SITE: 4

DATE: 28/03/2023

LOCATION: West Lane/Ferrand Lane/Latham Lane

DAY: Tuesday

TIME	B to A							TOT	B to D							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
09:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
09:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
H/TOT	0	1	0	1	0	0	0	0	0	2							
P/TOT	0	1	0	1	0	0	0	0	0	2							

TIME	B to A							TOT	B to D							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0								
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0								
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
H/TOT	0	2	0	2													
18:00	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1	9	0	9						
P/TOT	0	1	0	0	0	0	0	1	11	0	11						



SITE: 4

DATE: 28/03/2023

LOCATION: West Lane/Ferrand Lane/Latham Lane

DAY: Tuesday

TIME	B to C							TOT	B to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	0								
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
P/TOT	0	0	1	0	0	0	0	1	0								

TIME	B to C							TOT	B to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0								
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0								
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0																
P/TOT	2	0	0	0	0	0	0	2	0								



SITE: 4

DATE: 28/03/2023

LOCATION: West Lane/Ferrand Lane/Latham Lane

DAY: Tuesday

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	4
07:15	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4
07:30	0	0	0	0	0	0	0	0	7	1	0	0	0	0	1	9
07:45	0	0	0	0	0	0	0	0	16	1	0	0	0	0	0	17
H/TOT	0	28	4	0	0	0	1	1	34							
08:00	0	0	1	0	0	0	0	1	12	1	0	0	0	0	0	13
08:15	0	0	0	0	0	0	0	0	13	0	1	0	0	0	0	14
08:30	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8
08:45	0	0	0	0	0	0	0	0	14	0	1	0	0	0	0	15
H/TOT	0	0	1	0	0	0	0	1	46	2	2	0	0	0	0	50
09:00	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	6
09:15	1	0	0	0	0	0	0	1	3	0	0	0	0	0	1	4
H/TOT	1	0	0	0	0	0	0	1	7	2	0	0	0	0	1	10
P/TOT	1	0	1	0	0	0	0	2	81	8	2	0	0	1	2	94

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	0	0	0	0	0	0	0	0	6	1	1	0	0	0	0	8
15:15	0	0	0	0	0	0	0	0	7	0	0	0	0	0	1	8
15:30	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
15:45	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	12
H/TOT	0	27	3	1	0	0	0	1	32							
16:00	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
16:15	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	7
16:30	0	0	0	1	0	0	0	1	7	0	0	0	0	0	0	7
16:45	2	0	0	0	0	0	0	2	10	2	0	0	0	0	0	12
H/TOT	2	0	0	1	0	0	0	3	24	5	0	0	0	0	0	29
17:00	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9
17:15	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12
17:30	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7
17:45	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
H/TOT	0	35	1	0	0	0	0	0	36							
18:00	1	0	0	0	0	0	0	1	5	0	0	0	0	0	0	5
18:15	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
18:30	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6
18:45	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
H/TOT	2	0	0	0	0	0	0	2	17	0	0	0	0	0	0	17
P/TOT	4	0	0	1	0	0	0	5	103	9	1	0	0	0	1	114



SITE: 4

DATE: 28/03/2023

LOCATION: West Lane/Ferrand Lane/Latham Lane

DAY: Tuesday

TIME	C to D							TOT	C to C							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	19	3	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0
07:15	55	5	1	0	0	0	0	61	0	0	0	0	0	0	0	0	0
07:30	67	12	0	0	1	1	0	81	0	0	0	0	0	0	0	0	0
07:45	77	13	0	1	1	0	0	92	0	0	0	0	0	0	0	0	0
H/TOT	218	33	1	1	2	1	0	256	0								
08:00	57	7	0	0	0	1	0	65	0	0	0	0	0	0	0	0	0
08:15	41	1	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0
08:30	43	1	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0
08:45	43	1	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0
H/TOT	184	10	0	0	0	1	0	195	0								
09:00	19	4	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0
09:15	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
H/TOT	32	5	0	0	0	0	0	37	0								
P/TOT	434	48	1	1	2	2	0	488	0								

TIME	C to D							TOT	C to C							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	23	4	1	0	0	0	0	28	0	0	0	0	0	0	0	0	0
15:15	26	2	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0
15:30	25	5	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0
15:45	24	7	0	0	1	0	0	32	0	0	0	0	0	0	0	0	0
H/TOT	98	18	1	0	1	0	0	118	0								
16:00	18	1	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0
16:15	32	6	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0
16:30	33	4	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0
16:45	23	3	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0
H/TOT	106	14	0	0	0	0	0	120	0								
17:00	42	1	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0
17:15	29	2	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0
17:30	25	2	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0
17:45	25	1	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0
H/TOT	121	6	0	0	0	0	0	127	0								
18:00	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0
18:15	18	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
18:30	17	1	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
18:45	17	3	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
H/TOT	64	5	0	0	0	0	0	69	0								
P/TOT	389	43	1	0	1	0	0	434	0								



SITE: 4

DATE: 28/03/2023

LOCATION: West Lane/Ferrand Lane/Latham Lane

DAY: Tuesday

TIME	D to C							TOT	D to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	7	2	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0
07:15	15	5	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
07:30	32	1	1	0	0	0	0	34	0	0	0	0	0	0	0	0	0
07:45	13	1	0	0	1	0	0	15	0	0	0	0	0	0	0	0	0
H/TOT	67	9	1	0	1	0	0	78	0								
08:00	38	2	0	0	1	0	0	41	0	0	0	0	0	0	0	0	0
08:15	27	1	1	0	0	0	0	29	0	0	0	0	0	0	0	0	0
08:30	20	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
08:45	21	2	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0
H/TOT	106	5	1	0	1	0	0	113	0								
09:00	19	1	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
09:15	12	2	0	0	0	0	0	14	1	0	0	0	0	0	0	0	1
H/TOT	31	3	0	0	0	0	0	34	1	0	1						
P/TOT	204	17	2	0	2	0	0	225	1	0	1						

TIME	D to C							TOT	D to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	17	4	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0
15:15	26	1	0	2	0	0	1	30	0	0	0	0	0	0	0	0	0
15:30	24	3	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0
15:45	20	1	0	0	0	0	1	22	0	0	0	0	0	0	0	0	0
H/TOT	87	9	0	2	0	0	2	100	0	0	0	0	0	0	0	0	0
16:00	25	3	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0
16:15	36	4	0	0	1	1	0	42	0	0	0	0	0	0	0	0	0
16:30	39	2	0	0	0	0	0	41	1	0	0	0	0	0	0	0	1
16:45	42	5	0	0	0	0	0	47	0	1	0	0	0	0	0	0	1
H/TOT	142	14	0	0	1	1	0	158	1	1	0	0	0	0	0	0	2
17:00	38	3	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0
17:15	42	5	0	0	0	0	0	47	0	0	0	0	0	0	0	0	0
17:30	32	5	0	0	0	0	0	37	1	0	0	0	0	0	0	0	1
17:45	34	1	0	0	0	1	0	36	8	0	0	0	0	0	0	0	8
H/TOT	146	14	0	0	0	1	0	161	9	0	9						
18:00	35	4	0	0	0	0	1	40	3	0	0	0	0	0	0	0	3
18:15	29	2	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0
18:30	21	1	0	0	0	0	0	22	1	0	0	0	0	0	0	0	1
18:45	18	0	0	0	0	0	0	18	4	0	0	0	0	0	0	0	4
H/TOT	103	7	0	0	0	0	1	111	8	0	8						
P/TOT	478	44	0	2	1	2	3	530	18	1	0	0	0	0	0	0	19



SITE: 4

DATE: 28/03/2023

LOCATION: West Lane/Ferrand Lane/Latham Lane

DAY: Tuesday

TIME	D to A							TOT	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
07:15	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0
07:30	20	1	0	0	0	0	0	21	0	0	0	0	0	0	0	0
07:45	30	3	0	0	0	0	0	33	0	0	0	0	0	0	0	0
H/TOT	67	5	0	0	0	0	0	72	0							
08:00	28	0	1	0	0	0	0	29	0	0	0	0	0	0	0	0
08:15	22	4	0	0	0	0	0	26	0	0	0	0	0	0	0	0
08:30	16	2	1	1	0	0	0	20	0	0	0	0	0	0	0	0
08:45	16	1	1	0	0	0	0	18	0	0	0	0	0	0	0	0
H/TOT	82	7	3	1	0	0	0	93	0							
09:00	13	2	0	0	0	0	0	15	0	0	0	0	0	0	0	0
09:15	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
H/TOT	23	2	0	0	0	0	0	25	0							
P/TOT	172	14	3	1	0	0	0	190	0							

TIME	D to A							TOT	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0
15:15	7	3	0	0	0	0	0	10	0	0	0	0	0	0	0	0
15:30	15	3	0	0	0	0	0	18	0	0	0	0	0	0	0	0
15:45	16	2	0	0	0	0	0	18	0	0	0	0	0	0	0	0
H/TOT	46	9	0	0	0	0	0	55	0							
16:00	8	2	1	0	0	0	0	11	0	0	0	0	0	0	0	0
16:15	16	4	0	0	0	0	0	20	0	0	0	0	0	0	0	0
16:30	17	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0
16:45	28	3	0	0	0	0	0	31	0	0	0	0	0	0	0	0
H/TOT	69	9	1	0	0	0	0	79	0							
17:00	21	2	0	0	0	0	0	23	0	0	0	0	0	0	0	0
17:15	21	1	0	0	0	0	0	22	0	0	0	0	0	0	0	0
17:30	19	2	0	0	0	0	0	21	0	0	0	0	0	0	0	0
17:45	29	1	0	0	0	0	0	30	0	0	0	0	0	0	0	0
H/TOT	90	6	0	0	0	0	0	96	0							
18:00	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
18:15	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
18:30	14	2	0	0	0	0	0	16	0	0	0	0	0	0	0	0
18:45	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
H/TOT	42	3	0	0	0	0	0	45	0							
P/TOT	247	27	1	0	0	0	0	275	0							

13882 - KIRKLEES
 March 2023
 CLASSIFIED TURNING COUNT

28/03/2023

Tuesday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	7	1	0	0	0	1	0	9	6	2	0	0	0	0	0	8
07:15	15	2	0	0	0	0	0	17	26	4	0	0	0	0	0	30
07:30	27	2	0	0	0	0	1	30	17	3	0	0	0	0	0	20
07:45	46	4	0	0	0	0	0	50	19	3	0	0	0	0	0	22
H/TOT	95	9	0	0	0	1	1	106	68	12	0	0	0	0	0	80
08:00	40	1	1	0	0	0	0	42	30	4	0	0	0	0	0	34
08:15	35	4	1	0	0	0	0	40	19	3	2	0	0	0	0	24
08:30	23	3	1	1	0	0	0	28	19	5	0	0	0	0	0	24
08:45	30	1	2	0	0	0	0	33	21	1	2	1	0	0	0	25
H/TOT	128	9	5	1	0	0	0	143	89	13	4	1	0	0	0	107
09:00	17	4	0	0	0	0	0	21	17	2	1	0	0	1	0	21
09:15	13	0	0	0	0	0	1	14	15	2	0	0	1	0	0	18
H/TOT	30	4	0	0	0	0	1	35	32	4	1	0	1	1	0	39
P/TOT	253	22	5	1	0	1	2	284	189	29	5	1	1	1	0	226

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	14	2	1	0	0	0	0	17	14	0	0	0	0	0	0	14
15:15	14	3	0	0	0	0	1	18	16	3	1	0	0	1	0	21
15:30	19	3	0	0	0	0	0	22	22	2	0	0	0	0	0	24
15:45	26	4	0	0	0	0	0	30	18	3	0	0	1	0	0	22
H/TOT	73	12	1	0	0	0	1	87	70	8	1	0	1	1	0	81
16:00	10	3	1	0	0	0	0	14	25	11	1	0	0	0	0	37
16:15	21	6	0	0	0	0	0	27	19	2	0	0	0	0	0	21
16:30	24	0	0	0	0	0	0	24	23	4	0	0	0	0	0	27
16:45	38	5	0	0	0	0	0	43	22	3	1	0	0	0	0	26
H/TOT	93	14	1	0	0	0	0	108	89	20	2	0	0	0	0	111
17:00	29	3	0	0	0	0	0	32	30	3	0	0	0	0	1	34
17:15	33	1	0	0	0	0	0	34	35	3	0	0	0	0	0	38
17:30	26	2	0	0	0	0	0	28	23	3	0	0	0	0	0	26
17:45	37	1	0	0	0	0	0	38	31	3	0	0	0	0	0	34
H/TOT	125	7	0	0	0	0	0	132	119	12	0	0	0	0	1	132
18:00	15	0	0	0	0	0	0	15	27	2	0	0	0	0	0	29
18:15	14	0	0	0	0	0	0	14	15	1	0	0	0	0	0	16
18:30	20	2	0	0	0	0	0	22	19	0	0	0	0	0	0	19
18:45	10	2	0	0	0	0	0	12	20	2	0	0	0	0	0	22
H/TOT	59	4	0	0	0	0	0	63	81	5	0	0	0	0	0	86
P/TOT	350	37	2	0	0	0	1	390	359	45	3	0	1	1	1	410



SITE: 4

DATE: 28/03/2023

LOCATION: West Lane/Ferrand Lane/Latham Lane

DAY: Tuesday

TIME	TO ARM B							TOT	FROM ARM B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0								
08:00	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	1
09:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
09:15	3	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	1
H/TOT	3	0	0	0	0	0	0	3	1	0	1	0	0	0	0	0	2
P/TOT	3	0	1	0	0	0	0	4	1	0	2	0	0	0	0	0	3

TIME	TO ARM B							TOT	FROM ARM B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	1	0	0	1	0	0	0	2	1	0	0	0	0	0	0	0	1
16:45	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
H/TOT	3	1	0	1	0	0	0	5	1	0	1						
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
17:45	9	0	0	0	0	0	0	9	2	0	0	0	0	0	0	0	2
H/TOT	10	0	0	0	0	0	0	10	3	0	3						
18:00	4	0	0	0	0	0	0	4	9	0	0	0	0	0	0	0	9
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
18:45	5	0	0	0	0	0	0	5	0	1	0	0	0	0	0	0	1
H/TOT	10	0	0	0	0	0	0	10	9	1	0	0	0	0	0	0	10
P/TOT	23	1	0	1	0	0	0	25	13	1	0	0	0	0	0	0	14



SITE: 4

DATE: 28/03/2023

LOCATION: West Lane/Ferrand Lane/Latham Lane

DAY: Tuesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	7	2	0	0	0	0	0	9	22	3	0	0	0	1	0	26
07:15	18	6	0	0	0	0	0	24	57	7	1	0	0	0	0	65
07:30	34	1	1	0	0	0	0	36	74	13	0	0	1	1	1	90
07:45	17	1	0	0	1	0	0	19	93	14	0	1	1	0	0	109
H/TOT	76	10	1	0	1	0	0	88	246	37	1	1	2	2	1	290
08:00	45	3	0	0	1	0	0	49	69	8	1	0	0	1	0	79
08:15	35	2	2	0	0	0	0	39	54	1	1	0	0	0	0	56
08:30	23	0	0	0	0	0	0	23	50	2	0	0	0	0	0	52
08:45	24	2	1	0	0	0	0	27	57	1	1	0	0	0	0	59
H/TOT	127	7	3	0	1	0	0	138	230	12	3	0	0	1	0	246
09:00	23	1	0	0	0	0	0	24	23	6	0	0	0	0	0	29
09:15	18	2	0	0	0	0	0	20	17	1	0	0	0	0	1	19
H/TOT	41	3	0	0	0	0	0	44	40	7	0	0	0	0	1	48
P/TOT	244	20	4	0	2	0	0	270	516	56	4	1	2	3	2	584

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	21	4	0	0	0	0	0	25	29	5	2	0	0	0	0	36
15:15	32	1	0	2	0	1	1	37	33	2	0	0	0	0	1	36
15:30	33	4	0	0	0	0	0	37	29	5	0	0	0	0	0	34
15:45	24	3	0	0	0	0	1	28	34	9	0	0	1	0	0	44
H/TOT	110	12	0	2	0	1	2	127	125	21	2	0	1	0	1	150
16:00	31	8	0	0	0	0	0	39	20	2	0	0	0	0	0	22
16:15	39	6	0	0	1	1	0	47	37	8	0	0	0	0	0	45
16:30	47	3	0	0	0	0	0	50	40	4	1	0	0	0	0	45
16:45	48	8	0	0	0	0	0	56	35	5	0	0	0	0	0	40
H/TOT	165	25	0	0	1	1	0	192	132	19	0	1	0	0	0	152
17:00	50	3	0	0	0	0	0	53	50	2	0	0	0	0	0	52
17:15	58	6	0	0	0	0	0	64	41	2	0	0	0	0	0	43
17:30	41	6	0	0	0	0	0	47	32	2	0	0	0	0	0	34
17:45	43	1	0	0	0	1	0	45	33	1	0	0	0	0	0	34
H/TOT	192	16	0	0	0	1	0	209	156	7	0	0	0	0	0	163
18:00	43	5	0	0	0	0	1	49	18	1	0	0	0	0	0	19
18:15	34	2	0	0	0	0	0	36	23	0	0	0	0	0	0	23
18:30	28	1	0	0	0	0	0	29	23	1	0	0	0	0	0	24
18:45	27	2	0	0	0	0	0	29	19	3	0	0	0	0	0	22
H/TOT	132	10	0	0	0	0	1	143	83	5	0	0	0	0	0	88
P/TOT	599	63	0	2	1	3	3	671	496	52	2	1	1	0	1	553



SITE: 4

DATE: 28/03/2023

LOCATION: West Lane/Ferrand Lane/Latham Lane

DAY: Tuesday

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	25	5	0	0	0	0	0	30	11	3	0	0	0	0	0	14
07:15	78	8	1	0	0	0	0	87	28	5	0	0	0	0	0	33
07:30	82	15	0	0	1	1	0	99	52	2	1	0	0	0	0	55
07:45	92	16	0	1	1	0	0	110	43	4	0	0	1	0	0	48
H/TOT	277	44	1	1	2	1	0	326	134	14	1	0	1	0	0	150
08:00	80	10	0	0	0	1	0	91	66	2	1	0	1	0	0	70
08:15	52	3	2	0	0	0	0	57	49	5	1	0	0	0	0	55
08:30	59	6	0	0	0	0	0	65	36	2	1	1	0	0	0	40
08:45	61	2	1	1	0	0	0	65	37	3	1	0	0	0	0	41
H/TOT	252	21	3	1	0	1	0	278	188	12	4	1	1	0	0	206
09:00	32	6	2	0	0	1	0	41	32	3	0	0	0	0	0	35
09:15	22	3	0	0	1	0	0	26	23	2	0	0	0	0	0	25
H/TOT	54	9	2	0	1	1	0	67	55	5	0	0	0	0	0	60
P/TOT	583	74	6	2	3	3	0	671	377	31	5	1	2	0	0	416

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	33	4	1	0	0	0	0	38	25	5	0	0	0	0	0	30
15:15	36	5	1	0	0	0	0	42	33	4	0	2	0	0	1	40
15:30	38	6	0	0	0	0	0	44	39	6	0	0	0	0	0	45
15:45	38	8	0	0	2	0	0	48	36	3	0	0	0	0	1	40
H/TOT	145	23	2	0	2	0	0	172	133	18	0	2	0	0	2	155
16:00	37	7	1	0	0	0	0	45	33	5	1	0	0	0	0	39
16:15	48	6	0	0	0	0	0	54	52	8	0	0	1	1	0	62
16:30	49	7	0	0	0	0	0	56	57	2	0	0	0	0	0	59
16:45	39	3	1	0	0	0	0	43	70	9	0	0	0	0	0	79
H/TOT	173	23	2	0	0	0	0	198	212	24	1	0	1	1	0	239
17:00	60	4	0	0	0	0	1	65	59	5	0	0	0	0	0	64
17:15	48	4	0	0	0	0	0	52	63	6	0	0	0	0	0	69
17:30	40	4	0	0	0	0	0	44	52	7	0	0	0	0	0	59
17:45	48	4	0	0	0	0	0	52	71	2	0	0	0	1	0	74
H/TOT	196	16	0	0	0	0	1	213	245	20	0	0	0	1	0	266
18:00	40	2	0	0	0	0	0	42	48	4	0	0	0	0	1	53
18:15	28	1	0	0	0	0	0	29	38	2	0	0	0	0	0	40
18:30	29	1	0	0	0	0	0	30	36	3	0	0	0	0	0	39
18:45	28	3	0	0	0	0	0	31	31	1	0	0	0	0	0	32
H/TOT	125	7	0	0	0	0	0	132	153	10	0	0	0	0	1	164
P/TOT	639	69	4	0	2	0	1	715	743	72	1	2	1	2	3	824



SITE: 4

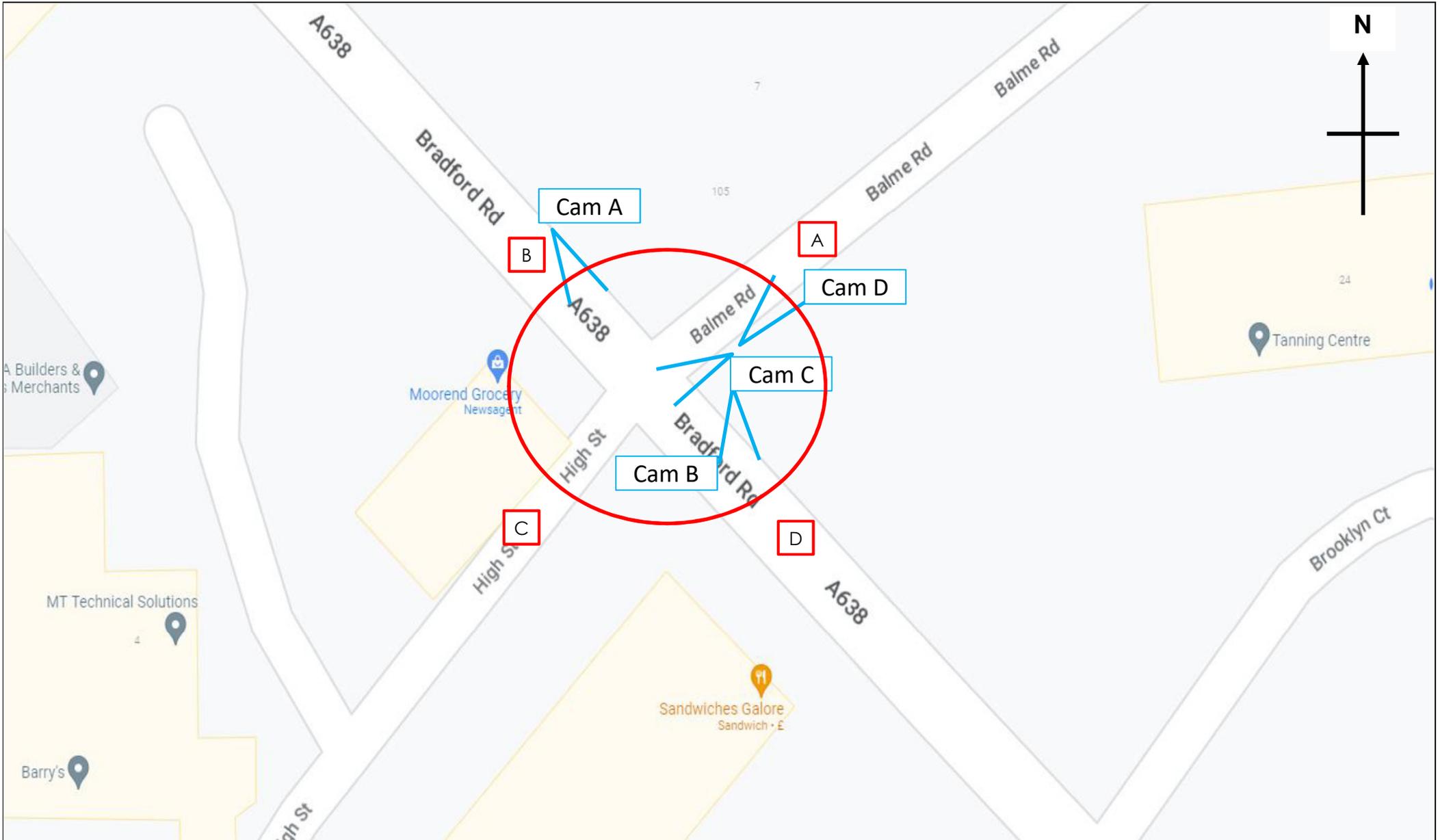
LOCATION: West Lane/Ferrand Lane/Latham Lane

TIME	JUNCTION TOTAL						TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL		PCL
07:00	39	8	0	0	0	1	0	48
07:15	111	16	1	0	0	0	0	128
07:30	143	18	1	0	1	1	1	165
07:45	155	21	0	1	2	0	0	179
H/TOT	448	63	2	1	3	2	1	520
08:00	165	14	2	0	1	1	0	183
08:15	122	9	5	0	0	0	0	136
08:30	105	9	1	1	0	0	0	116
08:45	115	5	4	1	0	0	0	125
H/TOT	507	37	12	2	1	1	0	560
09:00	72	11	2	0	0	1	0	86
09:15	56	5	0	0	1	0	1	63
H/TOT	128	16	2	0	1	1	1	149
P/TOT	1083	116	16	3	5	4	2	1229

PEAK HOUR CALCULATION	TOT
07:00 to 08:00	520
07:15 to 08:15	655
07:30 to 08:30	663
07:45 to 08:45	614
08:00 to 09:00	560
08:15 to 09:15	463
08:30 to 09:15	390
08:45 to 09:00	274
09:00 to 09:30	149
A.M. Peak	663

TIME	JUNCTION TOTAL						TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL		PCL
15:00	68	10	2	0	0	0	0	80
15:15	82	9	1	2	0	1	2	97
15:30	90	13	0	0	0	0	0	103
15:45	88	15	0	0	2	0	1	106
H/TOT	328	47	3	2	2	1	3	386
16:00	78	18	2	0	0	0	0	98
16:15	108	18	0	0	1	1	0	128
16:30	121	10	0	1	0	0	0	132
16:45	127	17	1	0	0	0	0	145
H/TOT	434	63	3	1	1	1	0	503
17:00	139	10	0	0	0	0	1	150
17:15	139	11	0	0	0	0	0	150
17:30	108	12	0	0	0	0	0	120
17:45	137	6	0	0	0	1	0	144
H/TOT	523	39	0	0	0	1	1	564
18:00	102	7	0	0	0	0	1	110
18:15	76	3	0	0	0	0	0	79
18:30	78	4	0	0	0	0	0	82
18:45	70	7	0	0	0	0	0	77
H/TOT	326	21	0	0	0	0	1	348
P/TOT	1611	170	6	3	3	3	5	1801

PEAK HOUR CALCULATION	TOT
15:00 to 16:00	386
15:15 to 16:15	404
15:30 to 16:30	435
15:45 to 16:45	464
16:00 to 17:00	503
16:15 to 17:15	555
16:30 to 17:30	577
16:45 to 17:45	565
17:00 to 18:00	564
17:15 to 18:15	524
17:30 to 18:30	453
17:45 to 18:45	415
18:00 to 19:00	348
P.M. Peak	6193



	Site / Location: Site 5 – Balme Road/A638 Bradford Road/High Street	Project No: 13882	Drawing No: 13882-05	Drawn By: DC
	Survey Date: Tuesday 28th March 2023	Project Name: KIRKLEES		
	Survey Times: 07:00 – 09:30 & 15:00 – 19:00	Drawing Title: Site Layout and Observed Movements		



SITE: 5

DATE: 28/03/2023

LOCATION: Balme Road/A638 Bradford Road/High Street

DAY: Tuesday

TIME	A to D							TOT	A to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	4	2	0	0	0	0	0	6	2	1	0	0	0	0	0	3
07:15	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
07:30	9	2	0	0	0	1	0	12	2	1	0	0	0	0	0	3
07:45	14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0
H/TOT	34	4	0	0	0	1	0	39	4	2	0	0	0	0	0	6
08:00	14	1	0	0	0	0	0	15	1	0	0	0	0	0	0	1
08:15	25	3	0	0	1	0	0	29	1	0	0	0	0	0	0	1
08:30	15	1	0	0	0	0	0	16	4	0	0	0	0	0	0	4
08:45	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
H/TOT	64	5	0	0	1	0	0	70	6	0	0	0	0	0	0	6
09:00	11	2	0	0	0	0	0	13	0	1	0	0	0	0	0	1
09:15	13	3	1	0	0	0	0	17	0	0	0	0	0	0	0	0
H/TOT	24	5	1	0	0	0	0	30	0	1	0	0	0	0	0	1
P/TOT	122	14	1	0	1	1	0	139	10	3	0	0	0	0	0	13

TIME	A to D							TOT	A to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	14	3	0	0	0	0	0	17	0	1	0	0	0	0	0	1
15:15	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0
15:30	17	1	0	0	0	0	1	19	1	1	1	0	0	0	0	3
15:45	16	2	0	1	0	0	0	19	1	0	0	0	0	0	0	1
H/TOT	58	6	0	1	0	0	1	66	2	2	1	0	0	0	0	5
16:00	16	1	0	0	0	0	0	17	1	1	0	0	0	0	0	2
16:15	11	1	0	0	0	1	0	13	1	0	0	0	0	0	0	1
16:30	19	1	0	0	0	0	0	20	1	2	0	0	0	0	0	3
16:45	15	1	0	0	0	0	0	16	1	0	0	0	0	0	0	1
H/TOT	61	4	0	0	0	1	0	66	4	3	0	0	0	0	0	7
17:00	23	3	0	0	0	0	0	26	1	0	0	0	0	0	0	1
17:15	31	1	1	0	0	0	0	33	0	0	0	0	0	0	0	0
17:30	22	0	0	0	0	0	0	22	2	0	0	0	0	0	0	2
17:45	23	0	0	0	0	0	0	23	0	1	0	0	0	0	0	1
H/TOT	99	4	1	0	0	0	0	104	3	1	0	0	0	0	0	4
18:00	26	2	0	0	0	0	1	29	0	0	0	0	0	0	0	0
18:15	20	0	0	0	0	0	0	20	2	0	0	0	0	0	0	2
18:30	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0
18:45	8	0	0	0	0	0	0	8	2	0	0	0	0	0	0	2
H/TOT	65	3	0	0	0	0	1	69	4	0	0	0	0	0	0	4
P/TOT	283	17	1	1	0	1	2	305	13	6	1	0	0	0	0	20



SITE: 5

DATE: 28/03/2023

LOCATION: Balme Road/A638 Bradford Road/High Street

DAY: Tuesday

TIME	A to B							TOT	A to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	13	6	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0
07:15	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0
07:30	15	2	3	0	1	1	0	22	0	0	0	0	0	0	0	0	0
07:45	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
H/TOT	47	9	3	0	1	1	0	61	0								
08:00	17	1	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
08:15	16	2	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
08:30	13	2	1	0	0	0	0	16	0	0	0	0	0	0	0	0	0
08:45	13	1	1	0	0	0	0	15	0	0	0	0	0	0	0	0	0
H/TOT	59	6	2	0	0	0	0	67	0								
09:00	11	6	2	0	0	0	0	19	0	0	0	0	0	0	0	0	0
09:15	6	3	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0
H/TOT	17	9	2	0	0	0	0	28	0								
P/TOT	123	24	7	0	1	1	0	156	0								

TIME	A to B							TOT	A to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0
15:15	9	4	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0
15:30	12	2	1	0	0	0	0	15	1	0	0	0	0	0	0	0	1
15:45	14	3	0	1	0	1	0	19	0	0	0	0	0	0	0	0	0
H/TOT	44	9	1	1	0	1	0	56	1	0	1						
16:00	23	3	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0
16:15	15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0
16:30	8	3	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
16:45	8	3	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
H/TOT	54	10	0	0	0	0	0	64	0								
17:00	19	2	1	0	0	0	0	22	0	0	0	0	0	0	0	0	0
17:15	19	1	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
17:30	18	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
17:45	9	2	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
H/TOT	65	5	1	0	0	0	0	71	0								
18:00	19	2	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0
18:15	11	2	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0
18:30	12	2	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
18:45	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
H/TOT	53	7	0	0	0	0	0	60	0								
P/TOT	216	31	2	1	0	1	0	251	1	0	1						



SITE: 5

DATE: 28/03/2023

LOCATION: Balme Road/A638 Bradford Road/High Street

DAY: Tuesday

TIME	B to A							TOT	B to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	4	2	0	0	0	0	0	6	61	7	1	1	2	0	0	72
07:15	11	1	0	0	0	0	0	12	71	18	5	1	1	0	0	96
07:30	18	1	0	0	0	0	0	19	84	16	6	2	1	0	0	109
07:45	17	8	0	0	0	0	0	25	82	19	5	1	1	0	0	108
H/TOT	50	12	0	0	0	0	0	62	298	60	17	5	5	0	0	385
08:00	15	3	1	0	0	0	0	19	78	8	1	3	3	0	1	94
08:15	20	1	1	0	0	0	0	22	53	15	4	2	1	0	0	75
08:30	17	5	0	0	0	0	0	22	77	20	3	0	1	0	0	101
08:45	14	2	0	0	0	0	0	16	73	16	4	2	1	0	0	96
H/TOT	66	11	2	0	0	0	0	79	281	59	12	7	6	0	1	366
09:00	8	5	2	0	0	0	0	15	81	12	4	3	2	0	0	102
09:15	4	4	1	0	0	0	0	9	83	19	4	2	1	0	0	109
H/TOT	12	9	3	0	0	0	0	24	164	31	8	5	3	0	0	211
P/TOT	128	32	5	0	0	0	0	165	743	150	37	17	14	0	1	962

TIME	B to A							TOT	B to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	19	2	1	0	0	0	0	22	113	23	3	2	1	1	1	144
15:15	10	5	0	0	0	0	0	15	100	15	5	4	2	0	0	126
15:30	13	2	0	0	0	0	0	15	95	15	3	3	1	0	1	118
15:45	15	3	0	0	0	0	0	18	107	18	3	3	2	0	1	134
H/TOT	57	12	1	0	0	0	0	70	415	71	14	12	6	1	3	522
16:00	17	5	1	0	0	0	0	23	135	18	3	2	2	2	0	162
16:15	19	5	0	0	1	0	0	25	113	23	3	0	2	0	1	142
16:30	17	4	0	0	0	0	0	21	126	12	2	0	4	1	1	146
16:45	18	4	2	0	0	1	2	27	135	22	3	0	1	0	0	161
H/TOT	71	18	3	0	1	1	2	96	509	75	11	2	9	3	2	611
17:00	29	3	0	0	0	0	1	33	131	13	1	1	0	0	0	146
17:15	21	2	0	0	0	1	0	24	146	17	2	0	2	0	0	167
17:30	21	1	0	0	0	0	0	22	143	15	0	0	1	1	0	160
17:45	20	4	0	0	0	0	0	24	119	6	4	0	2	0	0	131
H/TOT	91	10	0	0	0	1	1	103	539	51	7	1	5	1	0	604
18:00	17	1	0	0	0	0	0	18	110	10	1	0	2	0	0	123
18:15	17	1	0	0	0	0	0	18	120	9	0	1	0	0	1	131
18:30	7	1	0	0	0	0	0	8	116	8	1	1	1	0	1	128
18:45	10	0	0	0	0	0	0	10	110	7	1	0	2	0	0	120
H/TOT	51	3	0	0	0	0	0	54	456	34	3	2	5	0	2	502
P/TOT	270	43	4	0	1	2	3	323	1919	231	35	17	25	5	7	2239



SITE: 5

DATE: 28/03/2023

LOCATION: Balme Road/A638 Bradford Road/High Street

DAY: Tuesday

TIME	B to C							TOT	B to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
07:45	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
H/TOT	1	1	1	0	0	0	0	3	0								
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
08:30	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
08:45	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
H/TOT	3	3	0	0	0	0	0	6	0								
09:00	1	1	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0
09:15	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
H/TOT	3	2	1	0	0	0	0	6	0								
P/TOT	7	6	2	0	0	0	0	15	0								

TIME	B to C							TOT	B to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
15:30	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
15:45	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
H/TOT	5	0	1	0	0	0	0	6	0								
16:00	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
16:15	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
16:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
16:45	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
H/TOT	7	2	0	0	0	0	0	9	0								
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
H/TOT	4	1	0	0	0	0	0	5	0								
18:00	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
18:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
H/TOT	2	2	0	0	0	0	0	4	0								
P/TOT	18	5	1	0	0	0	0	24	0								



SITE: 5

DATE: 28/03/2023

LOCATION: Balme Road/A638 Bradford Road/High Street

DAY: Tuesday

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	1	1	0	0	0	0	2	1	1	0	0	0	0	0	2
07:15	1	1	0	0	0	0	0	2	0	2	0	0	0	0	0	2
07:30	0	2	0	0	0	0	0	2	0	1	0	0	0	0	0	1
07:45	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	2
H/TOT	2	4	1	0	0	0	0	7	2	5	0	0	0	0	0	7
08:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
08:15	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
08:30	3	0	0	0	0	0	0	3	3	0	0	0	0	0	0	3
08:45	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2
H/TOT	5	0	0	0	0	0	0	5	6	1	0	0	0	0	0	7
09:00	0	2	0	0	0	0	0	2	1	1	0	0	0	0	0	2
09:15	1	2	0	0	0	0	0	3	1	0	0	0	0	0	0	1
H/TOT	1	4	0	0	0	0	0	5	2	1	0	0	0	0	0	3
P/TOT	8	8	1	0	0	0	0	17	10	7	0	0	0	0	0	17

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
15:15	2	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	4
15:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	4	3	0	0	0	0	0	7	2	1	1	0	0	0	0	4
16:00	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1
16:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:30	2	0	0	0	0	0	0	2	2	1	0	0	0	0	0	3
16:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	5	0	0	0	0	0	0	5	2	1	0	0	1	0	0	4
17:00	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1
17:15	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1
17:30	1	1	0	0	0	0	0	2	2	0	0	0	0	0	0	2
17:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
H/TOT	1	3	0	0	0	0	0	4	5	0	0	0	0	0	0	5
18:00	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
18:15	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
18:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
H/TOT	2	1	0	0	0	0	0	3	1	1	0	0	0	0	0	2
P/TOT	12	7	0	0	0	0	0	19	10	3	1	0	1	0	0	15



SITE: 5

DATE: 28/03/2023

LOCATION: Balme Road/A638 Bradford Road/High Street

DAY: Tuesday

TIME	C to D							TOT	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
07:45	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	3	2	0	0	0	0	0	5	0							
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:30	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:45	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	3	2	1	0	0	0	0	6	0							
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	0							
P/TOT	6	4	2	0	0	0	0	12	0							

TIME	C to D							TOT	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2	0							
16:00	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
16:15	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:30	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	2	0	0	1	0	0	5	0							
17:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	0	0	3	0							
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
18:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2	0							
P/TOT	9	2	0	0	1	0	0	12	0							



SITE: 5

DATE: 28/03/2023

LOCATION: Balme Road/A638 Bradford Road/High Street

DAY: Tuesday

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	106	19	1	1	2	0	0	129
07:15	1	2	0	0	0	0	0	3	120	22	3	1	2	1	0	149
07:30	0	4	0	0	0	0	0	4	106	28	3	1	1	0	1	140
07:45	0	0	0	0	1	0	0	1	119	29	2	0	2	0	1	153
H/TOT	1	6	0	0	1	0	0	8	451	98	9	3	7	1	2	571
08:00	0	0	0	0	0	0	0	0	118	17	9	0	1	0	0	145
08:15	3	2	0	0	0	0	0	5	106	21	5	2	0	0	0	134
08:30	3	0	1	0	0	0	0	4	107	14	7	4	1	0	1	134
08:45	2	2	0	0	0	0	0	4	97	10	5	1	0	0	0	113
H/TOT	8	4	1	0	0	0	0	13	428	62	26	7	2	0	1	526
09:00	0	1	0	0	0	0	0	1	96	19	4	3	1	0	0	123
09:15	3	0	0	0	0	0	0	3	80	22	2	2	1	0	0	107
H/TOT	3	1	0	0	0	0	0	4	176	41	6	5	2	0	0	230
P/TOT	12	11	1	0	1	0	0	25	1055	201	41	15	11	1	3	1327

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	1	2	0	0	0	0	0	3	95	21	1	1	0	2	0	120
15:15	2	0	0	0	0	0	0	2	85	12	6	4	0	0	0	107
15:30	1	0	0	0	0	0	0	1	97	15	5	3	4	0	1	125
15:45	1	1	0	0	0	0	0	2	85	20	2	5	0	0	0	112
H/TOT	5	3	0	0	0	0	0	8	362	68	14	13	4	2	1	464
16:00	2	0	0	0	0	0	0	2	103	10	1	4	2	0	0	120
16:15	0	1	0	0	0	0	0	1	100	20	6	4	1	1	0	132
16:30	0	0	0	0	0	0	0	0	99	12	4	1	2	0	0	118
16:45	1	0	0	0	0	0	0	1	98	14	4	1	0	0	1	118
H/TOT	3	1	0	0	0	0	0	4	400	56	15	10	5	1	1	488
17:00	2	0	0	0	0	0	0	2	111	6	1	2	2	0	0	122
17:15	0	0	0	0	0	0	0	0	101	13	0	3	1	0	0	118
17:30	1	1	0	0	0	0	0	2	104	6	0	2	0	0	0	112
17:45	1	0	0	0	0	0	0	1	96	10	3	0	0	0	0	109
H/TOT	4	1	0	0	0	0	0	5	412	35	4	7	3	0	0	461
18:00	1	0	0	0	0	0	0	1	87	11	0	1	3	0	1	103
18:15	0	0	0	0	0	0	0	0	107	8	1	0	0	0	0	116
18:30	3	1	0	0	0	0	0	4	101	12	1	0	2	0	0	116
18:45	0	0	0	0	0	0	0	0	102	5	0	1	0	0	0	108
H/TOT	4	1	0	0	0	0	0	5	397	36	2	2	5	0	1	443
P/TOT	16	6	0	0	0	0	0	22	1571	195	35	32	17	3	3	1856



SITE: 5

DATE: 28/03/2023

LOCATION: Balme Road/A638 Bradford Road/High Street

DAY: Tuesday

TIME	D to A							TOT	D to D							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	2	4	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
07:15	8	2	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
07:30	25	4	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0
07:45	18	2	0	0	1	0	0	21	0	0	0	0	0	0	0	0	0
H/TOT	53	12	0	0	1	0	0	66	0								
08:00	14	1	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0
08:15	17	1	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
08:30	17	2	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0
08:45	19	2	1	0	0	0	0	22	0	0	0	0	0	0	0	0	0
H/TOT	67	6	1	0	0	0	0	74	0								
09:00	7	2	1	0	0	0	0	10	0	0	0	0	0	0	0	0	0
09:15	8	1	1	0	0	0	0	10	0	0	0	0	0	0	0	0	0
H/TOT	15	3	2	0	0	0	0	20	0								
P/TOT	135	21	3	0	1	0	0	160	0								

TIME	D to A							TOT	D to D							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	20	1	1	0	0	0	0	22	0	0	0	0	0	0	0	0	0
15:15	26	4	0	0	0	0	1	31	0	0	0	0	0	0	0	0	0
15:30	19	4	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0
15:45	24	2	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0
H/TOT	89	11	1	0	0	0	1	102	0								
16:00	20	1	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0
16:15	10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
16:30	13	3	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0
16:45	17	2	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0
H/TOT	60	8	0	0	0	0	0	68	0								
17:00	37	3	1	0	0	0	0	41	0	0	0	0	0	0	0	0	0
17:15	21	2	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0
17:30	17	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0
17:45	12	0	0	0	0	0	1	13	0	0	0	0	0	0	0	0	0
H/TOT	87	5	1	0	0	0	1	94	0								
18:00	15	3	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
18:15	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
18:30	11	2	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0
18:45	10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
H/TOT	43	7	0	0	0	0	0	50	0								
P/TOT	279	31	2	0	0	0	2	314	0								

13882 - KIRKLEES
 March 2023
 CLASSIFIED TURNING COUNT

28/03/2023

Tuesday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	7	7	0	0	0	0	0	14	19	9	0	0	0	0	0	28
07:15	19	5	0	0	0	0	0	24	15	1	0	0	0	0	16	
07:30	43	6	0	0	0	0	0	49	26	5	3	0	1	2	37	
07:45	36	11	0	0	1	0	0	48	25	0	0	0	0	0	25	
H/TOT	105	29	0	0	1	0	0	135	85	15	3	0	1	2	106	
08:00	29	5	1	0	0	0	0	35	32	2	0	0	0	0	34	
08:15	38	2	1	0	0	0	0	41	42	5	0	0	1	0	48	
08:30	37	7	0	0	0	0	0	44	32	3	1	0	0	0	36	
08:45	35	4	1	0	0	0	0	40	23	1	1	0	0	0	25	
H/TOT	139	18	3	0	0	0	0	160	129	11	2	0	1	0	143	
09:00	16	8	3	0	0	0	0	27	22	9	2	0	0	0	33	
09:15	13	5	2	0	0	0	0	20	19	6	1	0	0	0	26	
H/TOT	29	13	5	0	0	0	0	47	41	15	3	0	0	0	59	
P/TOT	273	60	8	0	1	0	0	342	255	41	8	0	2	2	308	

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	39	3	2	0	0	0	0	44	23	4	0	0	0	0	27	
15:15	36	9	0	0	0	0	1	46	20	4	0	0	0	0	24	
15:30	35	7	1	0	0	0	0	43	31	4	2	0	0	1	38	
15:45	39	5	0	0	0	0	0	44	31	5	0	2	0	1	39	
H/TOT	149	24	3	0	0	0	1	177	105	17	2	2	0	1	128	
16:00	37	6	1	0	1	0	0	45	40	5	0	0	0	0	45	
16:15	29	7	0	0	1	0	0	37	27	2	0	0	0	1	30	
16:30	32	8	0	0	0	0	0	40	28	6	0	0	0	0	34	
16:45	35	6	2	0	0	1	2	46	24	4	0	0	0	0	28	
H/TOT	133	27	3	0	2	1	2	168	119	17	0	0	0	1	137	
17:00	67	6	1	0	0	0	1	75	43	5	1	0	0	0	49	
17:15	43	4	0	0	0	1	0	48	50	2	1	0	0	0	53	
17:30	40	1	0	0	0	0	0	41	42	0	0	0	0	0	42	
17:45	33	4	0	0	0	0	1	38	32	3	0	0	0	0	35	
H/TOT	183	15	1	0	0	1	2	202	167	10	2	0	0	0	179	
18:00	32	4	0	0	0	0	0	36	45	4	0	0	0	1	50	
18:15	24	1	0	0	0	0	0	25	33	2	0	0	0	0	35	
18:30	19	3	0	0	0	0	0	22	23	3	0	0	0	0	26	
18:45	20	3	0	0	0	0	0	23	21	1	0	0	0	0	22	
H/TOT	95	11	0	0	0	0	0	106	122	10	0	0	0	1	133	
P/TOT	560	77	7	0	2	2	5	653	513	54	4	2	0	2	577	



SITE: 5

DATE: 28/03/2023

LOCATION: Balme Road/A638 Bradford Road/High Street

DAY: Tuesday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	119	26	2	1	2	0	0	150	65	10	1	1	2	0	0	79
07:15	129	24	3	1	2	1	0	160	82	19	5	1	1	0	0	108
07:30	121	32	6	1	2	1	1	164	103	17	6	2	1	0	0	129
07:45	131	29	2	0	2	0	1	165	99	27	6	1	1	0	0	134
H/TOT	500	111	13	3	8	2	2	639	349	73	18	5	5	0	0	450
08:00	135	18	9	0	1	0	0	163	93	11	2	3	3	0	1	113
08:15	123	23	5	2	0	0	0	153	74	16	5	2	1	0	0	98
08:30	123	16	8	4	1	0	1	153	94	27	3	0	1	0	0	125
08:45	111	11	6	1	0	0	0	129	89	19	4	2	1	0	0	115
H/TOT	492	68	28	7	2	0	1	598	350	73	14	7	6	0	1	451
09:00	107	27	6	3	1	0	0	144	90	18	7	3	2	0	0	120
09:15	87	27	2	2	1	0	0	119	89	24	5	2	1	0	0	121
H/TOT	194	54	8	5	2	0	0	263	179	42	12	5	3	0	0	241
P/TOT	1186	233	49	15	12	2	3	1500	878	188	44	17	14	0	1	1142

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	105	22	1	1	0	2	0	131	132	25	4	2	1	1	1	166
15:15	96	18	6	4	0	0	0	124	112	20	5	4	2	0	0	143
15:30	109	17	6	3	4	0	1	140	108	17	4	3	1	0	1	134
15:45	100	23	2	6	0	1	0	132	125	21	3	3	2	0	1	155
H/TOT	410	80	15	14	4	3	1	527	477	83	16	12	6	1	3	598
16:00	127	13	1	4	2	0	0	147	153	24	4	2	2	2	0	187
16:15	116	21	6	4	1	1	0	149	133	29	3	0	3	0	1	169
16:30	109	15	4	1	2	0	0	131	145	16	2	0	4	1	1	169
16:45	107	17	4	1	0	0	1	130	156	26	5	0	1	1	2	191
H/TOT	459	66	15	10	5	1	1	557	587	95	14	2	10	4	4	716
17:00	130	9	2	2	2	0	0	145	160	16	1	1	0	0	1	179
17:15	120	15	0	3	1	0	0	139	170	20	2	0	2	1	0	195
17:30	123	7	0	2	0	0	0	132	164	16	0	0	1	1	0	182
17:45	105	12	3	0	0	0	0	120	140	10	4	0	2	0	0	156
H/TOT	478	43	5	7	3	0	0	536	634	62	7	1	5	2	1	712
18:00	108	13	0	1	3	0	1	126	128	12	1	0	2	0	0	143
18:15	118	11	1	0	0	0	0	130	137	10	0	1	0	0	1	149
18:30	113	14	1	0	2	0	0	130	123	10	1	1	1	0	1	137
18:45	113	6	0	1	0	0	0	120	121	7	1	0	2	0	0	131
H/TOT	452	44	2	2	5	0	1	506	509	39	3	2	5	0	2	560
P/TOT	1799	233	37	33	17	4	3	2126	2207	279	40	17	26	7	10	2586



SITE: 5

DATE: 28/03/2023

LOCATION: Balme Road/A638 Bradford Road/High Street

DAY: Tuesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	2	2	0	0	0	0	0	4	2	2	1	0	0	0	0	5
07:15	1	2	0	0	0	0	0	3	1	3	0	0	0	0	0	4
07:30	3	5	0	0	0	0	0	8	1	4	0	0	0	0	0	5
07:45	0	0	1	0	1	0	0	2	3	2	0	0	0	0	0	5
H/TOT	6	9	1	0	1	0	0	17	7	11	1	0	0	0	0	19
08:00	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
08:15	5	2	0	0	0	0	0	7	3	1	0	0	0	0	0	4
08:30	7	2	1	0	0	0	0	10	7	1	0	0	0	0	0	8
08:45	4	3	0	0	0	0	0	7	4	0	1	0	0	0	0	5
H/TOT	17	7	1	0	0	0	0	25	14	3	1	0	0	0	0	18
09:00	1	3	1	0	0	0	0	5	1	3	0	0	0	0	0	4
09:15	5	1	0	0	0	0	0	6	2	2	1	0	0	0	0	5
H/TOT	6	4	1	0	0	0	0	11	3	5	1	0	0	0	0	9
P/TOT	29	20	3	0	1	0	0	53	24	19	3	0	0	0	0	46

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	1	3	0	0	0	0	0	4	1	1	0	0	0	0	0	2
15:15	4	0	0	0	0	0	0	4	4	2	0	0	0	0	0	6
15:30	2	1	2	0	0	0	0	5	2	1	1	0	0	0	0	4
15:45	5	1	0	0	0	0	0	6	1	0	0	0	0	0	0	1
H/TOT	12	5	2	0	0	0	0	19	8	4	1	0	0	0	0	13
16:00	4	2	0	0	0	0	0	6	1	0	0	0	2	0	0	3
16:15	2	2	0	0	0	0	0	4	1	1	0	0	0	0	0	2
16:30	3	2	0	0	0	0	0	5	6	2	0	0	0	0	0	8
16:45	5	0	0	0	0	0	0	5	1	0	0	0	0	0	0	1
H/TOT	14	6	0	0	0	0	0	20	9	3	0	0	2	0	0	14
17:00	3	0	0	0	0	0	0	3	2	1	0	0	0	0	0	3
17:15	3	1	0	0	0	0	0	4	2	1	0	0	0	0	0	3
17:30	3	1	0	0	0	0	0	4	4	1	0	0	0	0	0	5
17:45	2	1	0	0	0	0	0	3	1	0	0	0	0	0	0	1
H/TOT	11	3	0	0	0	0	0	14	9	3	0	0	0	0	0	12
18:00	2	1	0	0	0	0	0	3	2	0	0	0	0	0	0	2
18:15	2	0	0	0	0	0	0	2	1	1	0	0	0	0	0	2
18:30	3	2	0	0	0	0	0	5	2	0	0	0	0	0	0	2
18:45	3	0	0	0	0	0	0	3	0	1	0	0	0	0	0	1
H/TOT	10	3	0	0	0	0	0	13	5	2	0	0	0	0	0	7
P/TOT	47	17	2	0	0	0	0	66	31	12	1	0	2	0	0	46



SITE: 5

DATE: 28/03/2023

LOCATION: Balme Road/A638 Bradford Road/High Street

DAY: Tuesday

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	66	9	1	1	2	0	0	79	108	23	1	1	2	0	0	135
07:15	78	18	5	1	1	0	0	103	129	26	3	1	2	1	0	162
07:30	94	19	6	2	1	1	0	123	131	36	3	1	1	0	1	173
07:45	97	20	5	1	1	0	0	124	137	31	2	0	4	0	1	175
H/TOT	335	66	17	5	5	1	0	429	505	116	9	3	9	1	2	645
08:00	92	9	1	3	3	0	1	109	132	18	9	0	1	0	0	160
08:15	79	19	4	2	2	0	0	104	126	24	5	2	0	0	0	157
08:30	93	22	3	0	1	0	0	119	127	16	8	4	1	0	1	157
08:45	84	16	5	2	1	0	0	108	118	14	6	1	0	0	0	139
H/TOT	348	66	13	7	7	0	1	442	503	72	28	7	2	0	1	613
09:00	92	14	4	3	2	0	0	115	103	22	5	3	1	0	0	134
09:15	96	22	6	2	1	0	0	127	91	23	3	2	1	0	0	120
H/TOT	188	36	10	5	3	0	0	242	194	45	8	5	2	0	0	254
P/TOT	871	168	40	17	15	1	1	1113	1202	233	45	15	13	1	3	1512

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	127	26	3	2	1	1	1	161	116	24	2	1	0	2	0	145
15:15	113	15	5	4	2	0	0	139	113	16	6	4	0	0	1	140
15:30	112	16	3	3	1	0	2	137	117	19	5	3	4	0	1	149
15:45	123	20	3	4	2	0	1	153	110	23	2	5	0	0	0	140
H/TOT	475	77	14	13	6	1	4	590	456	82	15	13	4	2	2	574
16:00	151	19	3	2	3	2	0	180	125	11	1	4	2	0	0	143
16:15	124	25	3	0	2	1	1	156	110	23	6	4	1	1	0	145
16:30	147	14	2	0	4	1	1	169	112	15	4	1	2	0	0	134
16:45	150	23	3	0	1	0	0	177	116	16	4	1	0	0	1	138
H/TOT	572	81	11	2	10	4	2	682	463	65	15	10	5	1	1	560
17:00	155	16	1	1	0	0	0	173	150	9	2	2	2	0	0	165
17:15	178	18	3	0	2	0	0	201	122	15	0	3	1	0	0	141
17:30	166	15	0	0	1	1	0	183	122	7	0	2	0	0	0	131
17:45	142	6	4	0	2	0	0	154	109	10	3	0	0	0	1	123
H/TOT	641	55	8	1	5	1	0	711	503	41	5	7	3	0	1	560
18:00	136	12	1	0	2	0	1	152	103	14	0	1	3	0	1	122
18:15	141	9	0	1	0	0	1	152	114	8	1	0	0	0	0	123
18:30	128	9	1	1	1	0	1	141	115	15	1	0	2	0	0	133
18:45	118	7	1	0	2	0	0	128	112	7	0	1	0	0	0	120
H/TOT	523	37	3	2	5	0	3	573	444	44	2	2	5	0	1	498
P/TOT	2211	250	36	18	26	6	9	2556	1866	232	37	32	17	3	5	2192



SITE: 5

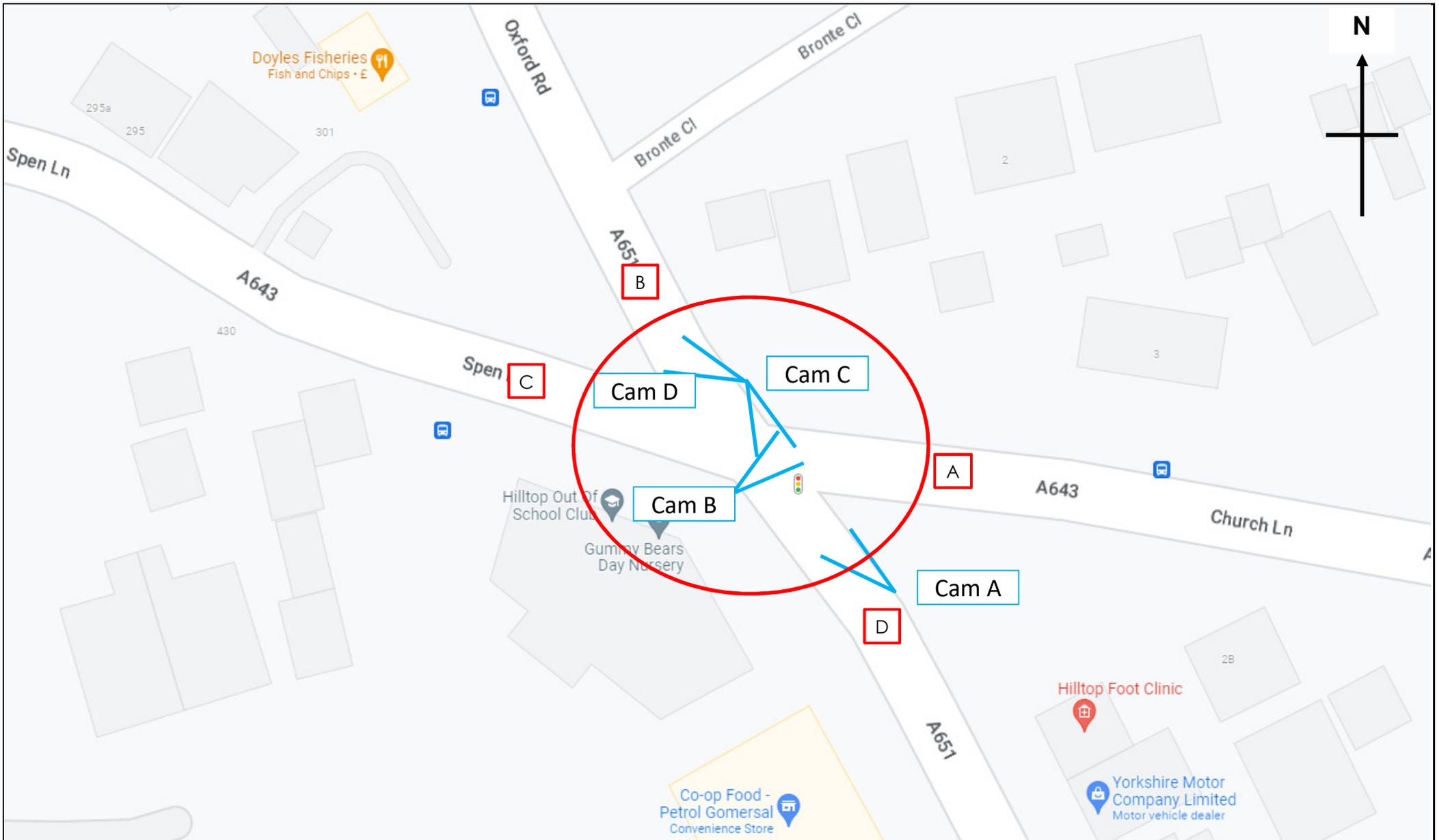
LOCATION: Balme Road/A638 Bradford Road/High Street

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	194	44	3	2	4	0	0	247
07:15	227	49	8	2	3	1	0	290
07:30	261	62	12	3	3	2	1	344
07:45	264	60	8	1	5	0	1	339
H/TOT	946	215	31	8	15	3	2	1220
08:00	257	32	11	3	4	0	1	308
08:15	245	46	10	4	2	0	0	307
08:30	260	47	12	4	2	0	1	326
08:45	234	34	12	3	1	0	0	284
H/TOT	996	152	45	14	9	0	2	1225
09:00	216	52	14	6	3	0	0	291
09:15	201	55	10	4	2	0	0	272
H/TOT	417	107	24	10	5	0	0	563
P/TOT	2359	481	100	32	29	3	4	3008

PEAK HOUR CALCULATION	TOT
07:00 to 08:00	1220
07:15 to 08:15	1281
07:30 to 08:30	1298
07:45 to 08:45	1280
08:00 to 09:00	1225
08:15 to 09:15	1208
08:30 to 09:15	1173
08:45 to 09:00	847
09:00 to 09:30	563
A.M. Peak	1298

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	272	54	6	3	1	3	1	340
15:15	249	42	11	8	2	0	1	313
15:30	258	41	12	6	5	0	3	325
15:45	267	49	5	10	2	1	1	335
H/TOT	1046	186	34	27	10	4	6	1313
16:00	319	40	5	6	6	2	0	378
16:15	271	55	9	4	4	2	1	346
16:30	291	39	6	1	6	1	1	345
16:45	297	46	9	1	1	1	3	358
H/TOT	1178	180	29	12	17	6	5	1427
17:00	355	31	4	3	2	0	1	396
17:15	344	38	3	3	3	1	0	392
17:30	332	24	0	2	1	1	0	360
17:45	282	23	7	0	2	0	1	315
H/TOT	1313	116	14	8	8	2	2	1463
18:00	278	30	1	1	5	0	2	317
18:15	285	21	1	1	0	0	1	309
18:30	263	28	2	1	3	0	1	298
18:45	254	16	1	1	2	0	0	274
H/TOT	1080	95	5	4	10	0	4	1198
P/TOT	4617	577	82	51	45	12	17	5401

PEAK HOUR CALCULATION	TOT
15:00 to 16:00	1313
15:15 to 16:15	1351
15:30 to 16:30	1384
15:45 to 16:45	1404
16:00 to 17:00	1427
16:15 to 17:15	1445
16:30 to 17:30	1491
16:45 to 17:45	1504
17:00 to 18:00	1463
17:15 to 18:15	1384
17:30 to 18:30	1301
17:45 to 18:45	1239
18:00 to 19:00	1198
P.M. Peak	17906



	Site / Location: Site 6 – A643 Spen Lane/A651 Oxford Road/A643 Church Lane	Project No: 13882	Drawing No: 13882-06	Drawn By: DC
	Survey Date: Tuesday 28th March 2023	Project Name: KIRKLEES		
	Survey Times: 07:00 – 09:30 & 15:00 – 19:00	Drawing Title: Site Layout and Observed Movements		



SITE: 6

DATE: 28/03/2023

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

DAY: Tuesday

TIME	A to D							TOT	A to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	1	0	0	0	0	0	1	19	5	1	0	0	0	0	25
07:15	0	1	0	0	1	0	0	2	19	3	0	0	1	0	1	24
07:30	2	1	0	0	0	0	0	3	19	6	0	0	1	0	1	27
07:45	2	0	1	0	0	0	0	3	42	4	0	0	0	0	0	46
H/TOT	4	3	1	0	1	0	0	9	99	18	1	0	2	0	2	122
08:00	3	1	0	0	0	0	0	4	30	4	0	0	2	0	0	36
08:15	4	0	0	0	1	0	0	5	38	8	1	0	0	0	0	47
08:30	4	1	0	0	0	0	0	5	26	6	0	0	0	0	0	32
08:45	5	0	1	0	0	0	0	6	24	3	0	1	1	0	0	29
H/TOT	16	2	1	0	1	0	0	20	118	21	1	1	3	0	0	144
09:00	5	1	0	1	0	0	0	7	35	8	4	0	1	1	0	49
09:15	3	2	0	0	0	0	0	5	19	5	1	1	0	0	0	26
H/TOT	8	3	0	1	0	0	0	12	54	13	5	1	1	1	0	75
P/TOT	28	8	2	1	2	0	0	41	271	52	7	2	6	1	2	341

TIME	A to D							TOT	A to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	5	0	0	0	0	0	0	5	39	4	0	0	1	0	0	44
15:15	4	3	0	0	0	0	0	7	30	4	0	0	1	0	0	35
15:30	7	0	0	0	0	0	0	7	57	9	0	0	1	0	0	67
15:45	5	1	0	0	0	0	0	6	30	5	1	1	1	0	0	38
H/TOT	21	4	0	0	0	0	0	25	156	22	1	1	4	0	0	184
16:00	8	0	0	0	0	0	0	8	50	4	1	0	0	1	0	56
16:15	3	1	0	0	0	0	0	4	39	4	1	0	1	0	1	46
16:30	5	0	0	1	0	0	0	6	54	7	0	0	0	1	0	62
16:45	7	0	0	0	0	0	0	7	51	5	0	0	1	0	0	57
H/TOT	23	1	0	1	0	0	0	25	194	20	2	0	2	2	1	221
17:00	5	1	1	0	0	0	0	7	48	2	0	0	1	0	0	51
17:15	2	1	0	0	0	0	0	3	59	5	0	0	1	1	0	66
17:30	6	0	0	0	0	0	0	6	59	3	0	0	0	1	0	63
17:45	5	0	0	0	0	0	0	5	43	2	0	0	1	0	0	46
H/TOT	18	2	1	0	0	0	0	21	209	12	0	0	3	2	0	226
18:00	5	3	0	0	0	0	0	8	46	1	0	0	0	0	0	47
18:15	6	2	0	0	0	0	0	8	55	3	0	0	2	0	0	60
18:30	7	0	0	0	0	0	0	7	38	5	0	0	0	0	0	43
18:45	9	2	0	0	0	0	0	11	38	0	0	0	1	0	0	39
H/TOT	27	7	0	0	0	0	0	34	177	9	0	0	3	0	0	189
P/TOT	89	14	1	1	0	0	0	105	736	63	3	1	12	4	1	820



SITE: 6

DATE: 28/03/2023

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

DAY: Tuesday

TIME	A to B							TOT	A to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	28	4	1	0	0	0	0	33	0	0	0	0	0	0	0	0	0
07:15	29	4	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0
07:30	22	4	1	0	0	0	0	27	0	0	0	0	0	0	0	0	0
07:45	32	3	0	0	1	0	0	36	0	0	0	0	0	0	0	0	0
H/TOT	111	15	2	0	1	0	0	129	0								
08:00	27	5	3	0	0	0	0	35	0	0	0	0	0	0	0	0	0
08:15	30	7	2	0	0	0	0	39	0	0	0	0	0	0	0	0	0
08:30	22	2	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0
08:45	20	1	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0
H/TOT	99	15	5	0	0	0	0	119	0								
09:00	16	3	1	0	0	0	0	20	0	0	0	0	0	0	0	0	0
09:15	20	1	1	0	0	0	0	22	0	0	0	0	0	0	0	0	0
H/TOT	36	4	2	0	0	0	0	42	0								
P/TOT	246	34	9	0	1	0	0	290	0								

TIME	A to B							TOT	A to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	11	5	0	0	0	0	0	16	1	0	0	0	0	0	0	0	1
15:15	17	9	2	0	0	0	0	28	0	0	0	0	0	0	0	0	0
15:30	18	6	0	1	0	0	0	25	0	0	0	0	0	0	0	0	0
15:45	19	6	2	0	0	0	0	27	0	0	0	0	0	0	0	0	0
H/TOT	65	26	4	1	0	0	0	96	1	0	1						
16:00	20	1	1	0	0	0	0	22	0	0	0	0	0	0	0	0	0
16:15	27	1	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0
16:30	28	3	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0
16:45	23	4	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0
H/TOT	98	9	1	0	0	0	0	108	0								
17:00	22	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0
17:15	28	2	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0
17:30	19	1	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
17:45	23	1	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0
H/TOT	92	4	0	0	0	0	0	96	0								
18:00	20	2	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0
18:15	20	2	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0
18:30	17	2	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0
18:45	17	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0
H/TOT	74	6	0	0	0	0	0	80	0								
P/TOT	329	45	5	1	0	0	0	380	1	0	1						



SITE: 6

DATE: 28/03/2023

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

DAY: Tuesday

TIME	B to A							TOT	B to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	9	1	0	0	0	0	0	10	28	7	0	0	0	0	0	35
07:15	25	4	0	0	0	0	0	29	36	9	0	0	0	0	0	45
07:30	34	5	0	0	0	0	0	39	44	12	1	1	0	0	0	58
07:45	22	4	0	0	0	0	0	26	66	13	2	1	0	0	0	82
H/TOT	90	14	0	0	0	0	0	104	174	41	3	2	0	0	0	220
08:00	20	6	0	1	0	0	0	27	44	4	0	0	0	1	0	49
08:15	23	5	1	0	0	0	0	29	50	6	3	0	0	0	0	59
08:30	11	1	1	0	1	0	0	14	28	2	0	0	0	0	0	30
08:45	26	3	1	0	0	0	0	30	46	3	0	1	0	0	0	50
H/TOT	80	15	3	1	1	0	0	100	168	15	3	1	0	1	0	188
09:00	17	3	1	0	0	0	0	21	48	7	3	1	0	0	0	59
09:15	14	1	0	0	0	1	0	16	15	8	1	0	1	0	0	25
H/TOT	31	4	1	0	0	1	0	37	63	15	4	1	1	0	0	84
P/TOT	201	33	4	1	1	1	0	241	405	71	10	4	1	1	0	492

TIME	B to A							TOT	B to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	16	2	0	0	0	0	0	18	39	2	1	2	0	0	0	44
15:15	24	1	1	0	0	0	0	26	54	8	0	1	0	0	0	63
15:30	27	4	0	0	0	0	0	31	56	12	0	0	0	0	0	68
15:45	22	1	0	0	0	0	0	23	54	4	2	1	1	0	0	62
H/TOT	89	8	1	0	0	0	0	98	203	26	3	4	1	0	0	237
16:00	24	1	1	0	0	0	0	26	63	11	0	0	0	2	0	76
16:15	31	4	0	0	0	0	0	35	62	1	0	0	0	0	0	63
16:30	38	3	0	0	0	0	0	41	46	9	2	0	0	0	0	57
16:45	30	4	0	0	0	0	0	34	57	7	0	1	1	0	0	66
H/TOT	123	12	1	0	0	0	0	136	228	28	2	1	1	2	0	262
17:00	30	2	4	0	0	1	0	37	78	5	1	0	0	0	0	84
17:15	31	5	1	0	0	1	0	38	60	5	0	0	0	2	0	67
17:30	31	1	1	0	0	0	0	33	59	3	0	0	0	0	0	62
17:45	33	3	0	0	0	0	0	36	66	3	0	0	0	0	0	69
H/TOT	125	11	6	0	0	2	0	144	263	16	1	0	0	2	0	282
18:00	36	2	0	0	0	0	0	38	48	4	0	0	0	0	0	52
18:15	28	1	0	0	0	0	0	29	53	3	0	0	0	0	1	57
18:30	29	2	0	0	0	0	0	31	44	5	1	0	0	0	1	51
18:45	26	5	1	0	0	1	0	33	39	4	0	0	0	0	0	43
H/TOT	119	10	1	0	0	1	0	131	184	16	1	0	0	0	2	203
P/TOT	456	41	9	0	0	3	0	509	878	86	7	5	2	4	2	984



SITE: 6

DATE: 28/03/2023

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

DAY: Tuesday

TIME	B to C							TOT	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
07:15	5	0	0	0	1	0	0	6	0	0	0	0	0	0	0	0
07:30	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
07:45	4	2	0	0	1	0	0	7	0	0	0	0	0	0	0	0
H/TOT	22	2	0	0	2	0	0	26	0							
08:00	10	0	0	0	1	0	0	11	0	0	0	0	0	0	0	0
08:15	12	1	1	0	1	0	0	15	0	0	0	0	0	0	0	0
08:30	3	1	0	0	1	0	0	5	0	0	0	0	0	0	0	0
08:45	9	2	0	0	1	0	0	12	0	0	0	0	0	0	0	0
H/TOT	34	4	1	0	4	0	0	43	0							
09:00	6	1	0	0	1	0	0	8	0	0	0	0	0	0	0	0
09:15	4	0	0	0	2	0	0	6	0	0	0	0	0	0	0	0
H/TOT	10	1	0	0	3	0	0	14	0							
P/TOT	66	7	1	0	9	0	0	83	0							

TIME	B to C							TOT	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	10	0	0	0	2	0	0	12	0	0	0	0	0	0	0	0
15:15	12	0	0	0	1	0	0	13	0	0	0	0	0	0	0	0
15:30	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
15:45	8	1	0	0	1	0	0	10	0	0	0	0	0	0	0	0
H/TOT	35	2	0	0	4	0	0	41	0							
16:00	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
16:15	4	2	0	0	2	0	0	8	0	0	0	0	0	0	0	0
16:30	6	0	0	0	1	0	0	7	0	0	0	0	0	0	0	0
16:45	12	2	0	0	0	0	0	14	0	0	0	0	0	0	0	0
H/TOT	31	4	0	0	3	0	0	38	0							
17:00	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0
17:15	6	1	0	0	1	0	0	8	0	0	0	0	0	0	0	0
17:30	9	0	0	0	1	0	0	10	0	0	0	0	0	0	0	0
17:45	15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0
H/TOT	42	2	0	0	2	0	0	46	0							
18:00	17	0	1	0	1	0	0	19	0	0	0	0	0	0	0	0
18:15	17	2	0	0	2	0	0	21	0	0	0	0	0	0	0	0
18:30	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
18:45	7	0	0	0	1	0	0	8	0	0	0	0	0	0	0	0
H/TOT	49	2	1	0	4	0	0	56	0							
P/TOT	157	10	1	0	13	0	0	181	0							



SITE: 6

DATE: 28/03/2023

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

DAY: Tuesday

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	8	1	0	0	0	0	0	9	70	21	1	0	1	0	0	93
07:15	14	0	0	0	2	0	0	16	79	12	3	0	0	0	0	94
07:30	12	2	1	0	1	0	0	16	83	10	1	1	2	2	1	100
07:45	9	1	0	0	0	0	0	10	56	8	1	0	0	0	0	65
H/TOT	43	4	1	0	3	0	0	51	288	51	6	1	3	2	1	352
08:00	13	2	1	0	1	0	0	17	62	9	1	0	1	0	0	73
08:15	8	1	0	0	1	0	0	10	50	7	2	1	1	1	0	62
08:30	11	2	0	0	1	0	0	14	60	7	0	1	1	0	0	69
08:45	18	1	0	1	0	0	0	20	51	5	1	0	0	0	0	57
H/TOT	50	6	1	1	3	0	0	61	223	28	4	2	3	1	0	261
09:00	4	0	0	0	1	0	0	5	40	3	0	0	0	0	0	43
09:15	9	1	1	0	1	0	0	12	35	2	0	0	1	0	0	38
H/TOT	13	1	1	0	2	0	0	17	75	5	0	0	1	0	0	81
P/TOT	106	11	3	1	8	0	0	129	586	84	10	3	7	3	1	694

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	11	0	0	0	0	0	0	11	32	6	0	0	1	0	0	39
15:15	4	1	0	0	0	0	0	5	37	4	0	0	0	0	0	41
15:30	4	2	0	0	1	0	0	7	49	3	1	0	0	0	0	53
15:45	11	1	0	0	0	0	0	12	43	7	2	0	2	0	0	54
H/TOT	30	4	0	0	1	0	0	35	161	20	3	0	3	0	0	187
16:00	10	1	0	0	1	0	0	12	41	4	1	0	3	0	0	49
16:15	10	2	0	0	2	0	0	14	56	9	1	0	1	1	1	69
16:30	11	0	0	0	1	0	0	12	57	7	1	0	0	0	0	65
16:45	5	0	0	0	1	0	0	6	38	1	1	0	1	0	0	41
H/TOT	36	3	0	0	5	0	0	44	192	21	4	0	5	1	1	224
17:00	15	0	0	0	1	0	0	16	42	6	0	0	1	0	0	49
17:15	18	1	0	0	0	0	0	19	36	2	0	0	0	0	0	38
17:30	9	0	0	0	1	0	0	10	59	6	0	0	0	0	0	65
17:45	17	3	0	0	0	0	0	20	38	8	0	0	0	0	1	47
H/TOT	59	4	0	0	2	0	0	65	175	22	0	0	1	0	1	199
18:00	7	0	0	0	1	0	0	8	42	4	0	0	1	0	0	47
18:15	8	2	0	0	1	0	0	11	29	2	0	0	1	0	0	32
18:30	12	0	0	0	0	0	0	12	25	1	0	0	0	0	0	26
18:45	11	1	0	0	0	0	0	12	30	2	0	0	1	0	1	34
H/TOT	38	3	0	0	2	0	0	43	126	9	0	0	3	0	1	139
P/TOT	163	14	0	0	10	0	0	187	654	72	7	0	12	1	3	749



SITE: 6

DATE: 28/03/2023

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

DAY: Tuesday

TIME	C to D							TOT	C to C							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
07:15	5	3	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0
07:30	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
07:45	9	1	1	0	0	0	0	11	0	0	0	0	0	0	0	0	0
H/TOT	30	4	1	0	0	0	0	35	0								
08:00	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
08:15	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0
08:30	6	3	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0
08:45	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
H/TOT	28	4	0	0	0	0	0	32	0								
09:00	14	4	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
09:15	11	3	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
H/TOT	25	7	0	0	0	0	0	32	0								
P/TOT	83	15	1	0	0	0	0	99	0								

TIME	C to D							TOT	C to C							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	18	1	0	0	1	0	0	20	0	0	0	0	0	0	0	0	0
15:15	9	1	0	0	1	0	0	11	0	0	0	0	0	0	0	0	0
15:30	14	0	0	0	0	1	0	15	0	0	0	0	0	0	0	0	0
15:45	15	1	1	0	0	0	0	17	0	0	0	0	0	0	0	0	0
H/TOT	56	3	1	0	2	1	0	63	0								
16:00	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
16:15	9	0	1	0	0	0	0	10	0	0	0	0	0	0	0	0	0
16:30	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0
16:45	6	3	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0
H/TOT	38	5	1	0	0	0	0	44	0								
17:00	17	1	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
17:15	17	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0
17:30	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
17:45	13	2	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0
H/TOT	53	3	0	0	0	0	0	56	0								
18:00	15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0
18:15	13	5	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
18:30	16	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0
18:45	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
H/TOT	55	7	0	0	0	0	0	62	0								
P/TOT	202	18	2	0	2	1	0	225	0								



SITE: 6

DATE: 28/03/2023

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

DAY: Tuesday

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	4	1	0	0	0	0	0	5	53	7	1	0	0	1	0	62
07:15	8	0	0	0	0	0	0	8	82	5	1	0	0	0	0	88
07:30	5	1	0	0	0	0	0	6	67	6	1	0	0	1	0	75
07:45	7	2	0	0	0	0	0	9	62	8	1	2	1	1	2	77
H/TOT	24	4	0	0	0	0	0	28	264	26	4	2	1	3	2	302
08:00	14	2	1	0	1	0	0	18	82	10	0	1	0	0	0	93
08:15	17	2	0	0	1	0	0	20	62	10	1	1	0	0	0	74
08:30	11	1	0	0	0	0	0	12	46	12	0	0	0	0	0	58
08:45	13	5	0	0	0	0	0	18	52	8	2	0	0	0	0	62
H/TOT	55	10	1	0	2	0	0	68	242	40	3	2	0	0	0	287
09:00	12	2	0	0	1	0	0	15	55	12	1	0	0	0	0	68
09:15	8	2	0	1	0	0	0	11	33	8	1	0	0	0	0	42
H/TOT	20	4	0	1	1	0	0	26	88	20	2	0	0	0	0	110
P/TOT	99	18	1	1	3	0	0	122	594	86	9	4	1	3	2	699

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	16	3	1	0	0	0	0	20	42	5	0	0	0	0	0	47
15:15	14	6	0	0	0	0	0	20	42	13	0	0	0	0	0	55
15:30	24	0	0	0	0	0	0	24	50	9	0	0	1	0	1	61
15:45	12	1	0	0	0	1	0	14	74	9	2	0	0	0	0	85
H/TOT	66	10	1	0	0	1	0	78	208	36	2	0	1	0	1	248
16:00	14	2	1	0	0	0	0	17	51	10	2	0	0	0	0	63
16:15	26	5	0	0	0	0	0	31	65	7	0	1	0	0	0	73
16:30	17	2	1	0	0	0	0	20	56	6	3	0	0	0	0	65
16:45	19	1	0	0	0	0	0	20	80	10	2	0	1	0	1	94
H/TOT	76	10	2	0	0	0	0	88	252	33	7	1	1	0	1	295
17:00	24	1	0	0	0	0	0	25	76	11	0	0	0	1	0	88
17:15	31	0	0	0	0	0	0	31	58	8	0	0	0	0	0	66
17:30	17	1	0	0	0	0	0	18	61	12	1	0	0	0	0	74
17:45	16	1	0	0	0	1	0	18	45	5	0	0	0	0	0	50
H/TOT	88	3	0	0	0	1	0	92	240	36	1	0	0	1	0	278
18:00	14	3	0	0	0	0	0	17	55	2	0	0	0	0	0	57
18:15	21	3	0	0	0	0	0	24	41	3	0	0	0	0	0	44
18:30	25	0	0	0	0	0	0	25	51	2	0	0	0	0	0	53
18:45	12	2	0	0	0	0	0	14	34	3	1	0	0	0	0	38
H/TOT	72	8	0	0	0	0	0	80	181	10	1	0	0	0	0	192
P/TOT	302	31	3	0	0	2	0	338	881	115	11	1	2	1	2	1013



SITE: 6

DATE: 28/03/2023

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

DAY: Tuesday

TIME	D to A							TOT	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	9	2	0	0	0	0	0	11	0	0	0	0	0	0	0	0
07:15	13	2	0	0	0	0	0	15	0	0	0	0	0	0	0	0
07:30	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0
07:45	5	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0
H/TOT	37	5	1	0	0	0	0	43	0							
08:00	4	2	0	1	0	0	0	7	0	0	0	0	0	0	0	0
08:15	11	3	0	0	0	0	0	14	0	0	0	0	0	0	0	0
08:30	9	3	0	0	0	0	0	12	0	0	0	0	0	0	0	0
08:45	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
H/TOT	29	9	0	1	0	0	0	39	0							
09:00	9	3	0	0	0	0	0	12	0	0	0	0	0	0	0	0
09:15	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
H/TOT	15	4	0	0	0	0	0	19	0							
P/TOT	81	18	1	1	0	0	0	101	0							

TIME	D to A							TOT	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0
15:15	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
15:30	3	0	0	0	1	0	0	4	0	0	0	0	0	0	0	0
15:45	7	2	0	0	0	0	0	9	0	0	0	0	0	0	0	0
H/TOT	21	4	0	0	1	0	0	26	0							
16:00	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
16:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
16:30	5	2	0	0	1	0	0	8	0	0	0	0	0	0	0	0
16:45	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
H/TOT	21	3	0	0	1	0	0	25	0							
17:00	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
17:15	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0
17:30	7	0	1	1	0	0	0	9	0	0	0	0	0	0	0	0
17:45	4	0	1	0	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	27	1	2	1	0	0	0	31	0							
18:00	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
18:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
18:30	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
18:45	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	21	0	0	0	0	0	0	21	0							
P/TOT	90	8	2	1	2	0	0	103	0							

13882 - KIRKLEES
 March 2023
 CLASSIFIED TURNING COUNT

28/03/2023

Tuesday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	88	24	1	0	1	0	0	114	47	10	2	0	0	0	0	59
07:15	117	18	3	0	0	0	0	138	48	8	0	0	2	0	1	59
07:30	127	16	1	1	2	2	1	150	43	11	1	0	1	0	1	57
07:45	83	12	2	0	0	0	0	97	76	7	1	0	1	0	0	85
H/TOT	415	70	7	1	3	2	1	499	214	36	4	0	4	0	2	260
08:00	86	17	1	2	1	0	0	107	60	10	3	0	2	0	0	75
08:15	84	15	3	1	1	1	0	105	72	15	3	0	1	0	0	91
08:30	80	11	1	1	2	0	0	95	52	9	0	0	0	0	0	61
08:45	82	9	2	0	0	0	0	93	49	4	1	1	1	0	0	56
H/TOT	332	52	7	4	4	1	0	400	233	38	7	1	4	0	0	283
09:00	66	9	1	0	0	0	0	76	56	12	5	1	1	1	0	76
09:15	55	4	0	0	1	1	0	61	42	8	2	1	0	0	0	53
H/TOT	121	13	1	0	1	1	0	137	98	20	7	2	1	1	0	129
P/TOT	868	135	15	5	8	4	1	1036	545	94	18	3	9	1	2	672

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	56	9	0	0	1	0	0	66	56	9	0	0	1	0	0	66
15:15	65	6	1	0	0	0	0	72	51	16	2	0	1	0	0	70
15:30	79	7	1	0	1	0	0	88	82	15	0	1	1	0	0	99
15:45	72	10	2	0	2	0	0	86	54	12	3	1	1	0	0	71
H/TOT	272	32	4	0	4	0	0	312	243	52	5	2	4	0	0	306
16:00	71	6	2	0	3	0	0	82	78	5	2	0	0	1	0	86
16:15	91	13	1	0	1	1	1	108	69	6	1	0	1	0	1	78
16:30	100	12	1	0	1	0	0	114	87	10	0	1	0	1	0	99
16:45	74	5	1	0	1	0	0	81	81	9	0	0	1	0	0	91
H/TOT	336	36	5	0	6	1	1	385	315	30	3	1	2	2	1	354
17:00	80	8	4	0	1	1	0	94	75	3	1	0	1	0	0	80
17:15	75	8	1	0	0	1	0	85	89	8	0	0	1	1	0	99
17:30	97	7	2	1	0	0	0	107	84	4	0	0	0	1	0	89
17:45	75	11	1	0	0	0	1	88	71	3	0	0	1	0	0	75
H/TOT	327	34	8	1	1	2	1	374	319	18	1	0	3	2	0	343
18:00	86	6	0	0	1	0	0	93	71	6	0	0	0	0	0	77
18:15	61	3	0	0	1	0	0	65	81	7	0	0	2	0	0	90
18:30	59	3	0	0	0	0	0	62	62	7	0	0	0	0	0	69
18:45	60	7	1	0	1	1	1	71	64	2	0	0	1	0	0	67
H/TOT	266	19	1	0	3	1	1	291	278	22	0	0	3	0	0	303
P/TOT	1201	121	18	1	14	4	3	1362	1155	122	9	3	12	4	1	1306



SITE: 6

DATE: 28/03/2023

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

DAY: Tuesday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	89	12	2	0	0	1	0	104	40	8	0	0	0	0	0	48
07:15	125	9	1	0	2	0	0	137	66	13	0	0	1	0	0	80
07:30	101	12	3	0	1	1	0	118	88	17	1	1	0	0	0	107
07:45	103	12	1	2	2	1	2	123	92	19	2	1	1	0	0	115
H/TOT	418	45	7	2	5	3	2	482	286	57	3	2	2	0	0	350
08:00	122	17	4	1	1	0	0	145	74	10	0	1	1	1	0	87
08:15	100	18	3	1	1	0	0	123	85	12	5	0	1	0	0	103
08:30	79	16	0	0	1	0	0	96	42	4	1	0	2	0	0	49
08:45	90	10	2	1	0	0	0	103	81	8	1	1	1	0	0	92
H/TOT	391	61	9	3	3	0	0	467	282	34	7	2	5	1	0	331
09:00	75	15	2	0	1	0	0	93	71	11	4	1	1	0	0	88
09:15	62	10	3	0	1	0	0	76	33	9	1	0	3	1	0	47
H/TOT	137	25	5	0	2	0	0	169	104	20	5	1	4	1	0	135
P/TOT	946	131	21	5	10	3	2	1118	672	111	15	5	11	2	0	816

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	64	10	0	0	0	0	0	74	65	4	1	2	2	0	0	74
15:15	63	23	2	0	0	0	0	88	90	9	1	1	1	0	0	102
15:30	72	17	0	1	2	0	1	93	88	17	0	0	0	0	0	105
15:45	104	16	4	0	0	0	0	124	84	6	2	1	2	0	0	95
H/TOT	303	66	6	1	2	0	1	379	327	36	4	4	5	0	0	376
16:00	81	12	3	0	1	0	0	97	96	12	1	0	0	2	0	111
16:15	102	10	0	1	2	0	0	115	97	7	0	0	2	0	0	106
16:30	95	9	3	0	1	0	0	108	90	12	2	0	1	0	0	105
16:45	108	14	2	0	2	0	1	127	99	13	0	1	1	0	0	114
H/TOT	386	45	8	1	6	0	1	447	382	44	3	1	4	2	0	436
17:00	113	11	0	0	1	1	0	126	120	7	5	0	0	1	0	133
17:15	104	11	0	0	0	0	0	115	97	11	1	0	1	3	0	113
17:30	89	13	1	0	1	0	0	104	99	4	1	0	1	0	0	105
17:45	85	9	0	0	0	0	0	94	114	7	0	0	0	0	0	121
H/TOT	391	44	1	0	2	1	0	439	430	29	7	0	2	4	0	472
18:00	82	4	0	0	1	0	0	87	101	6	1	0	1	0	0	109
18:15	69	7	0	0	1	0	0	77	98	6	0	0	2	0	1	107
18:30	80	4	0	0	0	0	0	84	81	7	1	0	0	0	1	90
18:45	62	4	1	0	0	0	0	67	72	9	1	0	1	1	0	84
H/TOT	293	19	1	0	2	0	0	315	352	28	3	0	4	1	2	390
P/TOT	1373	174	16	2	12	1	2	1580	1491	137	17	5	15	7	2	1674



SITE: 6

DATE: 28/03/2023

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

DAY: Tuesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	26	6	1	0	0	0	0	33	89	22	1	0	1	0	0	113
07:15	32	3	0	0	2	0	1	38	98	15	3	0	2	0	0	118
07:30	34	7	0	0	1	0	1	43	100	12	2	1	3	2	1	121
07:45	53	8	0	0	1	0	0	62	74	10	2	0	0	0	0	86
H/TOT	145	24	1	0	4	0	2	176	361	59	8	1	6	2	1	438
08:00	54	6	1	0	4	0	0	65	79	12	2	0	2	0	0	95
08:15	67	11	2	0	2	0	0	82	66	8	2	1	2	1	0	80
08:30	40	8	0	0	1	0	0	49	77	12	0	1	2	0	0	92
08:45	46	10	0	1	2	0	0	59	79	6	1	1	0	0	0	87
H/TOT	207	35	3	1	9	0	0	255	301	38	5	3	6	1	0	354
09:00	53	11	4	0	3	1	0	72	58	7	0	0	1	0	0	66
09:15	31	7	1	2	2	0	0	43	55	6	1	0	2	0	0	64
H/TOT	84	18	5	2	5	1	0	115	113	13	1	0	3	0	0	130
P/TOT	436	77	9	3	18	1	2	546	775	110	14	4	15	3	1	922

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	65	7	1	0	3	0	0	76	61	7	0	0	2	0	0	70
15:15	56	10	0	0	2	0	0	68	50	6	0	0	1	0	0	57
15:30	86	10	0	0	1	0	0	97	67	5	1	0	1	1	0	75
15:45	50	7	1	1	2	1	0	62	69	9	3	0	2	0	0	83
H/TOT	257	34	2	1	8	1	0	303	247	27	4	0	6	1	0	285
16:00	73	6	2	0	0	1	0	82	62	6	1	0	4	0	0	73
16:15	69	11	1	0	3	0	1	85	75	11	2	0	3	1	1	93
16:30	77	9	1	0	1	1	0	89	80	8	1	0	1	0	0	90
16:45	82	8	0	0	1	0	0	91	49	4	1	0	2	0	0	56
H/TOT	301	34	4	0	5	2	1	347	266	29	5	0	10	1	1	312
17:00	84	3	0	0	1	0	0	88	74	7	0	0	2	0	0	83
17:15	96	6	0	0	2	1	0	105	71	3	0	0	0	0	0	74
17:30	85	4	0	0	1	1	0	91	74	6	0	0	1	0	0	81
17:45	74	4	0	0	1	1	0	80	68	13	0	0	0	0	1	82
H/TOT	339	17	0	0	5	3	0	364	287	29	0	0	3	0	1	320
18:00	77	4	1	0	1	0	0	83	64	5	0	0	2	0	0	71
18:15	93	8	0	0	4	0	0	105	50	9	0	0	2	0	0	61
18:30	71	5	0	0	0	0	0	76	53	1	0	0	0	0	0	54
18:45	57	2	0	0	2	0	0	61	52	4	0	0	1	0	1	58
H/TOT	298	19	1	0	7	0	0	325	219	19	0	0	5	0	1	244
P/TOT	1195	104	7	1	25	6	1	1339	1019	104	9	0	24	2	3	1161



SITE: 6

DATE: 28/03/2023

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

DAY: Tuesday

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	39	8	0	0	0	0	0	47	66	10	1	0	0	1	0	78
07:15	41	13	0	0	1	0	0	55	103	7	1	0	0	0	0	111
07:30	51	13	1	1	0	0	0	66	82	8	1	0	0	1	0	92
07:45	77	14	4	1	0	0	0	96	74	10	2	2	1	1	2	92
H/TOT	208	48	5	2	1	0	0	264	325	35	5	2	1	3	2	373
08:00	51	6	0	0	0	1	0	58	100	14	1	2	1	0	0	118
08:15	62	6	3	0	1	0	0	72	90	15	1	1	1	0	0	108
08:30	38	6	0	0	0	0	0	44	66	16	0	0	0	0	0	82
08:45	61	3	1	1	0	0	0	66	70	14	2	0	0	0	0	86
H/TOT	212	21	4	1	1	1	0	240	326	59	4	3	2	0	0	394
09:00	67	12	3	2	0	0	0	84	76	17	1	0	1	0	0	95
09:15	29	13	1	0	1	0	0	44	47	11	1	1	0	0	0	60
H/TOT	96	25	4	2	1	0	0	128	123	28	2	1	1	0	0	155
P/TOT	516	94	13	5	3	1	0	632	774	122	11	6	4	3	2	922

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	62	3	1	2	1	0	0	69	65	9	1	0	0	0	0	75
15:15	67	12	0	1	1	0	0	81	60	20	0	0	0	0	0	80
15:30	77	12	0	0	0	1	0	90	77	9	0	0	2	0	1	89
15:45	74	6	3	1	1	0	0	85	93	12	2	0	0	1	0	108
H/TOT	280	33	4	4	3	1	0	325	295	50	3	0	2	1	1	352
16:00	82	12	0	0	0	2	0	96	71	13	3	0	0	0	0	87
16:15	74	2	1	0	0	0	0	77	95	12	0	1	0	0	0	108
16:30	63	10	2	1	0	0	0	76	78	10	4	0	1	0	0	93
16:45	70	10	0	1	1	0	0	82	105	11	2	0	1	0	1	120
H/TOT	289	34	3	2	1	2	0	331	349	46	9	1	2	0	1	408
17:00	100	7	2	0	0	0	0	109	108	12	0	0	0	1	0	121
17:15	79	6	0	0	0	2	0	87	97	9	0	0	0	0	0	106
17:30	71	3	0	0	0	0	0	74	85	13	2	1	0	0	0	101
17:45	84	5	0	0	0	0	0	89	65	6	1	0	0	1	0	73
H/TOT	334	21	2	0	0	2	0	359	355	40	3	1	0	2	0	401
18:00	68	8	0	0	0	0	0	76	77	5	0	0	0	0	0	82
18:15	72	10	0	0	0	0	1	83	66	6	0	0	0	0	0	72
18:30	67	5	1	0	0	0	1	74	81	2	0	0	0	0	0	83
18:45	59	7	0	0	0	0	0	66	50	5	1	0	0	0	0	56
H/TOT	266	30	1	0	0	0	2	299	274	18	1	0	0	0	0	293
P/TOT	1169	118	10	6	4	5	2	1314	1273	154	16	2	4	3	2	1454



SITE: 6

LOCATION: A643 Spen Lane/A651 Oxford Road/A643 Church Lane

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	242	50	4	0	1	1	0	298
07:15	315	43	4	0	5	0	1	368
07:30	313	48	5	2	4	3	2	377
07:45	316	46	7	3	3	1	2	378
H/TOT	1186	187	20	5	13	5	5	1421
08:00	313	46	6	3	6	1	0	375
08:15	313	50	11	2	5	1	0	382
08:30	237	41	1	1	4	0	0	284
08:45	279	32	5	3	2	0	0	321
H/TOT	1142	169	23	9	17	2	0	1362
09:00	261	47	10	2	4	1	0	325
09:15	177	34	5	2	5	1	0	224
H/TOT	438	81	15	4	9	2	0	549
P/TOT	2766	437	58	18	39	9	5	3332

PEAK HOUR CALCULATION	TOT
07:00 to 08:00	1421
07:15 to 08:15	1498
07:30 to 08:30	1512
07:45 to 08:45	1419
08:00 to 09:00	1362
08:15 to 09:15	1312
08:30 to 09:15	1154
08:45 to 09:00	870
09:00 to 09:30	549
A.M. Peak	1512

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	247	29	2	2	5	0	0	285
15:15	251	51	3	1	3	0	0	309
15:30	314	46	1	1	4	1	1	368
15:45	300	39	10	2	5	1	0	357
H/TOT	1112	165	16	6	17	2	1	1319
16:00	307	36	7	0	4	3	0	357
16:15	336	36	3	1	6	1	2	385
16:30	335	40	7	1	3	1	0	387
16:45	334	37	3	1	5	0	1	381
H/TOT	1312	149	20	3	18	5	3	1510
17:00	377	29	6	0	3	2	0	417
17:15	354	31	1	0	2	4	0	392
17:30	342	27	3	1	2	1	0	376
17:45	318	29	1	0	1	1	1	351
H/TOT	1391	116	11	1	8	8	1	1536
18:00	313	22	1	0	3	0	0	339
18:15	295	28	0	0	6	0	1	330
18:30	277	17	1	0	0	0	1	296
18:45	238	20	2	0	3	1	1	265
H/TOT	1123	87	4	0	12	1	3	1230
P/TOT	4938	517	51	10	55	16	8	5595

PEAK HOUR CALCULATION	TOT
15:00 to 16:00	1319
15:15 to 16:15	1391
15:30 to 16:30	1467
15:45 to 16:45	1486
16:00 to 17:00	1510
16:15 to 17:15	1570
16:30 to 17:30	1577
16:45 to 17:45	1566
17:00 to 18:00	1536
17:15 to 18:15	1458
17:30 to 18:30	1396
17:45 to 18:45	1316
18:00 to 19:00	1230
P.M. Peak	18822



SITE: 4

DATE: 25/04/2023

LOCATION: West Lane / A651 Oxford Rd

DAY: Tuesday

TIME	A to D							TOT	A to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	31	12	2	0	0	0	0	45
07:15	1	0	0	0	0	0	0	1	63	14	1	0	1	0	0	79
07:30	1	1	0	0	0	0	0	2	69	13	3	0	1	0	0	86
07:45	0	0	0	0	0	0	0	0	66	7	0	0	2	0	0	75
08:00	1	0	0	0	0	0	0	1	84	14	0	0	0	0	1	99
08:15	0	0	1	0	0	0	0	1	80	9	2	0	1	2	0	94
08:30	1	0	0	0	0	0	0	1	73	10	4	0	1	0	0	88
08:45	0	1	0	0	0	0	0	1	38	14	2	1	3	0	0	58
09:00	0	0	0	0	0	0	0	0	50	12	2	2	1	0	0	67
09:15	0	0	0	0	0	0	0	0	50	16	5	0	0	0	0	71
H/TOT	0	0	0	0	0	0	0	0	100	28	7	2	1	0	0	138
P/TOT	4	2	1	0	0	0	0	7	604	121	21	3	10	2	1	762

TIME	A to D							TOT	A to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	0	0	0	0	0	0	0	0	75	6	1	0	2	0	0	84
15:15	0	0	0	0	0	0	0	0	56	6	2	0	0	0	0	64
15:30	1	0	0	0	0	0	0	1	76	14	0	0	1	2	0	93
15:45	2	0	0	0	0	0	0	2	67	12	3	0	1	0	0	83
16:00	0	0	0	0	0	0	0	0	80	21	1	1	1	3	0	107
16:15	0	0	0	0	0	0	0	0	81	12	2	0	2	2	0	99
16:30	0	0	0	0	0	0	0	0	73	11	1	0	0	1	0	86
16:45	0	0	0	0	0	0	0	0	93	10	0	0	0	0	1	104
17:00	1	0	0	0	0	0	0	1	87	9	2	0	2	0	0	100
17:15	3	1	0	0	0	0	0	4	94	11	1	1	0	1	3	111
17:30	1	0	0	0	0	0	0	1	87	7	0	0	0	2	0	96
17:45	0	1	0	0	0	0	0	1	97	5	2	0	0	1	0	105
18:00	0	0	0	0	0	0	0	0	91	6	0	0	3	0	0	100
18:15	2	0	0	0	0	0	0	2	62	5	0	0	0	1	0	68
18:30	1	0	0	0	0	0	0	1	69	4	0	0	0	0	0	73
18:45	0	0	0	0	0	0	0	0	62	6	0	0	1	0	1	70
H/TOT	3	0	0	0	0	0	0	3	284	21	0	0	4	1	1	311
P/TOT	11	2	0	0	0	0	0	13	1250	145	15	2	13	13	5	1443



SITE: 4

DATE: 25/04/2023

LOCATION: West Lane / A651 Oxford Rd

DAY: Tuesday

TIME	A to B							TOT	A to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	7	3	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
07:15	25	3	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0
07:30	34	6	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0
07:45	25	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0
08:00	39	6	0	1	0	0	0	46	0	0	0	0	0	0	0	0	0
08:15	45	10	1	0	0	0	0	56	0	0	0	0	0	0	0	0	0
08:30	22	0	0	0	0	1	0	23	0	0	0	0	0	0	0	0	0
08:45	17	4	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0
09:00	14	3	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0
09:15	16	4	0	2	0	0	0	22	0	0	0	0	0	0	0	0	0
H/TOT	30	7	0	2	0	0	0	39	0								
P/TOT	244	39	1	3	0	1	0	288	0								

TIME	A to B							TOT	A to A							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	10	3	0	1	0	0	0	14	0	0	0	0	0	0	0	0	0
15:15	24	4	0	0	0	1	1	30	0	0	0	0	0	0	0	0	0
15:30	40	5	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0
15:45	33	9	0	0	0	0	1	43	0	0	0	0	0	0	0	0	0
16:00	17	6	1	0	0	0	0	24	0	0	0	0	0	0	0	0	0
16:15	34	14	1	0	0	1	2	52	0	0	0	0	0	0	0	0	0
16:30	45	6	0	0	0	1	0	52	0	0	0	0	0	0	0	0	0
16:45	39	9	0	1	0	0	0	49	0	0	0	0	0	0	0	0	0
17:00	55	4	2	0	0	1	0	62	0	0	0	0	0	0	0	0	0
17:15	57	8	0	0	0	0	0	65	0	0	0	0	0	0	0	0	0
17:30	45	7	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0
17:45	48	1	0	0	0	0	0	49	0	0	0	0	0	0	0	0	0
18:00	43	7	0	0	0	0	1	51	0	0	0	0	0	0	0	0	0
18:15	37	2	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0
18:30	22	3	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0
18:45	17	1	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
H/TOT	119	13	0	0	0	0	1	133	0								
P/TOT	566	89	4	2	0	4	5	670	0								



SITE: 4

DATE: 25/04/2023

LOCATION: West Lane / A651 Oxford Rd

DAY: Tuesday

TIME	B to A							TOT	B to D							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	42	6	0	1	0	0	0	49	0	0	0	0	0	0	0	0	0
07:15	63	7	0	0	0	0	0	70	0	0	0	0	0	0	0	0	0
07:30	65	14	0	0	0	0	0	79	0	0	0	0	0	0	0	0	0
07:45	89	20	0	0	0	0	0	109	0	0	0	0	0	0	0	0	0
08:00	94	8	0	0	0	0	0	102	0	0	0	0	0	0	0	0	0
08:15	50	7	0	1	0	1	0	59	0	0	0	0	0	0	0	0	0
08:30	47	7	0	0	0	0	0	54	0	0	0	0	0	0	0	0	0
08:45	49	3	0	0	0	0	0	52	1	0	0	0	0	0	0	0	1
09:00	20	5	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0
09:15	15	2	0	0	0	0	1	18	0	0	0	0	0	0	0	0	0
H/TOT	35	7	0	0	0	0	1	43	0								
P/TOT	534	79	0	2	0	1	1	617	1	0	1						

TIME	B to A							TOT	B to D							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	23	1	0	1	0	0	0	25	0	0	0	0	0	0	0	0	0
15:15	30	0	0	1	0	1	1	33	0	0	0	0	0	0	0	0	0
15:30	27	6	0	1	0	0	0	34	0	0	0	0	0	0	0	0	0
15:45	22	10	0	0	0	0	1	33	0	0	0	0	0	0	0	0	0
16:00	26	4	0	0	0	0	1	31	0	0	0	0	0	0	0	0	0
16:15	23	3	0	0	0	0	1	27	0	0	0	0	0	0	0	0	0
16:30	33	8	0	0	0	0	0	41	0	1	0	0	0	0	0	0	1
16:45	29	1	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0
17:00	35	4	0	0	0	0	1	40	2	0	0	0	0	0	0	0	2
17:15	35	6	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0
17:30	31	1	1	0	0	0	0	33	0	0	0	0	0	0	0	0	0
17:45	36	2	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0
18:00	35	2	0	0	0	0	0	37	0	1	0	0	0	0	0	0	1
18:15	27	3	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0
18:30	31	5	0	0	0	0	0	36	1	0	0	0	0	0	0	0	1
18:45	19	1	0	0	0	3	3	26	1	0	0	0	0	0	0	0	1
H/TOT	112	11	0	0	0	3	3	129	2	1	0	0	0	0	0	0	3
P/TOT	462	57	1	3	0	4	8	535	4	2	0	0	0	0	0	0	6



SITE: 4

DATE: 25/04/2023

LOCATION: West Lane / A651 Oxford Rd

DAY: Tuesday

TIME	B to C							TOT	B to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	2	3	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
07:15	10	4	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
07:30	16	2	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
07:45	17	4	1	0	0	0	0	22	0	0	0	0	0	0	0	0	0
08:00	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0
08:15	17	6	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0
08:30	25	2	1	0	0	0	0	28	0	0	0	0	0	0	0	0	0
08:45	17	1	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
09:00	7	4	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
09:15	5	5	1	0	0	0	0	11	0	0	0	0	0	0	0	0	0
H/TOT	12	9	1	0	0	0	0	22	0	0	0	0	0	0	0	0	0
P/TOT	125	31	3	0	0	0	0	159	0	0	0	0	0	0	0	0	0

TIME	B to C							TOT	B to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	14	2	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0
15:15	4	1	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0
15:30	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
15:45	14	1	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0
16:00	12	5	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0
16:15	19	3	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0
16:30	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
16:45	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
17:00	20	2	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0
17:15	18	4	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0
17:30	24	1	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0
17:45	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0
18:00	19	3	0	0	0	0	1	23	0	0	0	0	0	0	0	0	0
18:15	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
18:30	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
18:45	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
H/TOT	54	5	0	0	0	0	1	60	0	0	0	0	0	0	0	0	0
P/TOT	225	26	1	0	0	0	1	253	0	0	0	0	0	0	0	0	0



SITE: 4

DATE: 25/04/2023

LOCATION: West Lane / A651 Oxford Rd

DAY: Tuesday

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	5	1	0	0	0	0	0	6	85	11	0	0	2	2	0	100
07:15	7	1	0	0	0	0	0	8	98	22	2	0	1	0	0	123
07:30	14	0	0	0	0	0	0	14	85	12	2	0	1	0	0	100
07:45	14	2	0	0	0	0	0	16	68	15	3	0	0	1	1	88
08:00	22	0	1	0	0	0	0	23	96	14	1	0	1	0	1	113
08:15	24	1	0	0	0	0	0	25	72	10	4	2	1	0	0	89
08:30	18	4	0	0	0	0	0	22	79	10	1	0	0	0	0	90
08:45	13	3	0	0	0	0	0	16	95	16	2	0	0	0	0	113
09:00	9	1	0	0	0	0	0	10	58	10	2	1	1	1	0	72
09:15	4	1	0	0	0	0	0	5	55	13	2	1	1	0	0	72
H/TOT	13	2	0	0	0	0	0	15	113	23	4	2	2	0	0	144
P/TOT	130	14	1	0	0	0	0	145	791	133	19	4	8	3	2	960

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	6	1	0	0	0	0	0	7	66	8	2	0	1	0	0	77
15:15	8	2	0	0	0	0	0	10	92	13	1	0	0	0	0	106
15:30	15	4	0	0	0	0	0	19	85	15	1	0	2	1	0	104
15:45	4	3	0	0	0	0	0	7	63	17	1	0	1	1	0	83
16:00	6	1	0	0	0	0	0	7	65	12	0	0	1	1	0	79
16:15	6	1	0	0	0	0	0	7	78	9	0	0	2	0	0	89
16:30	13	2	0	0	0	0	0	15	80	15	2	0	1	0	1	99
16:45	13	1	0	0	0	0	0	14	78	16	1	0	1	0	1	97
17:00	16	1	0	0	0	1	0	18	84	10	0	0	0	0	1	95
17:15	13	3	0	0	0	0	0	16	85	10	0	1	1	1	2	100
17:30	12	0	0	0	0	0	0	12	85	11	0	0	2	1	0	99
17:45	13	1	0	0	0	0	0	14	90	6	0	0	1	0	0	97
18:00	13	0	0	0	0	0	0	13	82	9	0	0	0	0	3	94
18:15	17	2	0	0	0	0	0	19	78	4	0	0	1	0	1	84
18:30	10	0	0	0	0	0	0	10	57	7	0	0	0	0	0	64
18:45	7	1	0	0	0	0	0	8	71	9	1	0	0	0	0	81
H/TOT	47	3	0	0	0	0	0	50	288	29	1	0	1	0	4	323
P/TOT	172	23	0	0	0	1	0	196	1239	171	9	1	14	5	9	1448



SITE: 4

DATE: 25/04/2023

LOCATION: West Lane / A651 Oxford Rd

DAY: Tuesday

TIME	C to D							TOT	C to C							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	2	1	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
08:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	4	1	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0

TIME	C to D							TOT	C to C							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
15:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
16:15	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
16:30	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
17:45	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
18:00	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
P/TOT	13	2	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0



SITE: 4

DATE: 25/04/2023

LOCATION: West Lane / A651 Oxford Rd

DAY: Tuesday

TIME	D to C							TOT	D to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
07:45	2	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	1
08:00	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	2
08:15	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
09:00	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
09:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
H/TOT	1	0	0	0	0	0	0	1	2	0	2						
P/TOT	6	2	0	0	0	0	0	8	3	2	0	0	0	0	0	0	5

TIME	D to C							TOT	D to B							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
16:30	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
17:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
17:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	2
17:45	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
18:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
18:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
18:30	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
18:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	4	1	0	0	0	0	0	0	5
P/TOT	5	1	0	0	0	0	0	6	9	3	0	0	0	0	0	0	12



SITE: 4

DATE: 25/04/2023

LOCATION: West Lane / A651 Oxford Rd

DAY: Tuesday

TIME	D to A							TOT	D to D							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
07:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
07:15	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
08:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
08:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
08:45	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
09:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
P/TOT	8	0	2	0	0	0	0	10	0	0	0	0	0	0	0	0	0

TIME	D to A							TOT	D to D							TOT	
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
17:15	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
P/TOT	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0

13882 - KIRKLEES
 April 2023
 CLASSIFIED TURNING COUNT

25/04/2023

Tuesday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	128	17	0	1	2	2	0	150	38	15	2	0	0	0	0	55
07:15	164	29	2	0	1	0	0	196	89	17	1	0	1	0	0	108
07:30	150	26	2	0	1	0	0	179	104	20	3	0	1	0	0	128
07:45	157	35	3	0	0	1	1	197	91	7	0	0	2	0	0	100
08:00	192	22	1	0	1	0	1	217	124	20	0	1	0	0	1	146
08:15	122	17	5	3	1	1	0	149	125	19	4	0	1	2	0	151
08:30	127	17	1	0	0	0	0	145	96	10	4	0	1	1	0	112
08:45	144	19	3	0	0	0	0	166	55	19	2	1	3	0	0	80
09:00	79	15	2	1	1	0	0	98	64	15	2	2	1	0	0	84
09:15	70	15	2	1	1	0	1	90	66	20	5	2	0	0	0	93
H/TOT	149	30	4	2	2	0	1	188	130	35	7	4	1	0	0	177
P/TOT	1333	212	21	6	8	4	3	1587	852	162	23	6	10	3	1	1057

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	89	9	2	1	1	0	0	102	85	9	1	1	2	0	0	98
15:15	123	13	1	1	0	1	1	140	80	10	2	0	0	1	1	94
15:30	112	21	1	1	2	1	0	138	117	19	0	0	1	2	0	139
15:45	85	27	1	0	1	1	1	116	102	21	3	0	1	0	1	128
16:00	91	16	0	0	1	1	1	110	97	27	2	1	1	3	0	131
16:15	101	12	0	0	2	0	1	116	115	26	3	0	2	3	2	151
16:30	113	23	2	0	1	0	1	140	118	17	1	0	0	2	0	138
16:45	107	17	1	0	1	0	1	127	132	19	0	1	0	0	1	153
17:00	119	15	0	0	0	0	2	136	143	13	4	0	2	1	0	163
17:15	122	16	0	1	1	1	2	143	154	20	1	1	0	1	3	180
17:30	117	12	1	0	2	1	0	133	133	14	0	0	0	2	0	149
17:45	126	8	0	0	1	0	0	135	145	7	2	0	0	1	0	155
18:00	118	11	0	0	0	0	3	132	134	13	0	0	3	0	1	151
18:15	105	7	0	0	1	0	1	114	101	7	0	0	0	1	0	109
18:30	88	12	0	0	0	0	0	100	92	7	0	0	0	0	0	99
18:45	90	10	1	0	0	3	3	107	79	7	0	0	1	0	1	88
H/TOT	401	40	1	0	1	3	7	453	406	34	0	0	4	1	2	447
P/TOT	1706	229	10	4	14	9	17	1989	1827	236	19	4	13	17	10	2126



SITE: 4

DATE: 25/04/2023

LOCATION: West Lane / A651 Oxford Rd

DAY: Tuesday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	12	4	0	0	0	0	0	16	44	9	0	1	0	0	0	54
07:15	32	4	0	0	0	0	0	36	73	11	0	0	0	0	0	84
07:30	48	6	0	0	0	0	0	54	81	16	0	0	0	0	0	97
07:45	39	3	0	0	0	0	0	42	106	24	1	0	0	0	0	131
08:00	62	7	1	1	0	0	0	71	103	8	0	0	0	0	0	111
08:15	69	11	1	0	0	0	0	81	67	13	0	1	0	1	0	82
08:30	40	4	0	0	0	1	0	45	72	9	1	0	0	0	0	82
08:45	30	7	0	0	0	0	0	37	67	4	0	0	0	0	0	71
09:00	24	4	0	0	0	0	0	28	27	9	0	0	0	0	0	36
09:15	21	5	0	2	0	0	0	28	20	7	1	0	0	0	1	29
H/TOT	45	9	0	2	0	0	0	56	47	16	1	0	0	0	1	65
P/TOT	377	55	2	3	0	1	0	438	660	110	3	2	0	1	1	777

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	17	4	0	1	0	0	0	22	37	3	0	1	0	0	0	41
15:15	32	6	0	0	0	1	1	40	34	1	1	1	0	1	1	39
15:30	56	9	0	0	0	0	0	65	40	7	0	1	0	0	0	48
15:45	37	12	0	0	0	0	1	50	36	11	0	0	0	0	1	48
16:00	23	7	1	0	0	0	0	31	38	9	0	0	0	0	1	48
16:15	40	16	1	0	0	1	2	60	42	6	0	0	0	0	1	49
16:30	58	8	0	0	0	1	0	67	42	10	0	0	0	0	0	52
16:45	53	10	0	1	0	0	0	64	40	1	0	0	0	0	0	41
17:00	71	5	2	0	0	2	0	80	57	6	0	0	0	0	1	64
17:15	70	11	0	0	0	0	0	81	53	10	0	0	0	0	0	63
17:30	59	7	0	0	0	0	0	66	55	2	1	0	0	0	0	58
17:45	61	3	0	0	0	0	0	64	49	2	0	0	0	0	0	51
18:00	56	8	0	0	0	0	1	65	54	6	0	0	0	0	1	61
18:15	55	4	0	0	0	0	0	59	37	4	0	0	0	0	0	41
18:30	35	3	0	0	0	0	0	38	44	5	0	0	0	0	0	49
18:45	24	2	0	0	0	0	0	26	33	2	0	0	0	3	3	41
H/TOT	170	17	0	0	0	0	1	188	168	17	0	0	0	3	4	192
P/TOT	747	115	4	2	0	5	5	878	691	85	2	3	0	4	9	794



SITE: 4

DATE: 25/04/2023

LOCATION: West Lane / A651 Oxford Rd

DAY: Tuesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	33	15	2	0	0	0	0	50	90	12	0	0	2	2	0	106
07:15	73	18	1	0	1	0	0	93	105	23	2	0	1	0	0	131
07:30	86	15	3	0	1	0	0	105	99	12	2	0	1	0	0	114
07:45	85	11	1	0	2	0	0	99	82	17	3	0	0	1	1	104
08:00	94	14	0	0	0	0	1	109	120	15	3	0	1	0	1	140
08:15	97	16	2	0	1	2	0	118	96	11	4	2	1	0	0	114
08:30	98	12	5	0	1	0	0	116	98	14	1	0	0	0	0	113
08:45	56	16	2	1	3	0	0	78	109	19	2	0	0	0	0	130
09:00	58	16	2	2	1	0	0	79	67	11	2	1	1	0	0	82
09:15	55	21	6	0	0	0	0	82	59	14	2	1	1	0	0	77
H/TOT	113	37	8	2	1	0	0	161	126	25	4	2	2	0	0	159
P/TOT	735	154	24	3	10	2	1	929	925	148	21	4	8	3	2	1111

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	89	8	1	0	2	0	0	100	72	9	2	0	1	0	0	84
15:15	60	7	3	0	0	0	0	70	101	15	1	0	0	0	0	117
15:30	89	15	0	0	1	2	0	107	102	19	1	0	2	1	0	125
15:45	81	13	3	0	1	0	0	98	67	20	1	0	1	1	0	90
16:00	92	26	1	1	1	3	0	124	71	14	0	0	1	1	0	87
16:15	100	15	2	0	2	2	0	121	86	10	0	0	2	0	0	98
16:30	82	13	1	0	0	1	0	97	93	18	2	0	1	0	1	115
16:45	104	10	0	0	0	0	1	115	91	17	1	0	1	0	1	111
17:00	108	11	2	0	2	0	0	123	100	11	0	0	0	1	1	113
17:15	113	15	1	1	0	1	3	134	99	13	0	1	1	1	2	117
17:30	112	8	0	0	0	2	0	122	98	11	0	0	2	1	0	112
17:45	111	5	2	0	0	1	0	119	106	7	0	0	1	0	0	114
18:00	110	9	0	0	3	0	1	123	98	9	0	0	0	0	3	110
18:15	72	6	0	0	0	1	0	79	95	6	0	0	1	0	1	103
18:30	81	4	0	0	0	0	0	85	67	7	0	0	0	0	0	74
18:45	76	7	0	0	1	0	1	85	78	10	1	0	0	0	0	89
H/TOT	339	26	0	0	4	1	2	372	338	32	1	0	1	0	4	376
P/TOT	1480	172	16	2	13	13	6	1702	1424	196	9	1	14	6	9	1659



SITE: 4

DATE: 25/04/2023

LOCATION: West Lane / A651 Oxford Rd

DAY: Tuesday

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
07:15	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3
07:30	1	1	0	0	0	0	0	2	1	0	0	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
08:00	3	1	1	0	0	0	0	5	4	1	0	0	0	0	0	5
08:15	0	0	1	0	0	0	0	1	0	1	1	0	0	0	0	2
08:30	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1
08:45	2	1	0	0	0	0	0	3	1	1	1	0	0	0	0	3
09:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
09:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
P/TOT	9	3	2	0	0	0	0	14	17	4	2	0	0	0	0	23

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
15:15	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
15:30	3	0	0	0	0	0	0	3	1	0	0	0	0	0	0	1
15:45	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
16:00	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:15	2	0	0	0	0	0	0	2	0	1	0	0	0	0	0	1
16:30	0	2	0	0	0	0	0	2	0	1	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
17:00	3	0	0	0	0	0	0	3	1	1	0	0	0	0	0	2
17:15	4	1	0	0	0	0	0	5	3	0	0	0	0	0	0	3
17:30	2	0	0	0	0	0	0	2	4	0	0	0	0	0	0	4
17:45	3	1	0	0	0	0	0	4	1	1	0	0	0	0	0	2
18:00	3	1	0	0	0	0	0	4	1	1	0	0	0	0	0	2
18:15	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1
18:30	2	0	0	0	0	0	0	2	3	0	0	0	0	0	0	3
18:45	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
H/TOT	8	1	0	0	0	0	0	9	6	1	0	0	0	0	0	7
P/TOT	28	6	0	0	0	0	0	34	19	5	0	0	0	0	0	24



SITE: 4

LOCATION: West Lane / A651 Oxford Rd

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	173	36	2	1	2	2	0	216
07:15	270	51	3	0	2	0	0	326
07:30	285	48	5	0	2	0	0	340
07:45	281	49	4	0	2	1	1	338
08:00	351	44	3	1	1	0	2	402
08:15	288	44	9	3	2	3	0	349
08:30	267	33	6	0	1	1	0	308
08:45	232	43	5	1	3	0	0	284
09:00	161	35	4	3	2	0	0	205
09:15	146	41	8	3	1	0	1	200
H/TOT	307	76	12	6	3	0	1	405
P/TOT	2454	424	49	12	18	7	4	2968

PEAK HOUR	TOT
07:00 to 08:00	1220
07:15 to 08:15	1406
07:30 to 08:30	1429
07:45 to 08:45	1397
08:00 to 09:00	1343
08:15 to 09:15	1146
08:30 to 09:15	997
08:45 to 09:00	689
09:00 to 09:30	405
A.M. Peak	1429

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
15:00	195	21	3	2	3	0	0	224
15:15	216	26	4	1	0	2	2	251
15:30	260	45	1	1	3	3	0	313
15:45	205	52	4	0	2	1	2	266
16:00	206	50	2	1	2	4	1	266
16:15	243	43	3	0	4	3	3	299
16:30	253	46	3	0	1	2	1	306
16:45	264	37	1	1	1	0	2	306
17:00	301	31	4	0	2	2	2	342
17:15	309	43	1	2	1	2	5	363
17:30	290	27	1	0	2	3	0	323
17:45	301	17	2	0	1	1	0	322
18:00	287	29	0	0	3	0	5	324
18:15	234	17	0	0	1	1	1	254
18:30	206	19	0	0	0	0	0	225
18:45	191	19	1	0	1	3	4	219
H/TOT	918	84	1	0	5	4	10	1022
P/TOT	3961	522	30	8	27	27	28	4603

PEAK HOUR	TOT
15:00 to 16:00	1054
15:15 to 16:15	1096
15:30 to 16:30	1144
15:45 to 16:45	1137
16:00 to 17:00	1177
16:15 to 17:15	1253
16:30 to 17:30	1317
16:45 to 17:45	1334
17:00 to 18:00	1350
17:15 to 18:15	1332
17:30 to 18:30	1223
17:45 to 18:45	1125
18:00 to 19:00	1022
P.M. Peak	15564



APPENDIX C

Queue Lengths

Site: 1
 Location: Access/Cliffe Lane
 Date: 28 March 2023

ARM A	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0

ARM B	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0

Site: 1
 Location: Access/Cliffe Lane
 Date: 28 March 2023

ARM A	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0

ARM B	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0



Site: 1
Location: Access/Cliffe Lane
Date: 28 March 2023

	ARM C
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0



Site: 1
Location: Access/Cliffe Lane
Date: 28 March 2023

Time	ARM C
	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0

Site: 2
 Location: Woodlands Road/Cliffe Lane
 Date: 28 March 2023

ARM A	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0

ARM B	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0

Site: 2
 Location: Woodlands Road/Cliffe Lane
 Date: 28 March 2023

ARM A	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0

ARM B	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0

Site: 2
 Location: Woodlands Road/Cliffe Lane
 Date: 28 March 2023

Time	ARM C
	Lane 1
07:00	0
07:05	0
07:10	0
07:15	1
07:20	0
07:25	0
07:30	0
07:35	1
07:40	0
07:45	2
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	1
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	2

Site: 2
 Location: Woodlands Road/Cliffe Lane
 Date: 28 March 2023

Time	ARM C
	Lane 1
15:00	0
15:05	0
15:10	0
15:15	1
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	1
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	1
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	1

Site: 3
 Location: Woodlands Road/A643 Spen Lane
 Date: 28 March 2023

ARM A	
Time	Lane 1
07:00	0
07:05	0
07:10	1
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	1
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	1

ARM B	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0

Site: 3
 Location: Woodlands Road/A643 Spen Lane
 Date: 28 March 2023

ARM A	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	1
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	1
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	1
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	1
18:15	0
18:20	1
18:25	1
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	1

ARM B	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0



Site: 3
Location: Woodlands Road/A643 Spen Lane
Date: 28 March 2023

Time	ARM C
	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0



Site: 3
Location: Woodlands Road/A643 Spen Lane
Date: 28 March 2023

Time	ARM C
	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0

Site: 4
 Location: West Lane/Ferrand Lane/Latham Lane
 Date: 28 March 2023

ARM A	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0

ARM B	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0

Site: 4
 Location: West Lane/Ferrand Lane/Latham Lane
 Date: 28 March 2023

ARM A	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0

ARM B	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0



Site: 4
Location: West Lane/Ferrand Lane/Latham Lane
Date: 28 March 2023

ARM C	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	1
07:25	0
07:30	0
07:35	0
07:40	1
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	1
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	1

ARM D	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0



Site: 4
Location: West Lane/Ferrand Lane/Latham Lane
Date: 28 March 2023

ARM C	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0

ARM D	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0

Site: 5
 Location: Balme Road/A638 Bradford Road/High Street
 Date: 28 March 2023

ARM A		
Time	Lane 1	Lane 2
07:00	1	0
07:05	0	0
07:10	0	0
07:15	0	0
07:20	0	0
07:25	0	0
07:30	0	0
07:35	1	0
07:40	0	0
07:45	0	0
07:50	0	0
07:55	0	0
08:00	1	0
08:05	0	0
08:10	0	0
08:15	0	0
08:20	1	0
08:25	0	0
08:30	0	0
08:35	1	0
08:40	0	0
08:45	0	0
08:50	1	0
08:55	0	0
09:00	0	0
09:05	0	0
09:10	0	0
09:15	0	0
09:20	0	0
09:25	1	0
Max Queue	1	0

ARM B	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0

Site: 5
 Location: Balme Road/A638 Bradford Road/High Street
 Date: 28 March 2023

Time	ARM A	
	Lane 1	Lane 2
15:00	0	0
15:05	0	0
15:10	0	0
15:15	0	0
15:20	0	0
15:25	0	0
15:30	0	0
15:35	0	0
15:40	1	0
15:45	0	0
15:50	0	0
15:55	0	0
16:00	1	0
16:05	5	0
16:10	1	1
16:15	0	0
16:20	0	0
16:25	0	0
16:30	0	0
16:35	0	0
16:40	0	0
16:45	0	0
16:50	1	0
16:55	2	0
17:00	1	0
17:05	3	1
17:10	0	0
17:15	0	0
17:20	2	0
17:25	3	0
17:30	2	0
17:35	0	0
17:40	0	0
17:45	0	0
17:50	0	0
17:55	0	0
18:00	0	0
18:05	2	0
18:10	0	0
18:15	0	0
18:20	0	0
18:25	0	0
18:30	0	0
18:35	2	0
18:40	0	0
18:45	0	0
18:50	0	0
18:55	0	0
Max Queue	5	1

Time	ARM B
	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	3
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	3



Site: 5
Location: Balme Road/A638 Bradford Road/High Street
Date: 28 March 2023

ARM C	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0

ARM D	
Time	Lane 1
07:13:35	2
07:32:58	2
07:34:22	0
07:39:11	7
07:40:23	5
07:46:43	4
07:50:35	0
07:54:13	6
07:57:05	4
07:58:03	0
08:01:21	1
08:04:07	1
08:06:01	0
08:07:35	1
08:08:40	3
08:09:50	0
08:10:25	2
08:11:30	2
08:12:33	0
08:14:33	1
08:18:42	0
08:20:15	3
08:23:53	3
08:28:35	2
08:31:20	4
08:36:53	1
08:41:13	0
08:55:05	0
08:58:53	1
09:21:38	2
09:29:59	0
Max Queue	7

Site: 5
 Location: Balme Road/A638 Bradford Road/High Street
 Date: 28 March 2023

ARM C	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	1
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	1

ARM D	
Time	Lane 1
15:01:12	1
15:04:36	0
15:06:55	2
15:13:17	0
15:16:31	1
15:21:42	0
15:26:14	4
15:32:02	1
15:34:11	7
15:35:22	5
15:38:43	6
15:40:44	9
15:50:04	1
15:55:03	0
16:03:02	0
16:03:54	0
16:05:30	0
16:09:12	3
16:10:15	1
16:12:06	4
16:15:12	0
16:18:12	4
16:20:08	7
16:28:00	4
16:33:47	1
16:37:23	0
16:42:02	3
16:52:40	0
16:58:32	1
17:06:20	5
17:08:27	4
17:11:27	4
17:15:25	2
17:17:57	1
17:21:38	1
17:25:19	2
17:30:58	2
17:37:15	0
17:41:46	0
17:43:32	0
17:45:32	3
17:47:23	3
17:48:03	0
17:49:13	1
17:50:15	0
17:54:57	2
18:01:08	0
18:05:22	3
18:08:48	1
18:40:34	1
18:47:24	0
18:59:01	0
Max Queue	9

Site: 6
 Location: A643 Spen Lane/A651 Oxford Road/A643 Church Lane
 Date: 28 March 2023

ARM A	
Time	Lane 1
07:00	5
07:05	7
07:10	10
07:15	8
07:20	7
07:25	7
07:30	9
07:35	8
07:40	8
07:45	10
07:50	11
07:55	11
08:00	9
08:05	11
08:10	8
08:15	10
08:20	9
08:25	7
08:30	7
08:35	9
08:40	8
08:45	8
08:50	9
08:55	9
09:00	10
09:05	10
09:10	9
09:15	4
09:20	5
09:25	12
Max Queue	12

ARM B		
Time	Lane 1	Lane 2
07:00	7	0
07:05	6	1
07:10	8	1
07:15	6	0
07:20	10	1
07:25	8	1
07:30	9	1
07:35	14	3
07:40	9	1
07:45	7	1
07:50	8	1
07:55	9	1
08:00	8	0
08:05	8	0
08:10	7	2
08:15	8	1
08:20	8	2
08:25	9	2
08:30	4	1
08:35	7	1
08:40	8	1
08:45	8	1
08:50	7	3
08:55	8	1
09:00	7	1
09:05	10	2
09:10	6	0
09:15	4	0
09:20	3	0
09:25	7	0
Max Queue	14	3

Site: 6
 Location: A643 Spen Lane/A651 Oxford Road/A643 Church Lane
 Date: 28 March 2023

ARM A	
Time	Lane 1
15:00	11
15:05	9
15:10	10
15:15	11
15:20	10
15:25	12
15:30	10
15:35	8
15:40	10
15:45	11
15:50	11
15:55	10
16:00	11
16:05	10
16:10	11
16:15	12
16:20	11
16:25	12
16:30	11
16:35	12
16:40	11
16:45	10
16:50	10
16:55	9
17:00	11
17:05	11
17:10	10
17:15	13
17:20	15
17:25	13
17:30	11
17:35	11
17:40	12
17:45	11
17:50	10
17:55	12
18:00	9
18:05	10
18:10	9
18:15	10
18:20	11
18:25	11
18:30	8
18:35	8
18:40	6
18:45	7
18:50	9
18:55	5
Max Queue	15

ARM B		
Time	Lane 1	Lane 2
15:00	10	1
15:05	8	0
15:10	8	1
15:15	9	0
15:20	7	1
15:25	8	0
15:30	7	2
15:35	8	0
15:40	6	1
15:45	7	1
15:50	8	2
15:55	7	1
16:00	8	1
16:05	8	0
16:10	7	2
16:15	6	1
16:20	7	1
16:25	8	0
16:30	9	1
16:35	8	0
16:40	9	2
16:45	7	2
16:50	8	1
16:55	7	0
17:00	6	0
17:05	9	4
17:10	7	2
17:15	6	1
17:20	6	1
17:25	7	1
17:30	6	1
17:35	9	1
17:40	8	1
17:45	7	1
17:50	9	1
17:55	9	1
18:00	7	1
18:05	8	0
18:10	6	2
18:15	8	2
18:20	9	3
18:25	7	2
18:30	6	1
18:35	5	1
18:40	6	0
18:45	7	1
18:50	6	1
18:55	5	1
Max Queue	10	4

Site: 6
 Location: A643 Spen Lane/A651 Oxford Road/A643 Church Lane
 Date: 28 March 2023

ARM C	
Time	Lane 1
07:00	4
07:05	8
07:10	9
07:15	10
07:20	8
07:25	11
07:30	11
07:35	11
07:40	12
07:45	10
07:50	10
07:55	11
08:00	10
08:05	8
08:10	7
08:15	8
08:20	7
08:25	11
08:30	11
08:35	10
08:40	10
08:45	11
08:50	11
08:55	9
09:00	5
09:05	9
09:10	8
09:15	6
09:20	8
09:25	5
Max Queue	12

ARM D	
Time	Lane 1
07:00	7
07:05	5
07:10	10
07:15	11
07:20	13
07:25	12
07:30	5
07:35	12
07:40	14
07:45	12
07:50	14
07:55	15
08:00	16
08:05	12
08:10	14
08:15	9
08:20	11
08:25	11
08:30	12
08:35	12
08:40	14
08:45	13
08:50	12
08:55	7
09:00	13
09:05	13
09:10	14
09:15	5
09:20	6
09:25	3
Max Queue	16



Site: 6
 Location: A643 Spen Lane/A651 Oxford Road/A643 Church Lane
 Date: 28 March 2023

ARM C	
Time	Lane 1
15:00	11
15:05	8
15:10	9
15:15	10
15:20	10
15:25	11
15:30	10
15:35	7
15:40	8
15:45	10
15:50	11
15:55	10
16:00	8
16:05	10
16:10	11
16:15	10
16:20	9
16:25	11
16:30	10
16:35	11
16:40	8
16:45	6
16:50	7
16:55	7
17:00	6
17:05	7
17:10	10
17:15	8
17:20	8
17:25	6
17:30	9
17:35	9
17:40	9
17:45	8
17:50	8
17:55	6
18:00	9
18:05	5
18:10	8
18:15	8
18:20	6
18:25	10
18:30	4
18:35	4
18:40	7
18:45	5
18:50	6
18:55	4
Max Queue	11

ARM C	
Time	Lane 1
15:00	12
15:05	10
15:10	14
15:15	10
15:20	11
15:25	12
15:30	15
15:35	12
15:40	13
15:45	14
15:50	15
15:55	12
16:00	8
16:05	13
16:10	15
16:15	14
16:20	15
16:25	14
16:30	14
16:35	13
16:40	15
16:45	14
16:50	15
16:55	14
17:00	13
17:05	13
17:10	15
17:15	15
17:20	14
17:25	15
17:30	14
17:35	15
17:40	13
17:45	12
17:50	13
17:55	12
18:00	14
18:05	7
18:10	13
18:15	13
18:20	12
18:25	12
18:30	7
18:35	5
18:40	9
18:45	8
18:50	8
18:55	7
Max Queue	15

Site: 4
 Location: West Lane / A651 Oxford Rd
 Date: 25 April 2023

ARM A	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	2
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	1
09:15	0
09:20	0
09:25	0
Max Queue	2

ARM B	
Time	Lane 1
07:00	1
07:05	0
07:10	1
07:15	0
07:20	1
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	2
07:55	2
08:00	3
08:05	7
08:10	6
08:15	0
08:20	0
08:25	3
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	2
09:00	0
09:05	0
09:10	3
09:15	0
09:20	0
09:25	1
Max Queue	7

Site: 4
 Location: West Lane / A651 Oxford Rd
 Date: 25 April 2023

ARM A	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	1
15:20	0
15:25	0
15:30	7
15:35	0
15:40	0
15:45	0
15:50	0
15:55	1
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	2
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	4
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	1
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	7

ARM B	
Time	Lane 1
15:00	0
15:05	1
15:10	3
15:15	0
15:20	0
15:25	4
15:30	0
15:35	0
15:40	2
15:45	0
15:50	0
15:55	2
16:00	0
16:05	2
16:10	0
16:15	0
16:20	0
16:25	0
16:30	1
16:35	0
16:40	2
16:45	1
16:50	1
16:55	0
17:00	3
17:05	0
17:10	5
17:15	0
17:20	1
17:25	5
17:30	1
17:35	2
17:40	2
17:45	0
17:50	1
17:55	0
18:00	2
18:05	3
18:10	0
18:15	0
18:20	0
18:25	0
18:30	1
18:35	0
18:40	0
18:45	0
18:50	0
18:55	1
Max Queue	5



Site: 4
 Location: West Lane / A651 Oxford Rd
 Date: 25 April 2023

ARM C	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	0
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	0

ARM D	
Time	Lane 1
07:00	0
07:05	0
07:10	0
07:15	0
07:20	0
07:25	0
07:30	1
07:35	0
07:40	0
07:45	0
07:50	0
07:55	0
08:00	0
08:05	0
08:10	0
08:15	0
08:20	0
08:25	0
08:30	0
08:35	0
08:40	0
08:45	0
08:50	0
08:55	0
09:00	0
09:05	0
09:10	0
09:15	0
09:20	0
09:25	0
Max Queue	1

Site: 4
 Location: West Lane / A651 Oxford Rd
 Date: 25 April 2023

ARM C	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	2
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	2

ARM D	
Time	Lane 1
15:00	0
15:05	0
15:10	0
15:15	0
15:20	0
15:25	0
15:30	0
15:35	0
15:40	0
15:45	0
15:50	0
15:55	0
16:00	0
16:05	0
16:10	0
16:15	0
16:20	0
16:25	0
16:30	0
16:35	0
16:40	0
16:45	0
16:50	0
16:55	0
17:00	0
17:05	0
17:10	0
17:15	0
17:20	0
17:25	0
17:30	0
17:35	0
17:40	0
17:45	0
17:50	0
17:55	0
18:00	0
18:05	0
18:10	0
18:15	0
18:20	0
18:25	0
18:30	0
18:35	0
18:40	0
18:45	0
18:50	0
18:55	0
Max Queue	0

Site: 5
 Location: Balme Road/A638 Bradford Road/High Street
 Date: 28 March 2023

ARM D		
Time	NB	SB
07:00	1	0
07:15	0	0
07:30	2	2
07:45	4	1
08:00	2	9
08:15	0	4
08:30	2	1
08:45	1	1
09:00	0	0
09:15	1	1

ARM D		
Time	NB	SB
15:00	4	1
15:15	1	2
15:30	6	2
15:45	2	1
16:00	6	2
16:15	3	1
16:30	1	3
16:45	2	0
17:00	3	0
17:15	2	3
17:30	2	2
17:45	3	3
18:00	2	2
18:15	0	0
18:30	1	0
18:45	0	2

Site: 6
 Location: A643 Spen Lane/A651 Oxford Road/A643 Church Lane
 Date: 28 March 2023

ARM A		
Time	NB	SB
07:00	0	0
07:15	0	1
07:30	1	1
07:45	0	2
08:00	0	0
08:15	1	0
08:30	2	0
08:45	0	3
09:00	0	0
09:15	0	0

ARM B		
Time	EB	WB
07:00	1	0
07:15	0	0
07:30	0	1
07:45	1	0
08:00	0	0
08:15	0	0
08:30	6	0
08:45	0	5
09:00	0	2
09:15	0	1

ARM C		
Time	NB	SB
07:00	0	0
07:15	1	1
07:30	0	1
07:45	1	1
08:00	1	0
08:15	0	0
08:30	4	0
08:45	3	1
09:00	1	1
09:15	0	0

ARM D		
Time	EB	WB
07:00	0	0
07:15	0	1
07:30	2	0
07:45	4	3
08:00	0	0
08:15	1	0
08:30	0	0
08:45	1	1
09:00	0	0
09:15	0	0

ARM A		
Time	NB	SB
15:00	2	1
15:15	0	3
15:30	0	0
15:45	0	2
16:00	0	2
16:15	0	0
16:30	0	0
16:45	0	1
17:00	0	0
17:15	0	1
17:30	0	1
17:45	0	1
18:00	0	0
18:15	0	0
18:30	0	1
18:45	1	1

ARM B		
Time	EB	WB
15:00	2	1
15:15	3	6
15:30	0	0
15:45	0	2
16:00	0	1
16:15	0	1
16:30	0	2
16:45	1	0
17:00	0	2
17:15	3	1
17:30	0	1
17:45	1	0
18:00	1	2
18:15	1	3
18:30	0	0
18:45	0	1

ARM C		
Time	NB	SB
15:00	6	0
15:15	0	3
15:30	1	1
15:45	1	0
16:00	1	0
16:15	1	1
16:30	2	0
16:45	0	1
17:00	3	0
17:15	1	0
17:30	2	1
17:45	3	0
18:00	1	0
18:15	2	0
18:30	0	0
18:45	0	2

ARM D		
Time	EB	WB
15:00	1	0
15:15	0	0
15:30	0	0
15:45	1	1
16:00	0	0
16:15	0	0
16:30	0	0
16:45	1	2
17:00	0	0
17:15	1	0
17:30	1	0
17:45	0	0
18:00	0	0
18:15	0	0
18:30	0	0
18:45	0	0



Appendix C

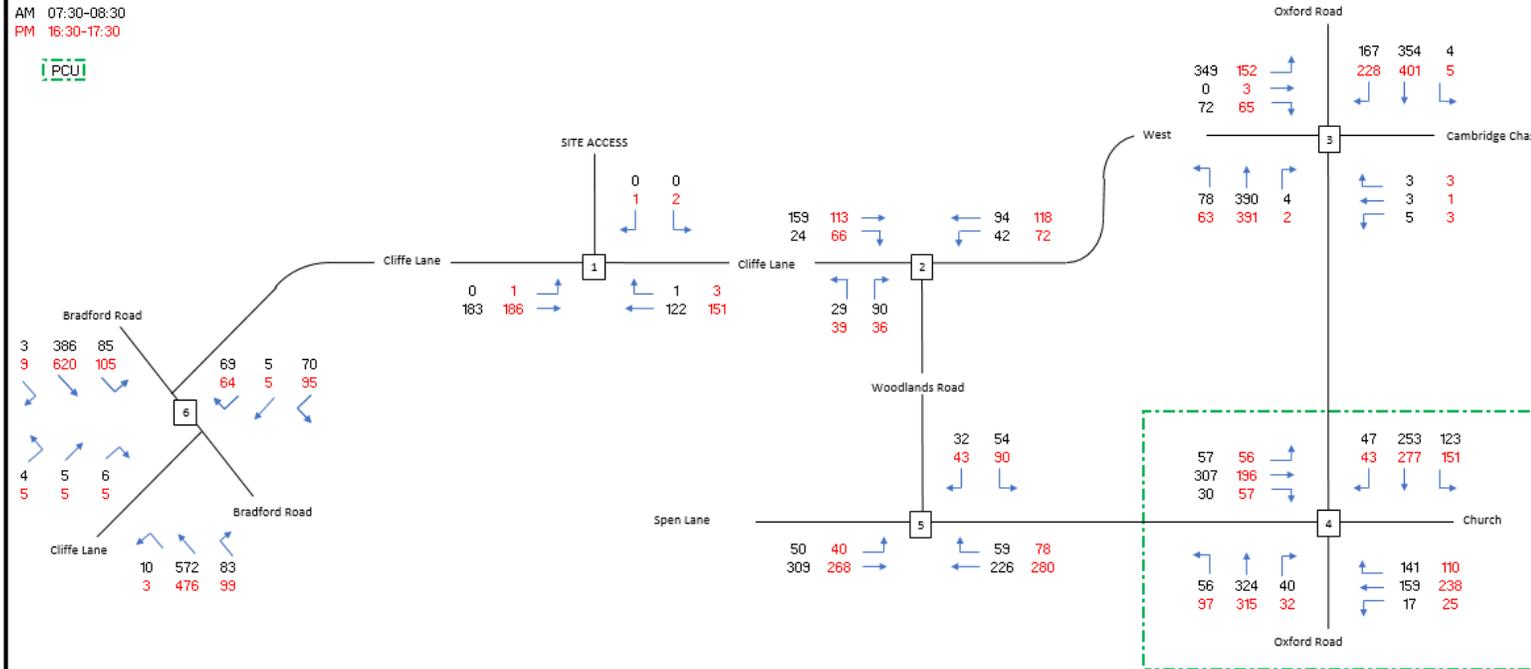
Traffic Figure Diagrams

Cliffe Lane, Gomersal

**Peak Hour Traffic Survey
Wednesday 27th of March 2023**

AM 07:30-08:30
PM 16:30-17:30

PCU



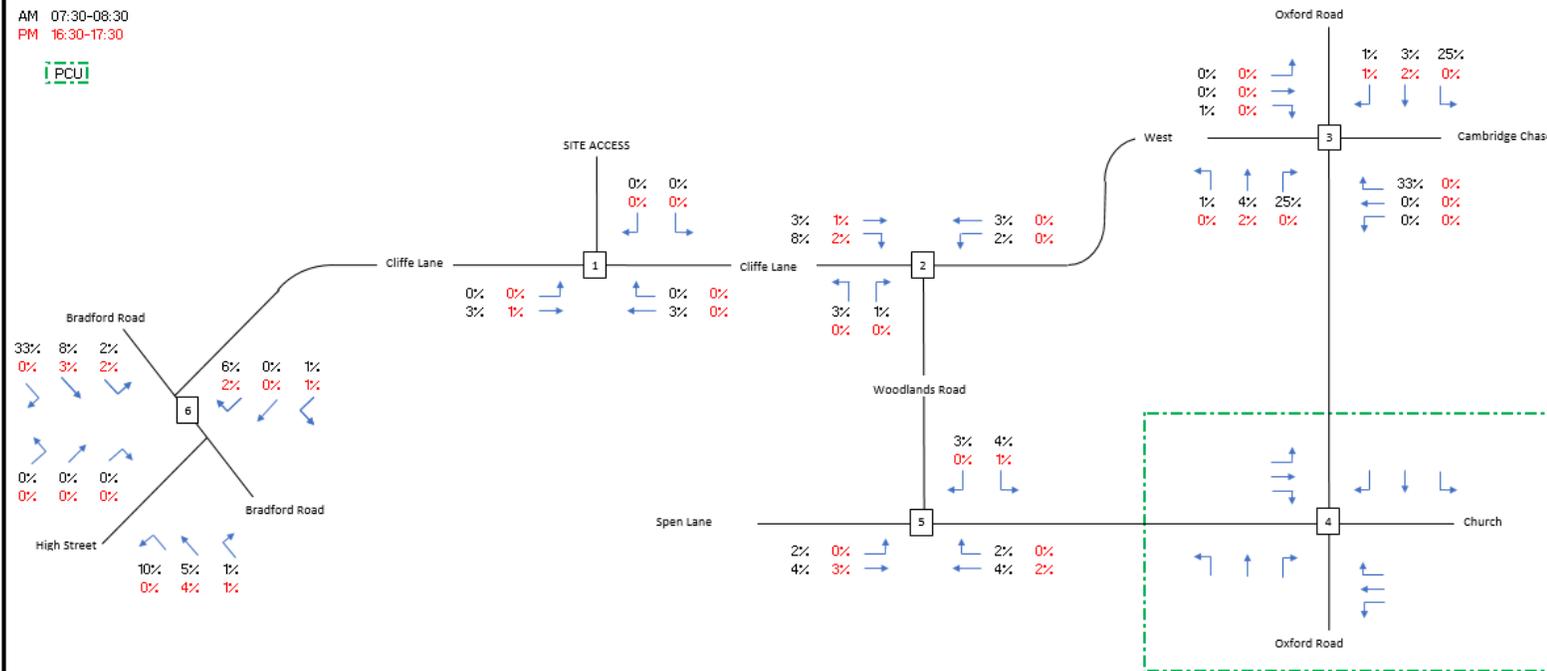
Rev	Amendment	Drawn	Date	Checked
Scale	NTS	Draw by	JB	
Drawing Size	N/A	Checked by	SB	
Date	07/2023	Approved by	SB	
Drawing Number		Rev.		
Figure 1		-		

Cliffe Lane, Gomersal

**Peak Hour Traffic Survey
 HGV %
 Wednesday 27th of March 2023**

AM 07:30-08:30
 PM 16:30-17:30

PCU

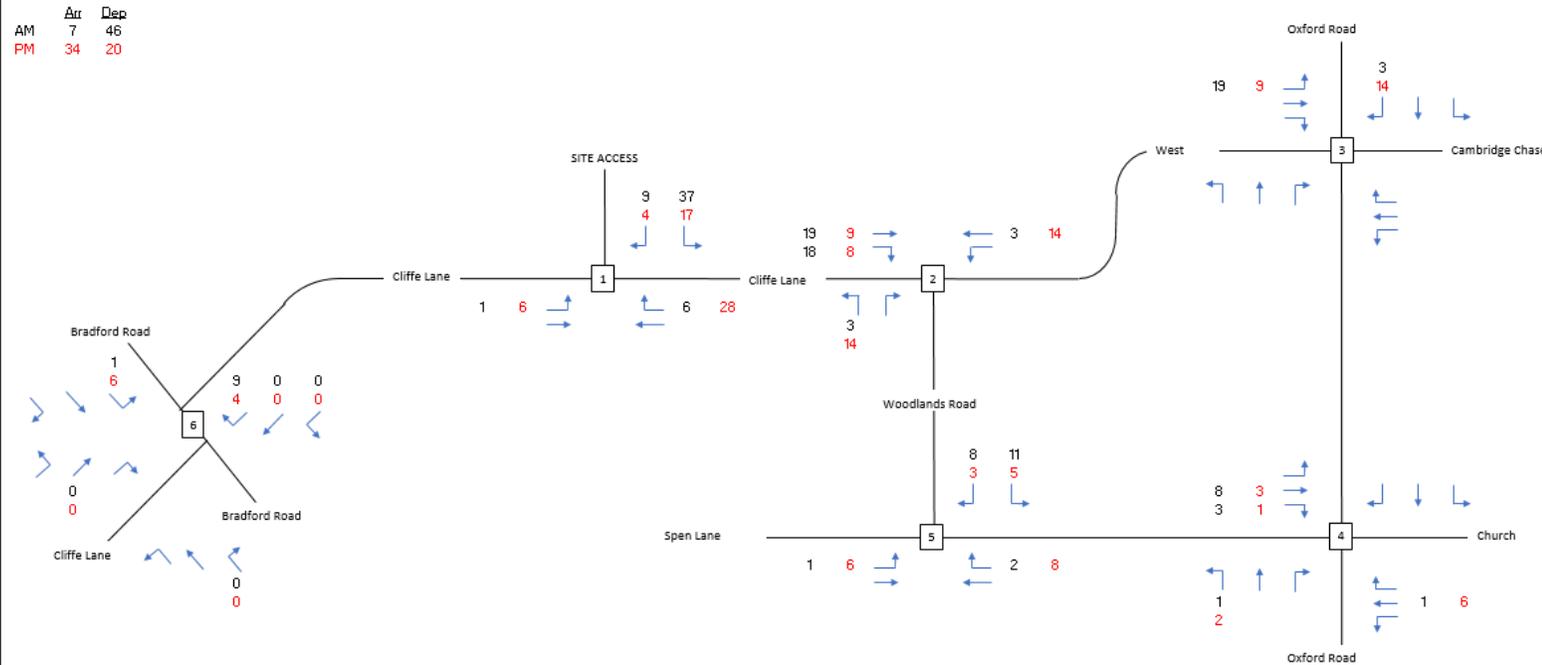


Rev	Amendment	Drawn	Date	Checked
Scale	NTS		Drawn by	JB
Drawing Size	N/A		Checked by	SB
Date	07/2023		Approved by	SB

Drawing Number	Rev.
Figure 2	-

Cliffe Lane, Gomersal

Development flows, based on rates approved by Kirklees Council



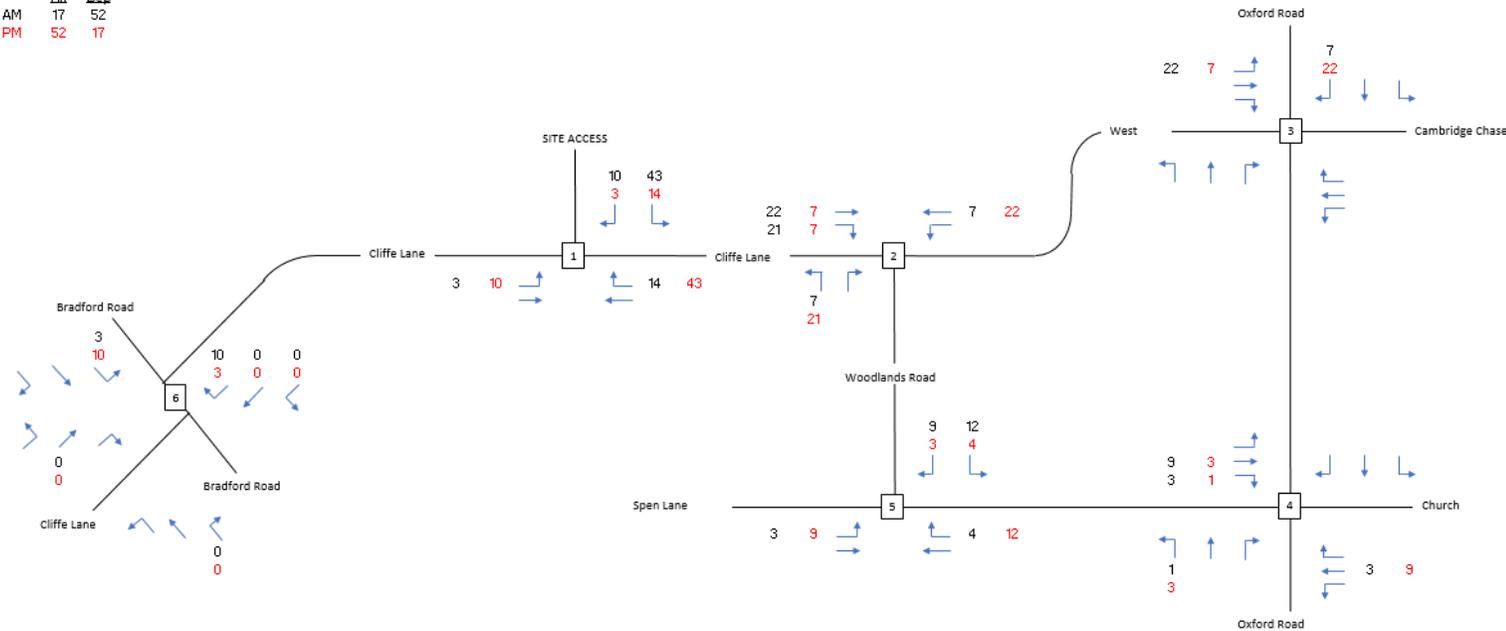
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Rev	Amendment	Drawn	Date	Checked
Scale	NTS		Drawn by	JB
Drawing Size	N/A		Checked by	SB
Date	07/2023		Approved by	SB
Drawing Number			Rev.	
Figure 3			-	

Cliffe Lane, Gomersal

Development flows based on Kirklees rates

AM Arr Dep
 17 52
 PM 52 17



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Rev	Amendment	Drawn	Date	Checked
Scale	NTS	Draw by	JB	
Drawing Size	N/A	Checked by	SB	
Date	07/2023	Approved by	SB	

Drawing Number	Rev.
Figure 4	-



Appendix D

Proposed Site Layout

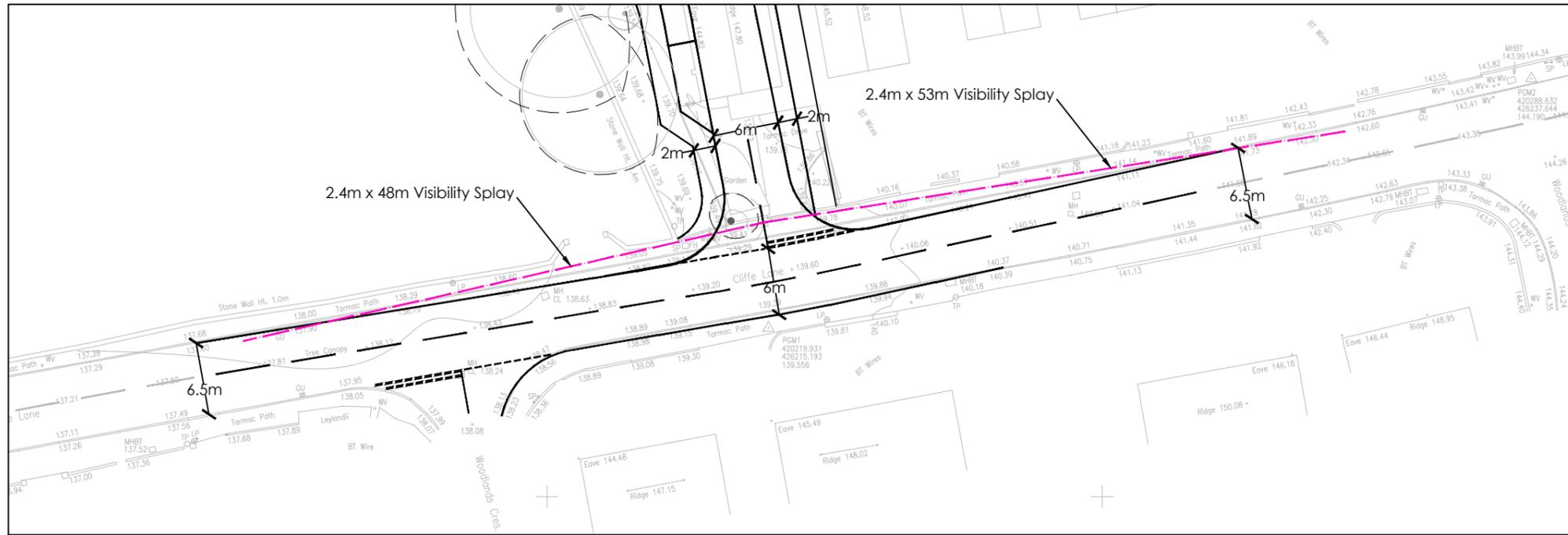


Appendix E

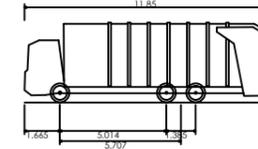
Drawing 152130-001 – Proposed Junction Arrangement

Drawing 152130-002 – Swept Path Analysis

Drawing 152130-003 – Visibility Plan



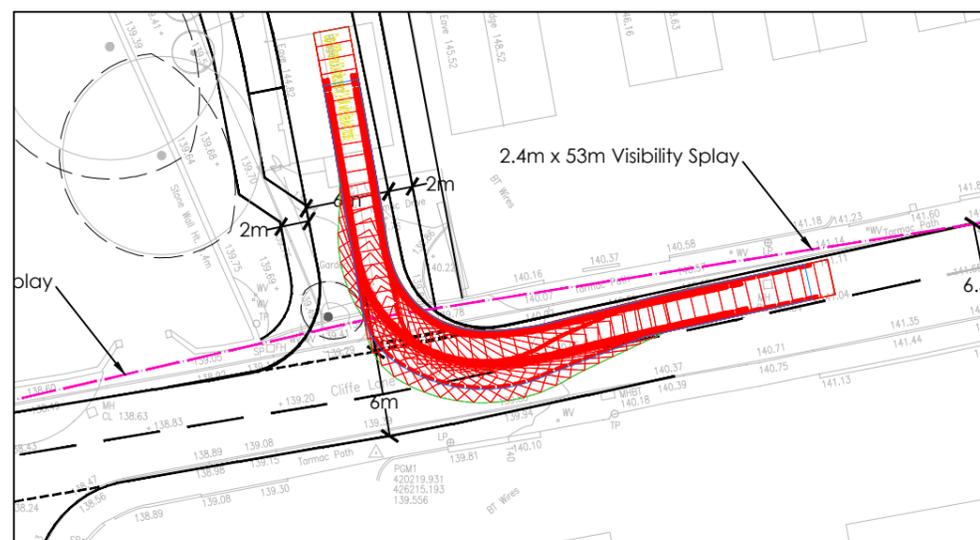
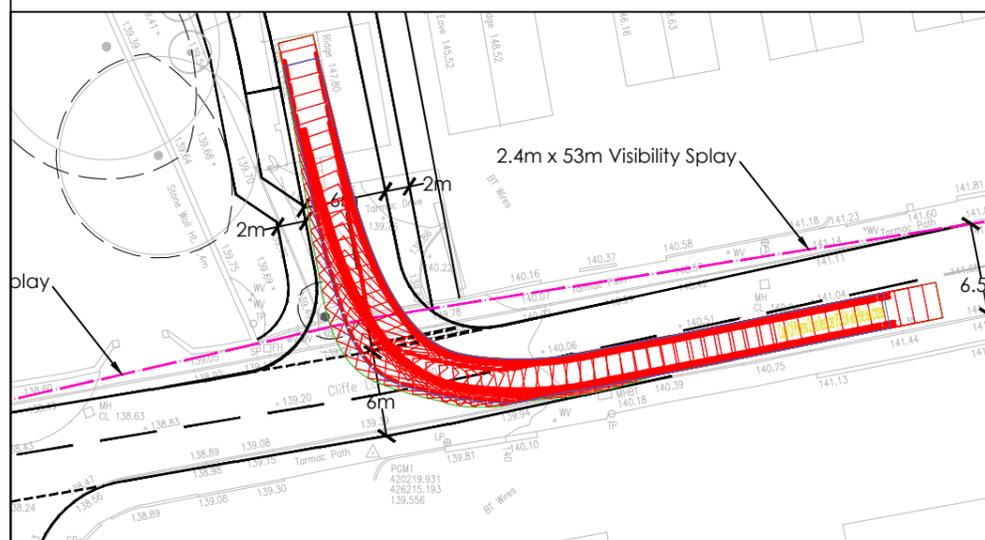
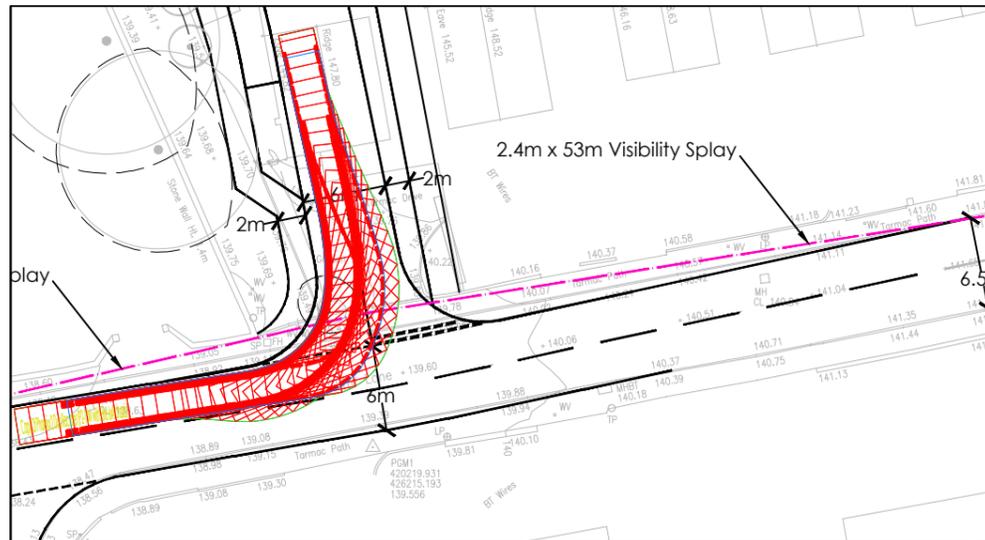
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Copy Of Phoenix 2 Duo Recycler (P2-15W with Elite 6x4 chassis)
 Overall Length 11.850m
 Overall Width 2.530m
 Overall Body Height 3.756m
 Min Body Ground Clearance 0.309m
 Track Width 2.530m
 Lock to lock time 4.00s
 Wall to Wall Turning Radius 11.035m

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Rev	Amendment	Drawn	Date	Checked
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Highways | Traffic | Transportation | Water

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Project Name
**Cliffe Lane
 Gomersal**

Drawing Title
**Access Arrangement
 Approved (Planning Ref 2019/90902)**

Scale 1:500	Drawn By SB
Drawing Size A3	Checked By KS
Date July 2023	Approved By KS

Drawing Number 152130-001	Rev
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Car and Refuse Vehicle

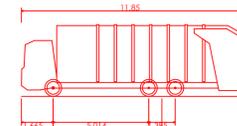
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- No liability whatsoever is accepted by the consultant for any error or omissions.
- The consultant accepts no liability for any vehicle specification errors within the vehicle track software used and / or its vehicle libraries.
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- Service connections are not shown but their presence should be anticipated.
- Reference to any third party equipment shown on this drawing was only relevant at the time the drawing was prepared.
- It is the client's responsibility to ensure that any equipment ordered meets the design.



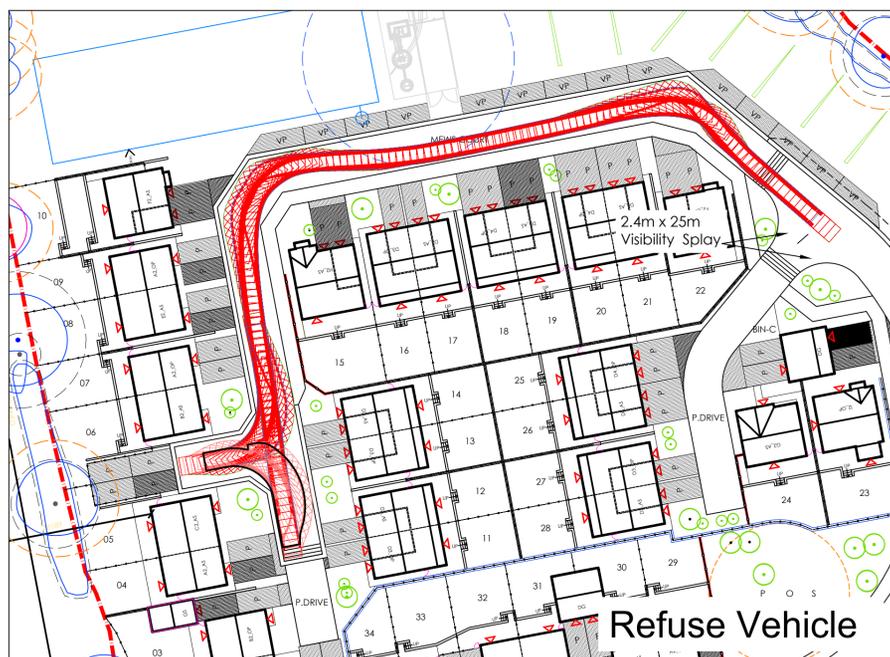
 Large Car (2006)

Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m



 Copy Of Phoenix 2 Duo Recycler (P2-15W with Elite 6x4 chassis)

Overall Length	11.850m
Overall Width	2.530m
Overall Body Height	3.750m
Min Body Ground Clearance	0.309m
Track Width	2.530m
Lock to lock time	4.00s
Wall to Wall Turning Radius	11.035m



Refuse Vehicle



Refuse Vehicle

Rev	Amendment	Drawn	Date	Checked



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Project Title	Cliffe Lane Gomersal		
Drawing Title	Swept Path Analysis		
Scale	1:500	Drawn By	SB
Drawing Size	A1	Checked By	KS
Date	July 2023	Approved By	KS
Drawing Number	152130-002	Rev	



Forward Visibility measured at 25m stopping sight distance for a design speed of 20mph. (Magenta Lines)

- Sanderson Associates Consulting Engineers ("the consultant"), has not checked or verified, and shall have no liability whatsoever for any inaccuracies which may be attributable to any data, reports, base plan(s) and drawings provided by the client, or purchased by the consultant on the client's behalf, that may have been utilised within this drawing.
- The consultant shall not be liable for the use by any person of any document for any purpose other than that for which the same were provided by the consultant.
- No liability whatsoever is accepted by the consultant for any error or omissions.
- The consultant accepts no liability for any vehicle specification errors within the vehicle track software used and / or its vehicle libraries.
- The locations of utilities apparatus, if shown, is reproduced from plans supplied to the consultant, although care has been taken when duplicating this information. These locations are approximate only and no guarantee can be given for their accuracy. It is the client's or its appointed agent/contractors responsibility to verify the exact locations on site by hand dug trial holes or other appropriate means prior to mechanical excavation.
- Service connections are not shown but their presence should be anticipated.
- Reference to any third party equipment shown on this drawing was only relevant at the time the drawing was prepared.
- It is the client's responsibility to ensure that any equipment ordered meets the design.

Rev	Amendment	Drawn	Date	Checked



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Project Title	Cliffe Lane Gomersal		
Drawing Title	Visibility Plan		
Scale	1:500	Drawn By	SB
Drawing Size	A1	Checked By	KS
Date	July 2023	Approved By	KS
Drawing Number	152130-003		Rev



Appendix F

Census Origin and Destination Table

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

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

place of work : 2011 super output area - middle layer	usual residence E02002274 : Kirklees 004	%	Coordinates		Route Assignment						
			LATITUDE	LONGITUDE	Bradford Rd (A638) (N)	Bradford Rd (A638) (S)	Spenn Lane (A643) (W)	Oxford Road (A651) (S)	Oxford Road (A651) (N)	Church Lane (A643) (E)	High Street
E02002272 : Kirklees 002	119	6.8%	53.73465878	-1.65609917					3.4%	3.4%	
E02002275 : Kirklees 005	110	6.3%	53.72419675	-1.71842465			6.3%				
E02006875 : Leeds 111	108	6.2%	53.79781511	-1.54577552					6.2%		
E02002274 : Kirklees 004	69	3.9%	53.73038816	-1.68852747			1.0%	1.0%	1.0%	1.0%	
E02002279 : Kirklees 009	60	3.4%	53.71335623	-1.68870491			3.4%				
E02002273 : Kirklees 003	55	3.1%	53.73127465	-1.74317935	3.1%						
E02002221 : Bradford 039	53	3.0%	53.79808185	-1.74691937					3.0%		
E02002239 : Bradford 057	51	2.9%	53.76659917	-1.7243426					2.9%		
E02002285 : Kirklees 015	51	2.9%	53.70182178	-1.69277268			2.9%				
E02002271 : Kirklees 001	50	2.9%	53.75123364	-1.69108333					2.9%		
E02002281 : Kirklees 011	45	2.6%	53.7109263	-1.66861602				2.6%			
E02002299 : Kirklees 029	45	2.6%	53.662793	-1.77448292	2.6%						
E02002287 : Kirklees 017	44	2.5%	53.69620544	-1.63817365						2.5%	
E02002242 : Bradford 060	43	2.5%	53.75768172	-1.75962804	2.5%						
E02002280 : Kirklees 010	43	2.5%	53.7119505	-1.64119654						2.5%	
E02002286 : Kirklees 016	35	2.0%	53.69840265	-1.65472603						2.0%	
E02006876 : Leeds 112	33	1.9%	53.7816801	-1.53015524					1.9%		
E02002251 : Calderdale 008	32	1.8%	53.730992	-1.86192779	0.9%		0.9%				
E02002226 : Bradford 044	28	1.6%	53.7878762	-1.77491911	1.6%						
E02002227 : Bradford 045	28	1.6%	53.78437483	-1.73884003					1.6%		
E02002422 : Leeds 093	27	1.5%	53.75949756	-1.59322106					1.5%		
E02002435 : Leeds 106	26	1.5%	53.73611635	-1.60203764						1.5%	
E02002419 : Leeds 090	25	1.4%	53.76940587	-1.57263915					1.4%		
E02002424 : Leeds 095	25	1.4%	53.75422183	-1.61059206					1.4%		
E02002433 : Leeds 104	25	1.4%	53.7414381	-1.60113144					1.4%		
E02002294 : Kirklees 024	23	1.3%	53.67688856	-1.63100505				1.3%			
E02002411 : Leeds 082	23	1.3%	53.78274552	-1.5605362					1.3%		
E02002276 : Kirklees 006	21	1.2%	53.72222339	-1.65190272						1.2%	
E02002283 : Kirklees 013	21	1.2%	53.70560446	-1.6338325						1.2%	
E02002312 : Kirklees 042	20	1.1%	53.63767906	-1.77420086	1.1%						
E02002400 : Leeds 071	20	1.1%	53.79632768	-1.58368741					1.1%		
E02002219 : Bradford 037	19	1.1%	53.80235348	-1.78937275	0.5%				0.5%		
E02002425 : Leeds 096	18	1.0%	53.75391308	-1.65403527					1.0%		
E02002235 : Bradford 053	17	1.0%	53.77419524	-1.7495049	1.0%						
E02002258 : Calderdale 015	17	1.0%	53.71907182	-1.77917674			1.0%				
E02002392 : Leeds 063	17	1.0%	53.8034058	-1.56235782					1.0%		
E02002451 : Wakefield 014	17	1.0%	53.70050592	-1.52545946					1.0%		
E02002454 : Wakefield 017	17	1.0%	53.68777487	-1.49435695					1.0%		
E02002228 : Bradford 046	16	0.9%	53.78496952	-1.71683045					0.9%		
E02002293 : Kirklees 023	16	0.9%	53.68049599	-1.66496402				0.9%			
E02002431 : Leeds 102	16	0.9%	53.74518118	-1.58845184					0.5%	0.5%	
E02002262 : Calderdale 019	15	0.9%	53.70953965	-1.78738712			0.9%				
E02002412 : Leeds 083	15	0.9%	53.78145464	-1.60149151					0.9%		
E02002202 : Bradford 020	14	0.8%	53.83324811	-1.78329004					0.8%		
E02002277 : Kirklees 007	14	0.8%	53.71464719	-1.61984124						0.8%	
E02002295 : Kirklees 025	14	0.8%	53.67209457	-1.75915999	0.8%						
E02002296 : Kirklees 026	14	0.8%	53.67390249	-1.69597234	0.4%			0.4%			
E02002420 : Leeds 091	14	0.8%	53.76841393	-1.55921333					0.8%		
E02002230 : Bradford 048	13	0.7%	53.78121345	-1.75784722	0.7%						
E02002292 : Kirklees 022	13	0.7%	53.67991278	-1.75561262	0.7%						
E02002303 : Kirklees 033	13	0.7%	53.65368664	-1.81879305	0.7%						
E02002357 : Leeds 028	12	0.7%	53.83723371	-1.6287025					0.7%		
E02002416 : Leeds 087	12	0.7%	53.7689682	-1.41579221					0.7%		
E02002243 : Bradford 061	11	0.6%	53.7399377	-1.76728685	0.6%						
E02002284 : Kirklees 014	11	0.6%	53.70193351	-1.61173237						0.6%	
E02002241 : Bradford 059	10	0.6%	53.75992002	-1.79078494	0.6%						
E02002268 : Calderdale 025	10	0.6%	53.68276837	-1.83934074	0.6%						
E02002395 : Leeds 066	10	0.6%	53.80316921	-1.69112478					0.6%		
E02002289 : Kirklees 019	9	0.5%	53.68671924	-1.64937358				0.5%			
Total	1,752	100.0%			18.5%	0.0%	16.3%	6.7%	41.3%	17.1%	0.0%



Appendix G

Junctions 9 Output – Site Access/Cliffe Lane

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Site Access - Cliffe Lane.j9
Path: V:\152000\152130_Cliffe_Lane_Gomersal\07 Design and other outputs\Traffic programs\Junctions
Report generation date: 28/04/2023 10:07:28

- »Site Access - Cliffe Lane - 2023 Base, AM
- »Site Access - Cliffe Lane - 2023 Base, PM
- »Site Access - Cliffe Lane - 2028 Base, AM
- »Site Access - Cliffe Lane - 2028 Base, PM
- »Site Access - Cliffe Lane - 2023 Base + Dev Approved Rates, AM
- »Site Access - Cliffe Lane - 2023 Base + Dev Approved Rates, PM
- »Site Access - Cliffe Lane - 2023 Base + Dev Kirklees Rates, AM
- »Site Access - Cliffe Lane - 2023 Base + Dev Kirklees Rates, PM
- »Site Access - Cliffe Lane - 2028 Base + Dev Approved Rates, AM
- »Site Access - Cliffe Lane - 2028 Base + Dev Approved Rates, PM
- »Site Access - Cliffe Lane - 2028 Base + Dev Kirklees Rates, AM
- »Site Access - Cliffe Lane - 2028 Base + Dev Kirklees Rates, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
Site Access - Cliffe Lane - 2023 Base										
Stream B-AC	D1	0.0	0.00	0.00	A	D2	0.0	0.00	0.00	A
Stream C-AB		0.0	5.37	0.00	A		0.0	5.26	0.01	A
Site Access - Cliffe Lane - 2028 Base										
Stream B-AC	D3	0.0	0.00	0.00	A	D4	0.0	0.00	0.00	A
Stream C-AB		0.0	5.36	0.00	A		0.0	5.25	0.01	A
Site Access - Cliffe Lane - 2023 Base + Dev Approved Rates										
Stream B-AC	D9	0.1	7.47	0.10	A	D10	0.1	7.21	0.05	A
Stream C-AB		0.0	5.42	0.01	A		0.1	5.48	0.06	A
Site Access - Cliffe Lane - 2023 Base + Dev Kirklees Rates										
Stream B-AC	D11	0.1	7.58	0.11	A	D12	0.0	7.15	0.04	A
Stream C-AB		0.0	5.48	0.03	A		0.1	5.65	0.09	A
Site Access - Cliffe Lane - 2028 Base + Dev Approved Rates										
Stream B-AC	D13	0.1	7.50	0.10	A	D14	0.1	7.24	0.05	A
Stream C-AB		0.0	5.41	0.01	A		0.1	5.47	0.06	A
Site Access - Cliffe Lane - 2028 Base + Dev Kirklees Rates										
Stream B-AC	D15	0.1	7.61	0.11	A	D16	0.0	7.19	0.04	A
Stream C-AB		0.0	5.47	0.03	A		0.1	5.63	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

Title	Site Access - Cliffe Lane
Location	Gomersal
Site number	
Date	27/04/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	FAIRHURST\ashley.armitage
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2023 Base	AM	ONE HOUR	07:15	08:45	15	✓		
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓		
D3	2028 Base	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1*1.0367
D4	2028 Base	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2*1.0375
D5	Dev - Approved Rates	AM	ONE HOUR	07:15	08:45	15			
D6	Dev - Approved Rates	PM	ONE HOUR	16:15	17:45	15			
D7	Dev - Kirklees Rates	AM	ONE HOUR	07:15	08:45	15			
D8	Dev - Kirklees Rates	PM	ONE HOUR	16:15	17:45	15			
D9	2023 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D5
D10	2023 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D6
D11	2023 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D7
D12	2023 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D8
D13	2028 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D5
D14	2028 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D6
D15	2028 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D7
D16	2028 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D8

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Site Access - Cliffe Lane	✓	100.000	100.000

Site Access - Cliffe Lane - 2023 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		0.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cliffe Lane (west)		Major
B	Site Access		Minor
C	Cliffe Lane (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	6.50			125.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.75	25	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	483	0.086	0.218	0.137	0.311
B-C	621	0.093	0.235	-	-
C-B	646	0.245	0.245	-	-

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	2023 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	183	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	123	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	0	183
	B	0	0	0
	C	122	1	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	3
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	5.37	0.0	A	1	2
C-A					112	168
A-B					0	0
A-C					168	252

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	502	0.000	0	0.0	0.0	0.000	A
C-AB	0.87	0.22	671	0.001	0.87	0.0	0.0	5.369	A
C-A	92	23			92				
A-B	0	0			0				
A-C	138	34			138				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	494	0.000	0	0.0	0.0	0.000	A
C-AB	1	0.27	677	0.002	1	0.0	0.0	5.327	A
C-A	110	27			110				
A-B	0	0			0				
A-C	165	41			165				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	483	0.000	0	0.0	0.0	0.000	A
C-AB	1	0.34	684	0.002	1	0.0	0.0	5.270	A
C-A	134	34			134				
A-B	0	0			0				
A-C	201	50			201				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	483	0.000	0	0.0	0.0	0.000	A
C-AB	1	0.34	684	0.002	1	0.0	0.0	5.272	A
C-A	134	34			134				
A-B	0	0			0				
A-C	201	50			201				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	494	0.000	0	0.0	0.0	0.000	A
C-AB	1	0.27	677	0.002	1	0.0	0.0	5.334	A
C-A	110	27			110				
A-B	0	0			0				
A-C	165	41			165				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	502	0.000	0	0.0	0.0	0.000	A
C-AB	0.87	0.22	671	0.001	0.87	0.0	0.0	5.371	A
C-A	92	23			92				
A-B	0	0			0				
A-C	138	34			138				

Site Access - Cliffe Lane - 2023 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		0.06	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	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	187	100.000
B		ONE HOUR	✓	3	100.000
C		ONE HOUR	✓	154	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	186
	B	1	0	2
	C	151	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.01	5.26	0.0	A	3	5
C-A					138	207
A-B					0.92	1
A-C					171	256

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	500	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.68	687	0.004	3	0.0	0.0	5.263	A
C-A	113	28			113				
A-B	0.75	0.19			0.75				
A-C	140	35			140				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	492	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.84	695	0.005	3	0.0	0.0	5.205	A
C-A	135	34			135				
A-B	0.90	0.22			0.90				
A-C	167	42			167				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	480	0.000	0	0.0	0.0	0.000	A
C-AB	4	1	707	0.006	4	0.0	0.0	5.125	A
C-A	165	41			165				
A-B	1	0.28			1				
A-C	205	51			205				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	480	0.000	0	0.0	0.0	0.000	A
C-AB	4	1	707	0.006	4	0.0	0.0	5.125	A
C-A	165	41			165				
A-B	1	0.28			1				
A-C	205	51			205				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	492	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.84	695	0.005	3	0.0	0.0	5.207	A
C-A	135	34			135				
A-B	0.90	0.22			0.90				
A-C	167	42			167				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	500	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.68	687	0.004	3	0.0	0.0	5.263	A
C-A	113	28			113				
A-B	0.75	0.19			0.75				
A-C	140	35			140				

Site Access - Cliffe Lane - 2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		0.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Base	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1*1.0367

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	190	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	128	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	190
	B	0	0	0
	C	126	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	5.36	0.0	A	1	2
C-A					116	174
A-B					0	0
A-C					174	261

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	501	0.000	0	0.0	0.0	0.000	A
C-AB	0.91	0.23	672	0.001	0.90	0.0	0.0	5.361	A
C-A	95	24			95				
A-B	0	0			0				
A-C	143	36			143				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	493	0.000	0	0.0	0.0	0.000	A
C-AB	1	0.28	678	0.002	1	0.0	0.0	5.318	A
C-A	114	28			114				
A-B	0	0			0				
A-C	171	43			171				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	481	0.000	0	0.0	0.0	0.000	A
C-AB	1	0.36	686	0.002	1	0.0	0.0	5.259	A
C-A	139	35			139				
A-B	0	0			0				
A-C	209	52			209				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	481	0.000	0	0.0	0.0	0.000	A
C-AB	1	0.36	686	0.002	1	0.0	0.0	5.261	A
C-A	139	35			139				
A-B	0	0			0				
A-C	209	52			209				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	493	0.000	0	0.0	0.0	0.000	A
C-AB	1	0.28	678	0.002	1	0.0	0.0	5.323	A
C-A	114	28			114				
A-B	0	0			0				
A-C	171	43			171				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	501	0.000	0	0.0	0.0	0.000	A
C-AB	0.91	0.23	672	0.001	0.91	0.0	0.0	5.364	A
C-A	95	24			95				
A-B	0	0			0				
A-C	143	36			143				

Site Access - Cliffe Lane - 2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		0.06	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	Relationship type	Relationship
D4	2028 Base	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2*1.0375

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	194	100.000
B		ONE HOUR	✓	3	100.000
C		ONE HOUR	✓	160	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	193
	B	1	0	2
	C	157	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.01	5.25	0.0	A	4	5
C-A					143	214
A-B					0.95	1
A-C					177	266

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	499	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.71	688	0.004	3	0.0	0.0	5.252	A
C-A	117	29			117				
A-B	0.78	0.20			0.78				
A-C	145	36			145				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	490	0.000	0	0.0	0.0	0.000	A
C-AB	4	0.88	697	0.005	4	0.0	0.0	5.191	A
C-A	140	35			140				
A-B	0.93	0.23			0.93				
A-C	173	43			173				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	478	0.000	0	0.0	0.0	0.000	A
C-AB	5	1	709	0.006	5	0.0	0.0	5.108	A
C-A	171	43			171				
A-B	1	0.29			1				
A-C	212	53			212				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	478	0.000	0	0.0	0.0	0.000	A
C-AB	5	1	709	0.006	5	0.0	0.0	5.108	A
C-A	171	43			171				
A-B	1	0.29			1				
A-C	212	53			212				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	490	0.000	0	0.0	0.0	0.000	A
C-AB	4	0.88	697	0.005	4	0.0	0.0	5.191	A
C-A	140	35			140				
A-B	0.93	0.23			0.93				
A-C	173	43			173				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	499	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.71	688	0.004	3	0.0	0.0	5.252	A
C-A	117	29			117				
A-B	0.78	0.20			0.78				
A-C	145	36			145				

Site Access - Cliffe Lane - 2023 Base + Dev Approved Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		1.08	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)	Run automatically	Relationship type	Relationship
D9	2023 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	184	100.000
B		ONE HOUR	✓	47	100.000
C		ONE HOUR	✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	183
	B	9	0	38
	C	122	7	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	3
B	0	0	0
C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.10	7.47	0.1	A	43	65
C-AB	0.01	5.42	0.0	A	8	12
C-A					111	166
A-B					0.92	1
A-C					168	252

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	551	0.064	35	0.0	0.1	6.974	A
C-AB	6	2	671	0.009	6	0.0	0.0	5.412	A
C-A	91	23			91				
A-B	0.75	0.19			0.75				
A-C	138	34			138				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	11	544	0.078	42	0.1	0.1	7.177	A
C-AB	8	2	676	0.011	8	0.0	0.0	5.380	A
C-A	108	27			108				
A-B	0.90	0.22			0.90				
A-C	165	41			165				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	534	0.097	52	0.1	0.1	7.469	A
C-AB	10	2	684	0.014	10	0.0	0.0	5.336	A
C-A	132	33			132				
A-B	1	0.28			1				
A-C	201	50			201				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	534	0.097	52	0.1	0.1	7.469	A
C-AB	10	2	684	0.014	10	0.0	0.0	5.341	A
C-A	132	33			132				
A-B	1	0.28			1				
A-C	201	50			201				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	11	544	0.078	42	0.1	0.1	7.182	A
C-AB	8	2	676	0.011	8	0.0	0.0	5.387	A
C-A	108	27			108				
A-B	0.90	0.22			0.90				
A-C	165	41			165				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	551	0.064	35	0.1	0.1	6.984	A
C-AB	6	2	671	0.009	6	0.0	0.0	5.415	A
C-A	91	23			91				
A-B	0.75	0.19			0.75				
A-C	138	34			138				

Site Access - Cliffe Lane - 2023 Base + Dev Approved Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		0.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2023 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	193	100.000
B		ONE HOUR	✓	24	100.000
C		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	186
	B	5	0	19
	C	151	31	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.05	7.21	0.1	A	22	33
C-AB	0.06	5.48	0.1	A	36	54
C-A					131	197
A-B					6	10
A-C					171	256

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	545	0.033	18	0.0	0.0	6.827	A
C-AB	28	7	686	0.041	28	0.0	0.1	5.472	A
C-A	109	27			109				
A-B	5	1			5				
A-C	140	35			140				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	537	0.040	22	0.0	0.0	6.983	A
C-AB	35	9	694	0.050	35	0.1	0.1	5.462	A
C-A	129	32			129				
A-B	6	2			6				
A-C	167	42			167				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	7	526	0.050	26	0.0	0.1	7.206	A
C-AB	45	11	705	0.063	45	0.1	0.1	5.450	A
C-A	156	39			156				
A-B	8	2			8				
A-C	205	51			205				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	7	526	0.050	26	0.1	0.1	7.207	A
C-AB	45	11	705	0.063	45	0.1	0.1	5.451	A
C-A	156	39			156				
A-B	8	2			8				
A-C	205	51			205				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	537	0.040	22	0.1	0.0	6.984	A
C-AB	35	9	694	0.050	35	0.1	0.1	5.467	A
C-A	129	32			129				
A-B	6	2			6				
A-C	167	42			167				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	545	0.033	18	0.0	0.0	6.831	A
C-AB	28	7	686	0.041	28	0.1	0.1	5.478	A
C-A	109	27			109				
A-B	5	1			5				
A-C	140	35			140				

Site Access - Cliffe Lane - 2023 Base + Dev Kirklees Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		1.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2023 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	186	100.000
B		ONE HOUR	✓	53	100.000
C		ONE HOUR	✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	3	183
	B	10	0	43
	C	122	15	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	3
B	0	0	0
C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.11	7.58	0.1	A	49	73
C-AB	0.03	5.48	0.0	A	17	25
C-A					109	164
A-B					3	4
A-C					168	252

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	10	551	0.072	40	0.0	0.1	7.036	A
C-AB	13	3	671	0.020	13	0.0	0.0	5.473	A
C-A	90	23			90				
A-B	2	0.56			2				
A-C	138	34			138				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	543	0.088	48	0.1	0.1	7.260	A
C-AB	16	4	676	0.024	16	0.0	0.0	5.453	A
C-A	107	27			107				
A-B	3	0.67			3				
A-C	165	41			165				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	533	0.109	58	0.1	0.1	7.579	A
C-AB	21	5	683	0.030	21	0.0	0.0	5.429	A
C-A	130	33			130				
A-B	3	0.83			3				
A-C	201	50			201				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	533	0.109	58	0.1	0.1	7.582	A
C-AB	21	5	683	0.030	21	0.0	0.0	5.434	A
C-A	130	33			130				
A-B	3	0.83			3				
A-C	201	50			201				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	543	0.088	48	0.1	0.1	7.266	A
C-AB	16	4	676	0.024	16	0.0	0.0	5.459	A
C-A	107	27			107				
A-B	3	0.67			3				
A-C	165	41			165				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	10	551	0.072	40	0.1	0.1	7.049	A
C-AB	13	3	671	0.020	13	0.0	0.0	5.478	A
C-A	90	23			90				
A-B	2	0.56			2				
A-C	138	34			138				

Site Access - Cliffe Lane - 2023 Base + Dev Kirklees Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		1.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2023 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	197	100.000
B		ONE HOUR	✓	20	100.000
C		ONE HOUR	✓	197	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	11	186
	B	4	0	16
	C	151	46	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	1
B	0	0	0
C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.04	7.15	0.0	A	18	28
C-AB	0.09	5.65	0.1	A	53	80
C-A					128	191
A-B					10	15
A-C					171	256

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	545	0.028	15	0.0	0.0	6.786	A
C-AB	42	10	685	0.061	41	0.0	0.1	5.589	A
C-A	107	27			107				
A-B	8	2			8				
A-C	140	35			140				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	4	537	0.033	18	0.0	0.0	6.936	A
C-AB	51	13	693	0.074	51	0.1	0.1	5.614	A
C-A	126	31			126				
A-B	10	2			10				
A-C	167	42			167				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	525	0.042	22	0.0	0.0	7.151	A
C-AB	66	17	704	0.094	66	0.1	0.1	5.643	A
C-A	150	38			150				
A-B	12	3			12				
A-C	205	51			205				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	525	0.042	22	0.0	0.0	7.151	A
C-AB	66	17	704	0.094	66	0.1	0.1	5.645	A
C-A	150	38			150				
A-B	12	3			12				
A-C	205	51			205				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	4	537	0.033	18	0.0	0.0	6.937	A
C-AB	52	13	693	0.074	52	0.1	0.1	5.618	A
C-A	126	31			126				
A-B	10	2			10				
A-C	167	42			167				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	545	0.028	15	0.0	0.0	6.790	A
C-AB	42	10	685	0.061	42	0.1	0.1	5.598	A
C-A	107	27			107				
A-B	8	2			8				
A-C	140	35			140				

Site Access - Cliffe Lane - 2028 Base + Dev Approved Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		1.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2028 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	191	100.000
B		ONE HOUR	✓	47	100.000
C		ONE HOUR	✓	134	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	190
	B	9	0	38
	C	126	7	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	3
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.10	7.50	0.1	A	43	65
C-AB	0.01	5.41	0.0	A	8	12
C-A					115	172
A-B					0.92	1
A-C					174	261

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	550	0.064	35	0.0	0.1	6.992	A
C-AB	6	2	672	0.009	6	0.0	0.0	5.405	A
C-A	94	24			94				
A-B	0.75	0.19			0.75				
A-C	143	36			143				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	11	542	0.078	42	0.1	0.1	7.200	A
C-AB	8	2	678	0.011	8	0.0	0.0	5.371	A
C-A	112	28			112				
A-B	0.90	0.22			0.90				
A-C	171	43			171				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	532	0.097	52	0.1	0.1	7.498	A
C-AB	10	2	685	0.014	10	0.0	0.0	5.325	A
C-A	137	34			137				
A-B	1	0.28			1				
A-C	209	52			209				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	532	0.097	52	0.1	0.1	7.501	A
C-AB	10	2	685	0.014	10	0.0	0.0	5.328	A
C-A	137	34			137				
A-B	1	0.28			1				
A-C	209	52			209				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	11	542	0.078	42	0.1	0.1	7.203	A
C-AB	8	2	678	0.011	8	0.0	0.0	5.376	A
C-A	112	28			112				
A-B	0.90	0.22			0.90				
A-C	171	43			171				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	550	0.064	35	0.1	0.1	7.003	A
C-AB	6	2	672	0.009	6	0.0	0.0	5.410	A
C-A	94	24			94				
A-B	0.75	0.19			0.75				
A-C	143	36			143				

Site Access - Cliffe Lane - 2028 Base + Dev Approved Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		0.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2028 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	200	100.000
B		ONE HOUR	✓	24	100.000
C		ONE HOUR	✓	188	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	193
	B	5	0	19
	C	157	31	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	1
B	0	0	0
C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.05	7.24	0.1	A	22	33
C-AB	0.06	5.47	0.1	A	36	54
C-A					136	204
A-B					6	10
A-C					177	266

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	544	0.033	18	0.0	0.0	6.848	A
C-AB	28	7	687	0.041	28	0.0	0.1	5.461	A
C-A	113	28			113				
A-B	5	1			5				
A-C	145	36			145				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	535	0.041	22	0.0	0.0	7.009	A
C-AB	35	9	696	0.050	35	0.1	0.1	5.449	A
C-A	134	33			134				
A-B	6	2			6				
A-C	173	43			173				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	524	0.051	27	0.0	0.1	7.241	A
C-AB	45	11	708	0.064	45	0.1	0.1	5.437	A
C-A	161	40			161				
A-B	8	2			8				
A-C	212	53			212				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	524	0.051	27	0.1	0.1	7.241	A
C-AB	45	11	708	0.064	45	0.1	0.1	5.436	A
C-A	161	40			161				
A-B	8	2			8				
A-C	212	53			212				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	535	0.041	22	0.1	0.0	7.010	A
C-AB	35	9	696	0.051	35	0.1	0.1	5.454	A
C-A	134	33			134				
A-B	6	2			6				
A-C	173	43			173				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	544	0.033	18	0.0	0.0	6.855	A
C-AB	28	7	687	0.041	28	0.1	0.1	5.467	A
C-A	113	28			113				
A-B	5	1			5				
A-C	145	36			145				

Site Access - Cliffe Lane - 2028 Base + Dev Kirklees Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		1.27	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)	Run automatically	Relationship type	Relationship
D15	2028 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	193	100.000
B		ONE HOUR	✓	53	100.000
C		ONE HOUR	✓	142	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	3	190
	B	10	0	43
	C	126	15	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	3
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.11	7.61	0.1	A	49	73
C-AB	0.03	5.47	0.0	A	17	25
C-A					113	170
A-B					3	4
A-C					174	261

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	10	550	0.073	40	0.0	0.1	7.055	A
C-AB	13	3	672	0.020	13	0.0	0.0	5.465	A
C-A	93	23			93				
A-B	2	0.56			2				
A-C	143	36			143				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	542	0.088	48	0.1	0.1	7.284	A
C-AB	16	4	677	0.024	16	0.0	0.0	5.444	A
C-A	111	28			111				
A-B	3	0.67			3				
A-C	171	43			171				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	531	0.110	58	0.1	0.1	7.611	A
C-AB	21	5	685	0.030	21	0.0	0.0	5.418	A
C-A	135	34			135				
A-B	3	0.83			3				
A-C	209	52			209				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	531	0.110	58	0.1	0.1	7.614	A
C-AB	21	5	685	0.030	21	0.0	0.0	5.423	A
C-A	135	34			135				
A-B	3	0.83			3				
A-C	209	52			209				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	542	0.088	48	0.1	0.1	7.290	A
C-AB	16	4	677	0.024	16	0.0	0.0	5.453	A
C-A	111	28			111				
A-B	3	0.67			3				
A-C	171	43			171				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	10	550	0.073	40	0.1	0.1	7.065	A
C-AB	13	3	672	0.020	13	0.0	0.0	5.471	A
C-A	93	23			93				
A-B	2	0.56			2				
A-C	143	36			143				

Site Access - Cliffe Lane - 2028 Base + Dev Kirklees Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access - Cliffe Lane	T-Junction	Two-way		1.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2028 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	204	100.000
B		ONE HOUR	✓	20	100.000
C		ONE HOUR	✓	203	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	11	193
	B	4	0	16
	C	157	46	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	1
B	0	0	0
C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.04	7.19	0.0	A	18	28
C-AB	0.10	5.63	0.1	A	54	81
C-A					132	198
A-B					10	15
A-C					177	266

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	544	0.028	15	0.0	0.0	6.808	A
C-AB	42	10	686	0.061	42	0.0	0.1	5.579	A
C-A	111	28			111				
A-B	8	2			8				
A-C	145	36			145				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	535	0.034	18	0.0	0.0	6.963	A
C-AB	52	13	695	0.075	52	0.1	0.1	5.600	A
C-A	130	33			130				
A-B	10	2			10				
A-C	173	43			173				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	523	0.042	22	0.0	0.0	7.185	A
C-AB	67	17	707	0.095	67	0.1	0.1	5.631	A
C-A	156	39			156				
A-B	12	3			12				
A-C	212	53			212				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	523	0.042	22	0.0	0.0	7.185	A
C-AB	67	17	707	0.095	67	0.1	0.1	5.631	A
C-A	156	39			156				
A-B	12	3			12				
A-C	212	53			212				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	535	0.034	18	0.0	0.0	6.967	A
C-AB	52	13	695	0.075	52	0.1	0.1	5.606	A
C-A	130	33			130				
A-B	10	2			10				
A-C	173	43			173				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	544	0.028	15	0.0	0.0	6.814	A
C-AB	42	10	687	0.061	42	0.1	0.1	5.587	A
C-A	111	28			111				
A-B	8	2			8				
A-C	145	36			145				



Appendix H

Junctions 9 Output – Woodlands Road/Cliffe Lane

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Woodlands Road - Cliffe Lane.j9
Path: V:\152000\152130_Cliffe_Lane_Gomersal\07 Design and other outputs\Traffic programs\Junctions
Report generation date: 16/05/2023 10:38:12

- »Woodlands Road - Cliffe Lane - 2023 Base, AM
- »Woodlands Road - Cliffe Lane - 2023 Base, PM
- »Woodlands Road - Cliffe Lane - 2028 Base, AM
- »Woodlands Road - Cliffe Lane - 2028 Base, PM
- »Woodlands Road - Cliffe Lane - 2023 Base + Dev Approved Rates, AM
- »Woodlands Road - Cliffe Lane - 2023 Base + Dev Approved Rates, PM
- »Woodlands Road - Cliffe Lane - 2023 Base + Dev Kirklees Rates, AM
- »Woodlands Road - Cliffe Lane - 2023 Base + Dev Kirklees Rates, PM
- »Woodlands Road - Cliffe Lane - 2028 Base + Dev Approved Rates, AM
- »Woodlands Road - Cliffe Lane - 2028 Base + Dev Approved Rates, PM
- »Woodlands Road - Cliffe Lane - 2028 Base + Dev Kirklees Rates, AM
- »Woodlands Road - Cliffe Lane - 2028 Base + Dev Kirklees Rates, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
Woodlands Road - Cliffe Lane - 2023 Base										
Stream B-AC	D1	0.4	11.44	0.29	B	D2	0.2	9.02	0.17	A
Stream C-AB		0.1	5.38	0.05	A		0.2	5.86	0.13	A
Woodlands Road - Cliffe Lane - 2028 Base										
Stream B-AC	D3	0.4	11.69	0.31	B	D4	0.2	9.15	0.18	A
Stream C-AB		0.1	5.37	0.05	A		0.2	5.88	0.13	A
Woodlands Road - Cliffe Lane - 2023 Base + Dev Approved Rates										
Stream B-AC	D9	0.4	11.79	0.31	B	D10	0.2	9.21	0.20	A
Stream C-AB		0.1	5.30	0.09	A		0.2	5.94	0.14	A
Woodlands Road - Cliffe Lane - 2023 Base + Dev Kirklees Rates										
Stream B-AC	D11	0.5	11.90	0.31	B	D12	0.3	9.30	0.21	A
Stream C-AB		0.1	5.30	0.09	A		0.2	5.96	0.14	A
Woodlands Road - Cliffe Lane - 2028 Base + Dev Approved Rates										
Stream B-AC	D13	0.5	12.06	0.32	B	D14	0.3	9.35	0.21	A
Stream C-AB		0.1	5.30	0.09	A		0.2	5.97	0.15	A
Woodlands Road - Cliffe Lane - 2028 Base + Dev Kirklees Rates										
Stream B-AC	D15	0.5	12.18	0.33	B	D16	0.3	9.44	0.22	A
Stream C-AB		0.1	5.30	0.09	A		0.2	5.98	0.15	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

Title	Woodlands Road - Cliffe Lane
Location	Gomersal
Site number	
Date	27/04/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	FAIRHURST\ashley.armitage
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2023 Base	AM	ONE HOUR	07:15	08:45	15	✓		
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓		
D3	2028 Base	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1*1.0367
D4	2028 Base	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2*1.0375
D5	Dev - Approved Rates	AM	ONE HOUR	07:15	08:45	15			
D6	Dev - Approved Rates	PM	ONE HOUR	16:15	17:45	15			
D7	Dev - Kirklees Rates	AM	ONE HOUR	07:15	08:45	15			
D8	Dev - Kirklees Rates	PM	ONE HOUR	16:15	17:45	15			
D9	2023 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D5
D10	2023 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D6
D11	2023 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D7
D12	2023 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D8
D13	2028 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D5
D14	2028 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D6
D15	2028 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D7
D16	2028 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D8

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Woodlands Road - Cliffe Lane	✓	100.000	100.000

Woodlands Road - Cliffe Lane - 2023 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	Two-way		3.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cliffe Lane (East)		Major
B	Woodlands Road		Minor
C	Cliffe Lane (west)		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	6.45			200.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.75	17	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	481	0.086	0.217	0.136	0.310
B-C	621	0.093	0.236	-	-
C-B	690	0.262	0.262	-	-

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	2023 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	136	100.000
B		ONE HOUR	✓	119	100.000
C		ONE HOUR	✓	183	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	42	94
	B	90	0	29
	C	159	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	2	3
	B	1	0	3
	C	3	8	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.29	11.44	0.4	B	109	164
C-AB	0.05	5.38	0.1	A	28	42
C-A					140	210
A-B					39	58
A-C					86	129

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	464	0.193	89	0.0	0.2	9.580	A
C-AB	22	5	691	0.032	22	0.0	0.0	5.380	A
C-A	116	29			116				
A-B	32	8			32				
A-C	71	18			71				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	456	0.235	107	0.2	0.3	10.306	B
C-AB	27	7	701	0.039	27	0.0	0.1	5.343	A
C-A	137	34			137				
A-B	38	9			38				
A-C	85	21			85				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	446	0.294	131	0.3	0.4	11.408	B
C-AB	35	9	716	0.049	35	0.1	0.1	5.290	A
C-A	166	42			166				
A-B	46	12			46				
A-C	103	26			103				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	446	0.294	131	0.4	0.4	11.440	B
C-AB	35	9	716	0.049	35	0.1	0.1	5.285	A
C-A	166	42			166				
A-B	46	12			46				
A-C	103	26			103				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	456	0.235	107	0.4	0.3	10.338	B
C-AB	27	7	702	0.039	27	0.1	0.1	5.333	A
C-A	137	34			137				
A-B	38	9			38				
A-C	85	21			85				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	463	0.193	90	0.3	0.2	9.642	A
C-AB	22	5	691	0.032	22	0.1	0.0	5.377	A
C-A	116	29			116				
A-B	32	8			32				
A-C	71	18			71				

Woodlands Road - Cliffe Lane - 2023 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	Two-way		2.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	190	100.000
B		ONE HOUR	✓	75	100.000
C		ONE HOUR	✓	179	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	72	118
	B	36	0	39
	C	113	66	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	9.02	0.2	A	69	103
C-AB	0.13	5.86	0.2	A	72	107
C-A					93	139
A-B					66	99
A-C					108	162

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	14	502	0.113	56	0.0	0.1	8.065	A
C-AB	57	14	694	0.082	56	0.0	0.1	5.642	A
C-A	78	20			78				
A-B	54	14			54				
A-C	89	22			89				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	493	0.137	67	0.1	0.2	8.447	A
C-AB	70	17	698	0.100	69	0.1	0.1	5.728	A
C-A	91	23			91				
A-B	65	16			65				
A-C	106	27			106				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	83	21	482	0.171	82	0.2	0.2	9.014	A
C-AB	88	22	704	0.126	88	0.1	0.2	5.852	A
C-A	109	27			109				
A-B	79	20			79				
A-C	130	32			130				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	83	21	481	0.172	83	0.2	0.2	9.023	A
C-AB	88	22	704	0.126	88	0.2	0.2	5.856	A
C-A	109	27			109				
A-B	79	20			79				
A-C	130	32			130				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	493	0.137	68	0.2	0.2	8.462	A
C-AB	70	17	698	0.100	70	0.2	0.1	5.731	A
C-A	91	23			91				
A-B	65	16			65				
A-C	106	27			106				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	14	502	0.113	57	0.2	0.1	8.091	A
C-AB	57	14	694	0.082	57	0.1	0.1	5.651	A
C-A	78	20			78				
A-B	54	14			54				
A-C	89	22			89				

Woodlands Road - Cliffe Lane - 2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	Two-way		3.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Base	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1*1.0367

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	141	100.000
B		ONE HOUR	✓	123	100.000
C		ONE HOUR	✓	190	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	44	97
	B	93	0	30
	C	165	25	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	3
	B	1	0	3
	C	3	8	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.31	11.69	0.4	B	113	170
C-AB	0.05	5.37	0.1	A	29	44
C-A					145	217
A-B					40	60
A-C					89	134

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	462	0.201	92	0.0	0.2	9.698	A
C-AB	23	6	693	0.033	23	0.0	0.0	5.370	A
C-A	120	30			120				
A-B	33	8			33				
A-C	73	18			73				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	111	28	454	0.244	111	0.2	0.3	10.465	B
C-AB	28	7	704	0.040	28	0.0	0.1	5.332	A
C-A	142	36			142				
A-B	39	10			39				
A-C	88	22			88				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	136	34	444	0.306	135	0.3	0.4	11.661	B
C-AB	37	9	719	0.051	37	0.1	0.1	5.280	A
C-A	172	43			172				
A-B	48	12			48				
A-C	107	27			107				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	136	34	444	0.306	136	0.4	0.4	11.694	B
C-AB	37	9	719	0.051	37	0.1	0.1	5.277	A
C-A	172	43			172				
A-B	48	12			48				
A-C	107	27			107				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	111	28	454	0.244	111	0.4	0.3	10.509	B
C-AB	28	7	704	0.040	28	0.1	0.1	5.324	A
C-A	142	36			142				
A-B	39	10			39				
A-C	88	22			88				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	462	0.201	93	0.3	0.3	9.768	A
C-AB	23	6	693	0.033	23	0.1	0.0	5.370	A
C-A	120	30			120				
A-B	33	8			33				
A-C	73	18			73				

Woodlands Road - Cliffe Lane - 2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	Two-way		2.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Base	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2*1.0375

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	197	100.000
B		ONE HOUR	✓	78	100.000
C		ONE HOUR	✓	186	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	75	122
	B	37	0	40
	C	117	68	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	9.15	0.2	A	71	107
C-AB	0.13	5.88	0.2	A	75	112
C-A					96	144
A-B					69	103
A-C					112	169

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	500	0.117	58	0.0	0.1	8.130	A
C-AB	59	15	695	0.085	59	0.0	0.1	5.657	A
C-A	81	20			81				
A-B	56	14			56				
A-C	92	23			92				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	17	491	0.142	70	0.1	0.2	8.537	A
C-AB	73	18	699	0.104	72	0.1	0.1	5.748	A
C-A	94	24			94				
A-B	67	17			67				
A-C	110	28			110				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	86	21	479	0.179	85	0.2	0.2	9.140	A
C-AB	92	23	705	0.131	92	0.1	0.2	5.879	A
C-A	112	28			112				
A-B	82	21			82				
A-C	135	34			135				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	86	21	479	0.179	86	0.2	0.2	9.150	A
C-AB	92	23	705	0.131	92	0.2	0.2	5.883	A
C-A	112	28			112				
A-B	82	21			82				
A-C	135	34			135				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	17	491	0.142	70	0.2	0.2	8.553	A
C-AB	73	18	699	0.104	73	0.2	0.1	5.753	A
C-A	94	24			94				
A-B	67	17			67				
A-C	110	28			110				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	500	0.117	59	0.2	0.1	8.160	A
C-AB	59	15	695	0.085	59	0.1	0.1	5.664	A
C-A	81	20			81				
A-B	56	14			56				
A-C	92	23			92				

Woodlands Road - Cliffe Lane - 2023 Base + Dev Approved Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	Two-way		3.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2023 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	139	100.000
B		ONE HOUR	✓	122	100.000
C		ONE HOUR	✓	221	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	42	97
	B	90	0	32
	C	178	43	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	2	3
B	1	0	3
C	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.31	11.79	0.4	B	112	168
C-AB	0.09	5.30	0.1	A	51	77
C-A					152	227
A-B					39	58
A-C					89	134

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	460	0.200	91	0.0	0.2	9.721	A
C-AB	40	10	719	0.055	39	0.0	0.1	5.298	A
C-A	127	32			127				
A-B	32	8			32				
A-C	73	18			73				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	452	0.243	109	0.2	0.3	10.511	B
C-AB	50	12	731	0.068	49	0.1	0.1	5.285	A
C-A	149	37			149				
A-B	38	9			38				
A-C	87	22			87				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	134	34	440	0.306	134	0.3	0.4	11.772	B
C-AB	64	16	748	0.086	64	0.1	0.1	5.270	A
C-A	179	45			179				
A-B	46	12			46				
A-C	107	27			107				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	134	34	440	0.306	134	0.4	0.4	11.788	B
C-AB	64	16	748	0.086	64	0.1	0.1	5.272	A
C-A	179	45			179				
A-B	46	12			46				
A-C	107	27			107				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	452	0.243	110	0.4	0.3	10.559	B
C-AB	50	12	731	0.068	50	0.1	0.1	5.284	A
C-A	149	37			149				
A-B	38	9			38				
A-C	87	22			87				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	460	0.200	92	0.3	0.3	9.791	A
C-AB	40	10	719	0.055	40	0.1	0.1	5.300	A
C-A	127	32			127				
A-B	32	8			32				
A-C	73	18			73				

Woodlands Road - Cliffe Lane - 2023 Base + Dev Approved Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	Two-way		2.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2023 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	204	100.000
B		ONE HOUR	✓	89	100.000
C		ONE HOUR	✓	195	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	72	132
	B	36	0	53
	C	121	74	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	9.21	0.2	A	82	123
C-AB	0.14	5.94	0.2	A	81	122
C-A					98	147
A-B					66	99
A-C					121	182

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	510	0.131	66	0.0	0.1	8.097	A
C-AB	64	16	697	0.092	64	0.0	0.1	5.683	A
C-A	83	21			83				
A-B	54	14			54				
A-C	99	25			99				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	501	0.160	80	0.1	0.2	8.536	A
C-AB	79	20	701	0.112	79	0.1	0.2	5.787	A
C-A	96	24			96				
A-B	65	16			65				
A-C	119	30			119				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	24	489	0.200	98	0.2	0.2	9.194	A
C-AB	101	25	707	0.142	100	0.2	0.2	5.937	A
C-A	114	29			114				
A-B	79	20			79				
A-C	145	36			145				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	24	489	0.200	98	0.2	0.2	9.206	A
C-AB	101	25	707	0.142	101	0.2	0.2	5.941	A
C-A	114	29			114				
A-B	79	20			79				
A-C	145	36			145				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	501	0.160	80	0.2	0.2	8.553	A
C-AB	79	20	701	0.113	79	0.2	0.2	5.791	A
C-A	96	24			96				
A-B	65	16			65				
A-C	119	30			119				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	510	0.131	67	0.2	0.2	8.125	A
C-AB	64	16	697	0.092	64	0.2	0.1	5.693	A
C-A	83	21			83				
A-B	54	14			54				
A-C	99	25			99				

Woodlands Road - Cliffe Lane - 2023 Base + Dev Kirklees Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	Two-way		3.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2023 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	143	100.000
B		ONE HOUR	✓	126	100.000
C		ONE HOUR	✓	226	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	42	101
	B	90	0	36
	C	181	45	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	2	3
B	1	0	2
C	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.31	11.90	0.5	B	116	173
C-AB	0.09	5.30	0.1	A	54	81
C-A					154	230
A-B					39	58
A-C					93	139

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	462	0.205	94	0.0	0.3	9.743	A
C-AB	42	10	721	0.058	41	0.0	0.1	5.298	A
C-A	128	32			128				
A-B	32	8			32				
A-C	76	19			76				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	454	0.250	113	0.3	0.3	10.561	B
C-AB	52	13	733	0.071	52	0.1	0.1	5.288	A
C-A	151	38			151				
A-B	38	9			38				
A-C	91	23			91				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	441	0.314	138	0.3	0.5	11.859	B
C-AB	68	17	750	0.090	67	0.1	0.1	5.280	A
C-A	181	45			181				
A-B	46	12			46				
A-C	111	28			111				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	441	0.314	139	0.5	0.5	11.895	B
C-AB	68	17	750	0.090	68	0.1	0.1	5.279	A
C-A	181	45			181				
A-B	46	12			46				
A-C	111	28			111				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	453	0.250	114	0.5	0.3	10.610	B
C-AB	52	13	733	0.071	52	0.1	0.1	5.290	A
C-A	151	38			151				
A-B	38	9			38				
A-C	91	23			91				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	462	0.205	95	0.3	0.3	9.816	A
C-AB	42	10	721	0.058	42	0.1	0.1	5.302	A
C-A	128	32			128				
A-B	32	8			32				
A-C	76	19			76				

Woodlands Road - Cliffe Lane - 2023 Base + Dev Kirklees Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	Two-way		2.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2023 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	212	100.000
B		ONE HOUR	✓	96	100.000
C		ONE HOUR	✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	72	140
	B	36	0	60
	C	120	73	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.21	9.30	0.3	A	88	132
C-AB	0.14	5.96	0.2	A	80	120
C-A					97	146
A-B					66	99
A-C					128	193

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	72	18	514	0.141	72	0.0	0.2	8.119	A
C-AB	63	16	695	0.091	63	0.0	0.1	5.694	A
C-A	82	21			82				
A-B	54	14			54				
A-C	105	26			105				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	86	22	505	0.171	86	0.2	0.2	8.582	A
C-AB	78	19	698	0.111	78	0.1	0.1	5.799	A
C-A	96	24			96				
A-B	65	16			65				
A-C	126	31			126				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	106	26	493	0.214	105	0.2	0.3	9.284	A
C-AB	99	25	704	0.141	99	0.1	0.2	5.952	A
C-A	113	28			113				
A-B	79	20			79				
A-C	154	39			154				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	106	26	493	0.214	106	0.3	0.3	9.298	A
C-AB	99	25	704	0.141	99	0.2	0.2	5.956	A
C-A	113	28			113				
A-B	79	20			79				
A-C	154	39			154				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	86	22	505	0.171	87	0.3	0.2	8.602	A
C-AB	78	19	698	0.111	78	0.2	0.2	5.803	A
C-A	96	24			96				
A-B	65	16			65				
A-C	126	31			126				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	72	18	514	0.141	72	0.2	0.2	8.150	A
C-AB	63	16	695	0.091	63	0.2	0.1	5.704	A
C-A	82	21			82				
A-B	54	14			54				
A-C	105	26			105				

Woodlands Road - Cliffe Lane - 2028 Base + Dev Approved Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	Two-way		3.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2028 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	144	100.000
B		ONE HOUR	✓	126	100.000
C		ONE HOUR	✓	228	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	44	100
	B	93	0	33
	C	184	44	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	2	3
B	1	0	3
C	3	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	12.06	0.5	B	116	174
C-AB	0.09	5.30	0.1	A	53	79
C-A					156	234
A-B					40	60
A-C					92	138

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	459	0.207	94	0.0	0.3	9.845	A
C-AB	41	10	720	0.057	41	0.0	0.1	5.294	A
C-A	131	33			131				
A-B	33	8			33				
A-C	76	19			76				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	114	28	450	0.253	113	0.3	0.3	10.687	B
C-AB	51	13	733	0.070	51	0.1	0.1	5.283	A
C-A	154	38			154				
A-B	39	10			39				
A-C	90	23			90				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	437	0.318	139	0.3	0.5	12.025	B
C-AB	66	17	750	0.088	66	0.1	0.1	5.268	A
C-A	184	46			184				
A-B	48	12			48				
A-C	111	28			111				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	437	0.318	139	0.5	0.5	12.064	B
C-AB	66	17	750	0.088	66	0.1	0.1	5.266	A
C-A	184	46			184				
A-B	48	12			48				
A-C	111	28			111				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	114	28	450	0.253	114	0.5	0.3	10.738	B
C-AB	51	13	733	0.070	51	0.1	0.1	5.280	A
C-A	154	38			154				
A-B	39	10			39				
A-C	90	23			90				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	459	0.207	95	0.3	0.3	9.921	A
C-AB	41	10	721	0.057	41	0.1	0.1	5.297	A
C-A	130	33			130				
A-B	33	8			33				
A-C	76	19			76				

Woodlands Road - Cliffe Lane - 2028 Base + Dev Approved Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	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)	Run automatically	Relationship type	Relationship
D14	2028 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	211	100.000
B		ONE HOUR	✓	92	100.000
C		ONE HOUR	✓	202	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	75	136
	B	37	0	54
	C	125	76	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.21	9.35	0.3	A	84	126
C-AB	0.15	5.97	0.2	A	84	127
C-A					101	151
A-B					69	103
A-C					125	188

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	508	0.136	68	0.0	0.2	8.171	A
C-AB	67	17	697	0.095	66	0.0	0.1	5.699	A
C-A	85	21			85				
A-B	56	14			56				
A-C	103	26			103				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	83	21	499	0.165	82	0.2	0.2	8.630	A
C-AB	82	20	702	0.117	82	0.1	0.2	5.808	A
C-A	99	25			99				
A-B	67	17			67				
A-C	123	31			123				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	101	25	486	0.208	101	0.2	0.3	9.334	A
C-AB	105	26	708	0.148	104	0.2	0.2	5.967	A
C-A	117	29			117				
A-B	82	21			82				
A-C	150	38			150				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	101	25	486	0.208	101	0.3	0.3	9.346	A
C-AB	105	26	708	0.148	105	0.2	0.2	5.969	A
C-A	117	29			117				
A-B	82	21			82				
A-C	150	38			150				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	83	21	499	0.165	83	0.3	0.2	8.651	A
C-AB	82	21	702	0.117	82	0.2	0.2	5.815	A
C-A	99	25			99				
A-B	67	17			67				
A-C	123	31			123				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	508	0.136	69	0.2	0.2	8.201	A
C-AB	67	17	697	0.096	67	0.2	0.1	5.712	A
C-A	85	21			85				
A-B	56	14			56				
A-C	103	26			103				

Woodlands Road - Cliffe Lane - 2028 Base + Dev Kirklees Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	Two-way		3.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2028 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	148	100.000
B		ONE HOUR	✓	130	100.000
C		ONE HOUR	✓	233	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	44	104
	B	93	0	37
	C	187	46	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	2	3
B	1	0	2
C	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.33	12.18	0.5	B	120	179
C-AB	0.09	5.30	0.1	A	55	83
C-A					158	237
A-B					40	60
A-C					96	144

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	25	461	0.213	97	0.0	0.3	9.870	A
C-AB	43	11	722	0.059	43	0.0	0.1	5.295	A
C-A	132	33			132				
A-B	33	8			33				
A-C	79	20			79				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	117	29	452	0.259	117	0.3	0.3	10.744	B
C-AB	54	13	735	0.073	53	0.1	0.1	5.285	A
C-A	156	39			156				
A-B	39	10			39				
A-C	94	23			94				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	144	36	439	0.327	143	0.3	0.5	12.139	B
C-AB	70	17	752	0.093	70	0.1	0.1	5.277	A
C-A	187	47			187				
A-B	48	12			48				
A-C	115	29			115				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	144	36	439	0.327	144	0.5	0.5	12.181	B
C-AB	70	17	752	0.093	70	0.1	0.1	5.277	A
C-A	187	47			187				
A-B	48	12			48				
A-C	115	29			115				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	117	29	452	0.260	118	0.5	0.4	10.800	B
C-AB	54	13	735	0.073	54	0.1	0.1	5.287	A
C-A	156	39			156				
A-B	39	10			39				
A-C	94	23			94				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	25	461	0.213	98	0.4	0.3	9.948	A
C-AB	43	11	722	0.059	43	0.1	0.1	5.298	A
C-A	132	33			132				
A-B	33	8			33				
A-C	79	20			79				

Woodlands Road - Cliffe Lane - 2028 Base + Dev Kirklees Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Crescent - Cliffe Lane	T-Junction	Two-way		2.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2028 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	219	100.000
B		ONE HOUR	✓	99	100.000
C		ONE HOUR	✓	200	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	75	144
	B	37	0	61
	C	124	75	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.22	9.44	0.3	A	91	136
C-AB	0.15	5.98	0.2	A	83	125
C-A					100	150
A-B					69	103
A-C					133	199

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	74	19	512	0.145	74	0.0	0.2	8.195	A
C-AB	66	16	695	0.094	65	0.0	0.1	5.710	A
C-A	85	21			85				
A-B	56	14			56				
A-C	109	27			109				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	503	0.177	89	0.2	0.2	8.684	A
C-AB	81	20	699	0.116	81	0.1	0.2	5.821	A
C-A	99	25			99				
A-B	67	17			67				
A-C	130	32			130				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	490	0.222	109	0.2	0.3	9.429	A
C-AB	103	26	705	0.146	103	0.2	0.2	5.982	A
C-A	117	29			117				
A-B	82	21			82				
A-C	159	40			159				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	490	0.222	109	0.3	0.3	9.443	A
C-AB	103	26	705	0.146	103	0.2	0.2	5.984	A
C-A	117	29			117				
A-B	82	21			82				
A-C	159	40			159				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	503	0.177	89	0.3	0.2	8.704	A
C-AB	81	20	699	0.116	81	0.2	0.2	5.827	A
C-A	99	25			99				
A-B	67	17			67				
A-C	130	32			130				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	74	19	512	0.145	75	0.2	0.2	8.229	A
C-AB	66	16	695	0.095	66	0.2	0.1	5.722	A
C-A	85	21			85				
A-B	56	14			56				
A-C	109	27			109				



Appendix I

Junctions 9 Output – West Lane/A651 Oxford Road/Cambridge Close

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Oxford Road - West Lane - Cambridge Chase.j9

Path: V:\152000\152130_Cliffe_Lane_Gomersal\07 Design and other outputs\Traffic programs\Junctions

Report generation date: 16/05/2023 10:32:12

-
- »Oxford Road - West Lane - Cambridge Chase - 2023 Base, AM
 - »Oxford Road - West Lane - Cambridge Chase - 2023 Base, PM
 - »Oxford Road - West Lane - Cambridge Chase - 2028 Base, AM
 - »Oxford Road - West Lane - Cambridge Chase - 2028 Base, PM
 - »Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Approved Rates, AM
 - »Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Approved Rates, PM
 - »Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Kirklees Rates, AM
 - »Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Kirklees Rates, PM
 - »Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Approved Rates, AM
 - »Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Approved Rates, PM
 - »Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Kirklees Rates, AM
 - »Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Kirklees Rates, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (Veh)	Delay (s)	RFC	Set ID	Queue (Veh)	Delay (s)	RFC
Oxford Road - West Lane - Cambridge Chase - 2023 Base								
Stream B-ACD	D1	0.0	13.68	0.04	D2	0.0	12.12	0.03
Stream A-BCD		1.2	7.87	0.44		2.3	10.91	0.61
Stream D-AB		2.7	26.46	0.74		0.5	10.32	0.33
Stream D-BC		0.8	35.76	0.44		0.4	20.96	0.30
Stream C-ABD		0.0	5.29	0.02		0.0	4.85	0.01
Oxford Road - West Lane - Cambridge Chase - 2028 Base								
Stream B-ACD	D3	0.0	14.24	0.05	D4	0.0	12.56	0.03
Stream A-BCD		1.3	8.19	0.46		2.7	11.99	0.65
Stream D-AB		3.5	33.19	0.79		0.5	10.88	0.35
Stream D-BC		1.0	46.53	0.52		0.5	22.75	0.32
Stream C-ABD		0.0	5.24	0.02		0.0	4.82	0.01
Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Approved Rates								
Stream B-ACD	D9	0.0	13.90	0.04	D10	0.0	14.29	0.05
Stream A-BCD		1.2	7.98	0.45		2.8	12.16	0.65
Stream D-AB		3.4	31.55	0.79		0.5	10.66	0.35
Stream D-BC		0.9	42.63	0.49		0.4	21.93	0.31
Stream C-ABD		0.0	5.29	0.02		0.0	4.88	0.01
Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Kirklees Rates								
Stream B-ACD	D11	0.0	13.98	0.04	D12	0.0	12.41	0.03
Stream A-BCD		1.3	8.14	0.46		2.9	12.91	0.67
Stream D-AB		3.5	32.70	0.79		0.5	10.63	0.34
Stream D-BC		0.9	44.56	0.50		0.4	22.20	0.31
Stream C-ABD		0.0	5.30	0.02		0.0	4.89	0.01
Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Approved Rates								
Stream B-ACD	D13	0.1	14.49	0.05	D14	0.1	14.87	0.05
Stream A-BCD		1.4	8.31	0.47		3.3	13.61	0.69
Stream D-AB		4.5	41.50	0.84		0.6	11.29	0.37
Stream D-BC		1.3	60.60	0.59		0.5	23.93	0.33
Stream C-ABD		0.0	5.24	0.02		0.0	4.85	0.01
Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Kirklees Rates								
Stream B-ACD	D15	0.1	14.58	0.05	D16	0.0	12.88	0.03
Stream A-BCD		1.4	8.49	0.48		3.5	14.57	0.71
Stream D-AB		4.8	43.51	0.85		0.6	11.26	0.36
Stream D-BC		1.4	64.85	0.61		0.5	24.26	0.34
Stream C-ABD		0.0	5.24	0.02		0.0	4.85	0.01

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

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

File summary

File Description

Title	Oxford Road - West Lane - Cambridge Chase
Location	Gomersal
Site number	
Date	27/04/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	FAIRHURST\ashley.armitage
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2023 Base	AM	ONE HOUR	07:15	08:45	15	✓		
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓		
D3	2028 Base	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1*1.0367
D4	2028 Base	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2*1.0375
D5	Dev - Approved Rates	AM	ONE HOUR	07:15	08:45	15			
D6	Dev - Approved Rates	PM	ONE HOUR	16:15	17:45	15			
D7	Dev - Kirklees Rates	AM	ONE HOUR	07:15	08:45	15			
D8	Dev - Kirklees Rates	PM	ONE HOUR	16:15	17:45	15			
D9	2023 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D5
D10	2023 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D6
D11	2023 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D7
D12	2023 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D8
D13	2028 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D5
D14	2028 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D6
D15	2028 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D7
D16	2028 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D8

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Oxford Road - West Lane - Cambridge Chase	✓	100.000	100.000

Oxford Road - West Lane - Cambridge Chase - 2023 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		9.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Oxford Road (N)		Major
B	Cambridge Chase		Minor
C	Oxford Road (S)		Major
D	West Lane		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	7.00			200.0	✓	0.00
C	7.00			100.0	✓	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)	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	2.75								18	18
D	One lane plus flare		10.00	4.75	4.00	3.75	3.75		1.00	20	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	690	-	-	-	-	-	-	0.256	0.365	0.256	-	-	-
B-A	480	0.084	0.211	0.211	-	-	-	0.133	0.302	-	0.211	0.211	0.106
B-C	619	0.091	0.230	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	480	0.084	0.211	0.211	-	-	-	0.133	0.302	0.133	-	-	-
B-D, offside lane	480	0.084	0.211	0.211	-	-	-	0.133	0.302	0.133	-	-	-
C-B	632	0.234	0.234	0.335	-	-	-	-	-	-	-	-	-
D-A	728	-	-	-	-	-	-	0.270	-	0.107	-	-	-
D-B, nearside lane	565	0.156	0.156	0.355	-	-	-	0.249	0.249	0.098	-	-	-
D-B, offside lane	488	0.135	0.135	0.307	-	-	-	0.215	0.215	0.085	-	-	-
D-C	488	-	0.135	0.307	0.107	0.215	0.215	0.215	0.215	0.085	-	-	-

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	2023 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	525	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	472	100.000
D		ONE HOUR	✓	421	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	4	354	167
	B	3	0	5	3
	C	390	4	0	78
	D	349	0	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	25	3	1
	B	33	0	0	0
	C	4	25	0	1
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.04	13.68	0.0	B	10	15
A-BCD	0.44	7.87	1.2	A	269	403
A-B					2	4
A-C					210	316
D-AB	0.74	26.46	2.7	D	320	480
D-BC	0.44	35.76	0.8	E	66	99
C-ABD	0.02	5.29	0.0	A	9	14
C-D					71	106
C-A					353	530

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	351	0.024	8	0.0	0.0	10.506	B
A-BCD	194	48	768	0.252	192	0.0	0.5	6.244	A
A-B	2	0.56			2				
A-C	199	50			199				
D-AB	263	66	607	0.433	260	0.0	0.7	10.277	B
D-BC	54	14	312	0.174	53	0.0	0.2	13.913	B
C-ABD	6	2	687	0.009	6	0.0	0.0	5.289	A
C-D	58	15			58				
C-A	291	73			291				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	2	321	0.031	10	0.0	0.0	11.585	B
A-BCD	255	64	788	0.323	254	0.5	0.7	6.745	A
A-B	2	0.61			2				
A-C	215	54			215				
D-AB	314	78	576	0.545	312	0.7	1.2	13.568	B
D-BC	65	16	264	0.245	64	0.2	0.3	17.982	C
C-ABD	9	2	726	0.012	9	0.0	0.0	5.046	A
C-D	69	17			69				
C-A	346	87			346				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	3	276	0.044	12	0.0	0.0	13.610	B
A-BCD	357	89	817	0.437	355	0.7	1.2	7.799	A
A-B	2	0.62			2				
A-C	219	55			219				
D-AB	384	96	521	0.737	379	1.2	2.6	24.359	C
D-BC	79	20	184	0.431	78	0.3	0.7	33.452	D
C-ABD	13	3	782	0.017	13	0.0	0.0	4.709	A
C-D	84	21			84				
C-A	422	106			422				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	3	275	0.044	12	0.0	0.0	13.684	B
A-BCD	358	89	818	0.437	358	1.2	1.2	7.873	A
A-B	2	0.61			2				
A-C	218	54			218				
D-AB	384	96	518	0.741	384	2.6	2.7	26.462	D
D-BC	79	20	179	0.442	79	0.7	0.8	35.764	E
C-ABD	13	3	782	0.017	13	0.0	0.0	4.682	A
C-D	84	21			84				
C-A	422	106			422				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	2	319	0.031	10	0.0	0.0	11.657	B
A-BCD	256	64	789	0.324	258	1.2	0.7	6.831	A
A-B	2	0.60			2				
A-C	214	53			214				
D-AB	314	78	573	0.548	320	2.7	1.2	14.510	B
D-BC	65	16	260	0.249	66	0.8	0.3	18.747	C
C-ABD	9	2	726	0.012	9	0.0	0.0	4.978	A
C-D	69	17			69				
C-A	346	87			346				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	350	0.024	8	0.0	0.0	10.549	B
A-BCD	195	49	768	0.253	196	0.7	0.5	6.315	A
A-B	2	0.56			2				
A-C	198	50			198				
D-AB	263	66	606	0.434	265	1.2	0.8	10.606	B
D-BC	54	14	310	0.175	55	0.3	0.2	14.125	B
C-ABD	6	2	687	0.009	6	0.0	0.0	5.252	A
C-D	58	15			58				
C-A	291	73			291				

Oxford Road - West Lane - Cambridge Chase - 2023 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		5.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	634	100.000
B		ONE HOUR	✓	7	100.000
C		ONE HOUR	✓	456	100.000
D		ONE HOUR	✓	220	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	5	401	228
	B	3	0	3	1
	C	391	2	0	63
	D	152	3	65	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	12.12	0.0	B	6	10
A-BCD	0.61	10.91	2.3	B	393	589
A-B					2	3
A-C					187	280
D-AB	0.33	10.32	0.5	B	141	212
D-BC	0.30	20.96	0.4	C	61	91
C-ABD	0.01	4.85	0.0	A	4	6
C-D					57	86
C-A					357	535

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	384	0.014	5	0.0	0.0	9.508	A
A-BCD	278	70	797	0.349	275	0.0	0.7	6.884	A
A-B	2	0.61			2				
A-C	196	49			196				
D-AB	116	29	593	0.195	115	0.0	0.2	7.514	A
D-BC	50	12	332	0.151	49	0.0	0.2	12.722	B
C-ABD	3	0.69	746	0.004	3	0.0	0.0	4.843	A
C-D	47	12			47				
C-A	293	73			293				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	2	352	0.018	6	0.0	0.0	10.421	B
A-BCD	370	92	824	0.449	368	0.7	1.2	7.922	A
A-B	2	0.62			2				
A-C	198	49			198				
D-AB	138	35	565	0.245	138	0.2	0.3	8.418	A
D-BC	60	15	296	0.201	59	0.2	0.2	15.198	C
C-ABD	4	0.95	773	0.005	4	0.0	0.0	4.676	A
C-D	56	14			56				
C-A	350	87			350				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	306	0.025	8	0.0	0.0	12.069	B
A-BCD	526	131	862	0.610	521	1.2	2.3	10.610	B
A-B	2	0.53			2				
A-C	170	43			170				
D-AB	169	42	519	0.326	169	0.3	0.5	10.249	B
D-BC	73	18	245	0.296	72	0.2	0.4	20.690	C
C-ABD	6	1	815	0.007	6	0.0	0.0	4.446	A
C-D	69	17			69				
C-A	427	107			427				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	305	0.025	8	0.0	0.0	12.119	B
A-BCD	528	132	864	0.612	528	2.3	2.3	10.906	B
A-B	2	0.52			2				
A-C	168	42			168				
D-AB	169	42	518	0.327	169	0.5	0.5	10.318	B
D-BC	73	18	244	0.298	73	0.4	0.4	20.958	C
C-ABD	6	1	814	0.007	6	0.0	0.0	4.455	A
C-D	69	17			69				
C-A	427	107			427				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	2	350	0.018	6	0.0	0.0	10.472	B
A-BCD	372	93	826	0.451	377	2.3	1.2	8.151	A
A-B	2	0.61			2				
A-C	195	49			195				
D-AB	138	35	564	0.245	139	0.5	0.3	8.480	A
D-BC	60	15	294	0.202	60	0.4	0.3	15.404	C
C-ABD	4	0.96	772	0.005	4	0.0	0.0	4.690	A
C-D	56	14			56				
C-A	350	87			350				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	383	0.014	5	0.0	0.0	9.542	A
A-BCD	280	70	799	0.351	282	1.2	0.8	7.023	A
A-B	2	0.61			2				
A-C	195	49			195				
D-AB	116	29	592	0.196	116	0.3	0.2	7.570	A
D-BC	50	12	330	0.151	50	0.3	0.2	12.862	B
C-ABD	3	0.70	745	0.004	3	0.0	0.0	4.854	A
C-D	47	12			47				
C-A	293	73			293				

Oxford Road - West Lane - Cambridge Chase - 2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		12.12	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Base	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1*1.0367

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	544	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	489	100.000
D		ONE HOUR	✓	436	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	4	367	173
	B	3	0	5	3
	C	404	4	0	81
	D	362	0	75	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	25	3	1
	B	33	0	0	0
	C	4	25	0	1
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.05	14.24	0.0	B	10	16
A-BCD	0.46	8.19	1.3	A	285	428
A-B					2	4
A-C					212	317
D-AB	0.79	33.19	3.5	D	332	498
D-BC	0.52	46.53	1.0	E	68	103
C-ABD	0.02	5.24	0.0	A	10	15
C-D					73	110
C-A					366	549

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	9	2	345	0.025	8	0.0	0.0	10.684	B
A-BCD	204	51	771	0.265	202	0.0	0.5	6.318	A
A-B	2	0.57			2				
A-C	203	51			203				
D-AB	272	68	602	0.453	269	0.0	0.8	10.724	B
D-BC	56	14	304	0.185	55	0.0	0.2	14.433	B
C-ABD	7	2	694	0.009	7	0.0	0.0	5.235	A
C-D	60	15			60				
C-A	301	75			301				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	3	314	0.033	10	0.0	0.0	11.864	B
A-BCD	270	67	793	0.341	269	0.5	0.7	6.880	A
A-B	2	0.61			2				
A-C	217	54			217				
D-AB	325	81	568	0.573	323	0.8	1.3	14.597	B
D-BC	67	17	252	0.266	67	0.2	0.4	19.336	C
C-ABD	9	2	735	0.013	9	0.0	0.0	4.988	A
C-D	72	18			72				
C-A	359	90			359				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	13	3	267	0.047	12	0.0	0.0	14.134	B
A-BCD	381	95	824	0.462	378	0.7	1.3	8.100	A
A-B	2	0.61			2				
A-C	216	54			216				
D-AB	398	100	508	0.785	391	1.3	3.2	29.103	D
D-BC	82	21	165	0.498	80	0.4	0.9	41.339	E
C-ABD	14	4	794	0.018	14	0.0	0.0	4.645	A
C-D	87	22			87				
C-A	437	109			437				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	13	3	265	0.047	13	0.0	0.0	14.238	B
A-BCD	382	95	825	0.463	382	1.3	1.3	8.191	A
A-B	2	0.61			2				
A-C	215	54			215				
D-AB	398	100	503	0.792	397	3.2	3.5	33.192	D
D-BC	82	21	158	0.519	82	0.9	1.0	46.529	E
C-ABD	14	4	793	0.018	14	0.0	0.0	4.621	A
C-D	87	22			87				
C-A	437	109			437				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	3	311	0.033	10	0.0	0.0	11.959	B
A-BCD	271	68	794	0.341	273	1.3	0.8	6.980	A
A-B	2	0.61			2				
A-C	216	54			216				
D-AB	325	81	564	0.577	333	3.5	1.4	16.136	C
D-BC	67	17	246	0.272	70	1.0	0.4	20.627	C
C-ABD	9	2	734	0.013	9	0.0	0.0	4.920	A
C-D	72	18			72				
C-A	359	90			359				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	9	2	344	0.025	9	0.0	0.0	10.735	B
A-BCD	205	51	772	0.266	206	0.8	0.5	6.397	A
A-B	2	0.57			2				
A-C	202	51			202				
D-AB	272	68	600	0.454	275	1.4	0.8	11.133	B
D-BC	56	14	301	0.186	57	0.4	0.2	14.752	B
C-ABD	7	2	694	0.010	7	0.0	0.0	5.201	A
C-D	60	15			60				
C-A	301	75			301				

Oxford Road - West Lane - Cambridge Chase - 2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		6.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Base	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2*1.0375

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	658	100.000
B		ONE HOUR	✓	7	100.000
C		ONE HOUR	✓	473	100.000
D		ONE HOUR	✓	228	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	5	416	237
	B	3	0	3	1
	C	406	2	0	65
	D	158	3	67	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	12.56	0.0	B	7	10
A-BCD	0.65	11.99	2.7	B	418	627
A-B					2	3
A-C					183	274
D-AB	0.35	10.88	0.5	B	146	220
D-BC	0.32	22.75	0.5	C	63	94
C-ABD	0.01	4.82	0.0	A	4	7
C-D					60	89
C-A					370	555

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	378	0.014	5	0.0	0.0	9.665	A
A-BCD	295	74	802	0.367	291	0.0	0.8	7.032	A
A-B	2	0.62			2				
A-C	198	50			198				
D-AB	120	30	588	0.204	119	0.0	0.3	7.662	A
D-BC	52	13	325	0.159	51	0.0	0.2	13.112	B
C-ABD	3	0.74	751	0.004	3	0.0	0.0	4.810	A
C-D	49	12			49				
C-A	304	76			304				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	344	0.019	7	0.0	0.0	10.658	B
A-BCD	393	98	830	0.474	391	0.8	1.3	8.230	A
A-B	2	0.61			2				
A-C	196	49			196				
D-AB	143	36	558	0.257	143	0.3	0.3	8.661	A
D-BC	62	15	288	0.215	61	0.2	0.3	15.893	C
C-ABD	4	1	780	0.005	4	0.0	0.0	4.637	A
C-D	58	15			58				
C-A	363	91			363				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	296	0.027	8	0.0	0.0	12.490	B
A-BCD	563	141	870	0.647	557	1.3	2.7	11.560	B
A-B	2	0.50			2				
A-C	159	40			159				
D-AB	176	44	508	0.346	175	0.3	0.5	10.786	B
D-BC	75	19	235	0.321	75	0.3	0.5	22.380	C
C-ABD	6	2	824	0.008	6	0.0	0.0	4.400	A
C-D	71	18			71				
C-A	443	111			443				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	295	0.027	8	0.0	0.0	12.556	B
A-BCD	566	142	872	0.649	566	2.7	2.7	11.994	B
A-B	2	0.49			2				
A-C	156	39			156				
D-AB	176	44	507	0.347	176	0.5	0.5	10.883	B
D-BC	75	19	234	0.323	75	0.5	0.5	22.753	C
C-ABD	6	2	823	0.008	6	0.0	0.0	4.410	A
C-D	71	18			71				
C-A	443	111			443				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	342	0.019	7	0.0	0.0	10.725	B
A-BCD	397	99	833	0.476	402	2.7	1.4	8.534	A
A-B	2	0.60			2				
A-C	192	48			192				
D-AB	143	36	557	0.258	144	0.5	0.4	8.736	A
D-BC	62	15	286	0.216	62	0.5	0.3	16.164	C
C-ABD	4	1	778	0.005	4	0.0	0.0	4.655	A
C-D	58	15			58				
C-A	363	91			363				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	376	0.015	5	0.0	0.0	9.705	A
A-BCD	297	74	804	0.369	299	1.4	0.8	7.193	A
A-B	2	0.61			2				
A-C	196	49			196				
D-AB	120	30	587	0.205	120	0.4	0.3	7.726	A
D-BC	52	13	324	0.160	52	0.3	0.2	13.280	B
C-ABD	3	0.74	750	0.004	3	0.0	0.0	4.824	A
C-D	49	12			49				
C-A	304	76			304				

Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Approved Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		11.71	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	Relationship type	Relationship
D9	2023 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	528	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	472	100.000
D		ONE HOUR	✓	440	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	4	354	170
	B	3	0	5	3
	C	390	4	0	78
	D	368	0	72	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	25	3	1
	B	33	0	0	0
	C	4	25	0	1
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.04	13.90	0.0	B	10	15
A-BCD	0.45	7.98	1.2	A	274	411
A-B					2	4
A-C					208	313
D-AB	0.79	31.55	3.4	D	338	507
D-BC	0.49	42.63	0.9	E	66	99
C-ABD	0.02	5.29	0.0	A	9	14
C-D					71	106
C-A					353	530

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	349	0.024	8	0.0	0.0	10.567	B
A-BCD	197	49	768	0.257	195	0.0	0.5	6.278	A
A-B	2	0.56			2				
A-C	198	50			198				
D-AB	277	69	608	0.456	274	0.0	0.8	10.681	B
D-BC	54	14	307	0.177	53	0.0	0.2	14.141	B
C-ABD	6	2	686	0.009	6	0.0	0.0	5.292	A
C-D	58	15			58				
C-A	291	73			291				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	2	318	0.031	10	0.0	0.0	11.685	B
A-BCD	259	65	788	0.329	258	0.5	0.7	6.802	A
A-B	2	0.60			2				
A-C	213	53			213				
D-AB	331	83	576	0.575	329	0.8	1.3	14.472	B
D-BC	65	16	256	0.253	64	0.2	0.3	18.747	C
C-ABD	9	2	725	0.012	9	0.0	0.0	5.050	A
C-D	69	17			69				
C-A	346	87			346				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	3	273	0.044	12	0.0	0.0	13.807	B
A-BCD	363	91	818	0.445	361	0.7	1.2	7.905	A
A-B	2	0.61			2				
A-C	215	54			215				
D-AB	405	101	520	0.780	398	1.3	3.1	28.034	D
D-BC	79	20	169	0.469	77	0.3	0.8	38.495	E
C-ABD	13	3	781	0.017	13	0.0	0.0	4.713	A
C-D	84	21			84				
C-A	422	106			422				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	3	271	0.045	12	0.0	0.0	13.900	B
A-BCD	364	91	818	0.445	364	1.2	1.2	7.984	A
A-B	2	0.61			2				
A-C	215	54			215				
D-AB	405	101	516	0.785	404	3.1	3.4	31.555	D
D-BC	79	20	163	0.487	79	0.8	0.9	42.633	E
C-ABD	13	3	781	0.017	13	0.0	0.0	4.686	A
C-D	84	21			84				
C-A	422	106			422				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	2	316	0.031	10	0.0	0.0	11.770	B
A-BCD	260	65	789	0.330	262	1.2	0.7	6.890	A
A-B	2	0.60			2				
A-C	212	53			212				
D-AB	331	83	572	0.578	339	3.4	1.4	15.878	C
D-BC	65	16	250	0.259	67	0.9	0.4	19.844	C
C-ABD	9	2	725	0.012	9	0.0	0.0	4.982	A
C-D	69	17			69				
C-A	346	87			346				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	347	0.024	8	0.0	0.0	10.614	B
A-BCD	198	50	769	0.258	199	0.7	0.5	6.351	A
A-B	2	0.56			2				
A-C	197	49			197				
D-AB	277	69	606	0.457	279	1.4	0.9	11.082	B
D-BC	54	14	305	0.178	55	0.4	0.2	14.437	B
C-ABD	6	2	686	0.009	6	0.0	0.0	5.256	A
C-D	58	15			58				
C-A	291	73			291				

Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Approved Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		6.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2023 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	654	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	456	100.000
D		ONE HOUR	✓	229	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	11	401	242
	B	7	0	3	1
	C	391	2	0	63
	D	161	3	65	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.05	14.29	0.0	B	10	15
A-BCD	0.65	12.16	2.8	B	420	631
A-B					5	7
A-C					175	262
D-AB	0.35	10.66	0.5	B	149	224
D-BC	0.31	21.93	0.4	C	61	91
C-ABD	0.01	4.88	0.0	A	4	6
C-D					57	86
C-A					357	535

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	348	0.024	8	0.0	0.0	10.578	B
A-BCD	297	74	800	0.372	294	0.0	0.8	7.091	A
A-B	5	1			5				
A-C	190	47			190				
D-AB	123	31	594	0.206	121	0.0	0.3	7.600	A
D-BC	50	12	327	0.153	49	0.0	0.2	12.948	B
C-ABD	3	0.70	742	0.004	3	0.0	0.0	4.868	A
C-D	47	12			47				
C-A	293	73			293				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	2	314	0.032	10	0.0	0.0	11.838	B
A-BCD	396	99	828	0.478	394	0.8	1.3	8.319	A
A-B	5	1			5				
A-C	187	47			187				
D-AB	146	37	566	0.259	146	0.3	0.3	8.568	A
D-BC	60	15	290	0.205	59	0.2	0.3	15.586	C
C-ABD	4	0.96	769	0.005	4	0.0	0.0	4.702	A
C-D	56	14			56				
C-A	350	87			350				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	3	265	0.046	12	0.0	0.0	14.203	B
A-BCD	564	141	867	0.651	558	1.3	2.7	11.712	B
A-B	4	1			4				
A-C	152	38			152				
D-AB	179	45	518	0.346	179	0.3	0.5	10.576	B
D-BC	73	18	238	0.306	72	0.3	0.4	21.602	C
C-ABD	6	1	810	0.007	6	0.0	0.0	4.473	A
C-D	69	17			69				
C-A	427	107			427				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	3	264	0.046	12	0.0	0.0	14.290	B
A-BCD	567	142	869	0.653	567	2.7	2.8	12.156	B
A-B	4	1			4				
A-C	149	37			149				
D-AB	179	45	517	0.347	179	0.5	0.5	10.663	B
D-BC	73	18	237	0.307	73	0.4	0.4	21.927	C
C-ABD	6	1	809	0.007	6	0.0	0.0	4.482	A
C-D	69	17			69				
C-A	427	107			427				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	2	312	0.032	10	0.0	0.0	11.923	B
A-BCD	399	100	831	0.480	405	2.7	1.4	8.628	A
A-B	5	1			5				
A-C	184	46			184				
D-AB	146	37	564	0.259	147	0.5	0.4	8.640	A
D-BC	60	15	288	0.206	60	0.4	0.3	15.833	C
C-ABD	4	0.96	767	0.005	4	0.0	0.0	4.721	A
C-D	56	14			56				
C-A	350	87			350				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	347	0.024	8	0.0	0.0	10.631	B
A-BCD	300	75	802	0.373	302	1.4	0.8	7.254	A
A-B	5	1			5				
A-C	188	47			188				
D-AB	123	31	593	0.207	123	0.4	0.3	7.666	A
D-BC	50	12	325	0.153	50	0.3	0.2	13.103	B
C-ABD	3	0.70	741	0.004	3	0.0	0.0	4.882	A
C-D	47	12			47				
C-A	293	73			293				

Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Kirklees Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		12.17	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	Relationship type	Relationship
D11	2023 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	532	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	472	100.000
D		ONE HOUR	✓	443	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	4	354	174
	B	3	0	5	3
	C	390	4	0	78
	D	371	0	72	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	25	3	1
	B	33	0	0	0
	C	4	25	0	1
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.04	13.98	0.0	B	10	15
A-BCD	0.46	8.14	1.3	A	280	420
A-B					2	3
A-C					206	308
D-AB	0.79	32.70	3.5	D	340	511
D-BC	0.50	44.56	0.9	E	66	99
C-ABD	0.02	5.30	0.0	A	9	14
C-D					71	106
C-A					353	530

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	348	0.024	8	0.0	0.0	10.591	B
A-BCD	202	50	768	0.263	200	0.0	0.5	6.328	A
A-B	2	0.55			2				
A-C	196	49			196				
D-AB	279	70	608	0.460	276	0.0	0.8	10.751	B
D-BC	54	14	306	0.177	53	0.0	0.2	14.230	B
C-ABD	6	2	686	0.009	6	0.0	0.0	5.297	A
C-D	58	15			58				
C-A	291	73			291				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	2	317	0.031	10	0.0	0.0	11.723	B
A-BCD	265	66	788	0.337	264	0.5	0.7	6.880	A
A-B	2	0.59			2				
A-C	210	53			210				
D-AB	334	83	575	0.580	332	0.8	1.3	14.637	B
D-BC	65	16	254	0.255	64	0.2	0.3	18.959	C
C-ABD	9	2	724	0.012	9	0.0	0.0	5.055	A
C-D	69	17			69				
C-A	346	87			346				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	3	271	0.045	12	0.0	0.0	13.881	B
A-BCD	372	93	818	0.455	370	0.7	1.2	8.052	A
A-B	2	0.60			2				
A-C	211	53			211				
D-AB	408	102	519	0.787	401	1.3	3.2	28.808	D
D-BC	79	20	166	0.479	77	0.3	0.8	39.844	E
C-ABD	13	3	781	0.017	13	0.0	0.0	4.718	A
C-D	84	21			84				
C-A	422	106			422				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	3	270	0.045	12	0.0	0.0	13.980	B
A-BCD	373	93	818	0.456	373	1.2	1.3	8.137	A
A-B	2	0.59			2				
A-C	210	53			210				
D-AB	408	102	515	0.793	407	3.2	3.5	32.704	D
D-BC	79	20	159	0.498	79	0.8	0.9	44.561	E
C-ABD	13	3	780	0.017	13	0.0	0.0	4.693	A
C-D	84	21			84				
C-A	422	106			422				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	2	315	0.031	10	0.0	0.0	11.815	B
A-BCD	266	67	789	0.338	268	1.3	0.8	6.972	A
A-B	2	0.59			2				
A-C	209	52			209				
D-AB	334	83	572	0.583	342	3.5	1.5	16.161	C
D-BC	65	16	248	0.261	67	0.9	0.4	20.158	C
C-ABD	9	2	724	0.012	9	0.0	0.0	4.987	A
C-D	69	17			69				
C-A	346	87			346				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	347	0.024	8	0.0	0.0	10.639	B
A-BCD	203	51	769	0.264	204	0.8	0.5	6.403	A
A-B	2	0.55			2				
A-C	195	49			195				
D-AB	279	70	606	0.461	282	1.5	0.9	11.169	B
D-BC	54	14	303	0.179	55	0.4	0.2	14.536	B
C-ABD	6	2	685	0.009	6	0.0	0.0	5.261	A
C-D	58	15			58				
C-A	291	73			291				

Oxford Road - West Lane - Cambridge Chase - 2023 Base + Dev Kirklees Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		6.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2023 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	656	100.000
B		ONE HOUR	✓	7	100.000
C		ONE HOUR	✓	456	100.000
D		ONE HOUR	✓	227	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	5	401	250
	B	3	0	3	1
	C	391	2	0	63
	D	159	3	65	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	12.41	0.0	B	6	10
A-BCD	0.67	12.91	2.9	B	431	646
A-B					2	3
A-C					169	254
D-AB	0.34	10.63	0.5	B	148	221
D-BC	0.31	22.20	0.4	C	61	91
C-ABD	0.01	4.89	0.0	A	4	6
C-D					57	86
C-A					357	535

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	380	0.014	5	0.0	0.0	9.603	A
A-BCD	305	76	798	0.383	302	0.0	0.8	7.241	A
A-B	2	0.58			2				
A-C	186	47			186				
D-AB	121	30	594	0.204	120	0.0	0.3	7.588	A
D-BC	50	12	325	0.153	49	0.0	0.2	13.009	B
C-ABD	3	0.70	741	0.004	3	0.0	0.0	4.873	A
C-D	47	12			47				
C-A	293	73			293				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	2	347	0.018	6	0.0	0.0	10.569	B
A-BCD	406	101	824	0.492	404	0.8	1.4	8.577	A
A-B	2	0.57			2				
A-C	182	45			182				
D-AB	145	36	565	0.256	144	0.3	0.3	8.545	A
D-BC	60	15	288	0.206	59	0.2	0.3	15.688	C
C-ABD	4	0.96	768	0.005	4	0.0	0.0	4.707	A
C-D	56	14			56				
C-A	350	87			350				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	299	0.026	8	0.0	0.0	12.338	B
A-BCD	576	144	862	0.669	571	1.4	2.8	12.370	B
A-B	2	0.45			2				
A-C	144	36			144				
D-AB	177	44	517	0.343	177	0.3	0.5	10.543	B
D-BC	73	18	236	0.308	72	0.3	0.4	21.846	C
C-ABD	6	1	809	0.007	6	0.0	0.0	4.479	A
C-D	69	17			69				
C-A	427	107			427				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	298	0.026	8	0.0	0.0	12.407	B
A-BCD	580	145	865	0.671	580	2.8	2.9	12.908	B
A-B	2	0.44			2				
A-C	141	35			141				
D-AB	177	44	516	0.344	177	0.5	0.5	10.632	B
D-BC	73	18	235	0.310	73	0.4	0.4	22.203	C
C-ABD	6	1	808	0.007	6	0.0	0.0	4.489	A
C-D	69	17			69				
C-A	427	107			427				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	2	345	0.018	6	0.0	0.0	10.639	B
A-BCD	409	102	827	0.494	415	2.9	1.4	8.935	A
A-B	2	0.56			2				
A-C	178	45			178				
D-AB	145	36	564	0.256	145	0.5	0.3	8.616	A
D-BC	60	15	287	0.208	60	0.4	0.3	15.954	C
C-ABD	4	0.97	766	0.005	4	0.0	0.0	4.727	A
C-D	56	14			56				
C-A	350	87			350				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	379	0.014	5	0.0	0.0	9.644	A
A-BCD	307	77	799	0.385	310	1.4	0.9	7.418	A
A-B	2	0.57			2				
A-C	184	46			184				
D-AB	121	30	592	0.204	121	0.3	0.3	7.650	A
D-BC	50	12	324	0.154	50	0.3	0.2	13.170	B
C-ABD	3	0.70	740	0.004	3	0.0	0.0	4.885	A
C-D	47	12			47				
C-A	293	73			293				

Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Approved Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		15.16	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2028 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	547	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	489	100.000
D		ONE HOUR	✓	455	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	4	367	176
	B	3	0	5	3
	C	404	4	0	81
	D	381	0	75	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	25	3	1
	B	33	0	0	0
	C	4	25	0	1
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.05	14.49	0.1	B	10	16
A-BCD	0.47	8.31	1.4	A	290	436
A-B					2	4
A-C					209	314
D-AB	0.84	41.50	4.5	E	349	524
D-BC	0.59	60.60	1.3	F	68	103
C-ABD	0.02	5.24	0.0	A	10	15
C-D					73	110
C-A					366	549

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	9	2	343	0.025	8	0.0	0.0	10.748	B
A-BCD	208	52	771	0.269	206	0.0	0.5	6.354	A
A-B	2	0.57			2				
A-C	202	50			202				
D-AB	287	72	602	0.476	283	0.0	0.9	11.165	B
D-BC	56	14	299	0.188	55	0.0	0.2	14.742	B
C-ABD	7	2	694	0.010	7	0.0	0.0	5.239	A
C-D	60	15			60				
C-A	301	75			301				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	3	311	0.033	10	0.0	0.0	11.971	B
A-BCD	275	69	793	0.346	274	0.5	0.8	6.940	A
A-B	2	0.61			2				
A-C	215	54			215				
D-AB	342	86	568	0.603	340	0.9	1.5	15.653	C
D-BC	67	17	243	0.276	67	0.2	0.4	20.276	C
C-ABD	9	2	734	0.013	9	0.0	0.0	4.992	A
C-D	72	18			72				
C-A	359	90			359				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	13	3	263	0.048	12	0.0	0.0	14.354	B
A-BCD	387	97	824	0.470	385	0.8	1.3	8.219	A
A-B	2	0.60			2				
A-C	213	53			213				
D-AB	419	105	506	0.829	409	1.5	4.0	34.216	D
D-BC	82	21	149	0.552	79	0.4	1.1	49.779	E
C-ABD	14	4	793	0.018	14	0.0	0.0	4.649	A
C-D	87	22			87				
C-A	437	109			437				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	13	3	261	0.048	13	0.0	0.1	14.491	B
A-BCD	388	97	825	0.471	388	1.3	1.4	8.315	A
A-B	2	0.60			2				
A-C	212	53			212				
D-AB	419	105	500	0.839	417	4.0	4.5	41.500	E
D-BC	82	21	140	0.589	81	1.1	1.3	60.597	F
C-ABD	14	4	793	0.018	14	0.0	0.0	4.623	A
C-D	87	22			87				
C-A	437	109			437				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	3	308	0.033	10	0.1	0.0	12.092	B
A-BCD	276	69	794	0.347	278	1.4	0.8	7.045	A
A-B	2	0.60			2				
A-C	214	53			214				
D-AB	342	86	562	0.609	354	4.5	1.6	18.148	C
D-BC	67	17	235	0.286	71	1.3	0.4	22.337	C
C-ABD	9	2	734	0.013	9	0.0	0.0	4.922	A
C-D	72	18			72				
C-A	359	90			359				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	9	2	342	0.025	9	0.0	0.0	10.806	B
A-BCD	209	52	772	0.271	210	0.8	0.5	6.435	A
A-B	2	0.57			2				
A-C	201	50			201				
D-AB	287	72	601	0.477	289	1.6	0.9	11.672	B
D-BC	56	14	296	0.190	57	0.4	0.2	15.120	C
C-ABD	7	2	693	0.010	7	0.0	0.0	5.205	A
C-D	60	15			60				
C-A	301	75			301				

Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Approved Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		7.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2028 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	678	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	473	100.000
D		ONE HOUR	✓	237	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	11	416	251
	B	7	0	3	1
	C	406	2	0	65
	D	167	3	67	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.05	14.87	0.1	B	10	16
A-BCD	0.69	13.61	3.3	B	447	671
A-B					5	7
A-C					170	255
D-AB	0.37	11.29	0.6	B	155	232
D-BC	0.33	23.93	0.5	C	63	94
C-ABD	0.01	4.85	0.0	A	4	7
C-D					60	89
C-A					370	555

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	343	0.025	8	0.0	0.0	10.759	B
A-BCD	314	79	805	0.390	311	0.0	0.9	7.255	A
A-B	5	1			5				
A-C	191	48			191				
D-AB	127	32	589	0.215	126	0.0	0.3	7.754	A
D-BC	52	13	320	0.162	51	0.0	0.2	13.351	B
C-ABD	3	0.74	748	0.004	3	0.0	0.0	4.834	A
C-D	49	12			49				
C-A	304	76			304				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	3	307	0.033	10	0.0	0.0	12.129	B
A-BCD	420	105	834	0.504	418	0.9	1.4	8.674	A
A-B	5	1			5				
A-C	184	46			184				
D-AB	152	38	559	0.271	151	0.3	0.4	8.823	A
D-BC	62	15	282	0.219	61	0.2	0.3	16.320	C
C-ABD	4	1	776	0.005	4	0.0	0.0	4.662	A
C-D	58	15			58				
C-A	363	91			363				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	3	256	0.048	12	0.0	0.1	14.759	B
A-BCD	602	151	875	0.689	596	1.4	3.1	12.931	B
A-B	4	0.94			4				
A-C	140	35			140				
D-AB	186	46	506	0.367	185	0.4	0.6	11.170	B
D-BC	75	19	227	0.332	75	0.3	0.5	23.457	C
C-ABD	6	2	819	0.008	6	0.0	0.0	4.427	A
C-D	71	18			71				
C-A	443	111			443				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	3	254	0.049	12	0.1	0.1	14.875	B
A-BCD	607	152	878	0.691	606	3.1	3.3	13.606	B
A-B	4	0.91			4				
A-C	136	34			136				
D-AB	186	46	505	0.368	186	0.6	0.6	11.289	B
D-BC	75	19	226	0.334	75	0.5	0.5	23.934	C
C-ABD	6	2	818	0.008	6	0.0	0.0	4.437	A
C-D	71	18			71				
C-A	443	111			443				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	3	304	0.033	10	0.1	0.0	12.240	B
A-BCD	424	106	838	0.506	431	3.3	1.5	9.094	A
A-B	5	1			5				
A-C	180	45			180				
D-AB	152	38	557	0.272	152	0.6	0.4	8.913	A
D-BC	62	15	280	0.221	63	0.5	0.3	16.647	C
C-ABD	4	1	774	0.005	4	0.0	0.0	4.682	A
C-D	58	15			58				
C-A	363	91			363				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	341	0.025	9	0.0	0.0	10.824	B
A-BCD	316	79	807	0.392	319	1.5	0.9	7.448	A
A-B	5	1			5				
A-C	189	47			189				
D-AB	127	32	588	0.216	127	0.4	0.3	7.825	A
D-BC	52	13	318	0.163	52	0.3	0.2	13.535	B
C-ABD	3	0.75	746	0.004	3	0.0	0.0	4.849	A
C-D	49	12			49				
C-A	304	76			304				

Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Kirklees Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		15.95	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2028 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	551	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	489	100.000
D		ONE HOUR	✓	458	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	4	367	180
	B	3	0	5	3
	C	404	4	0	81
	D	384	0	75	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	25	3	1
	B	33	0	0	0
	C	4	25	0	1
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.05	14.58	0.1	B	10	16
A-BCD	0.48	8.49	1.4	A	297	446
A-B					2	3
A-C					206	310
D-AB	0.85	43.51	4.8	E	352	528
D-BC	0.61	64.85	1.4	F	68	103
C-ABD	0.02	5.24	0.0	A	10	15
C-D					73	110
C-A					366	549

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	9	2	343	0.025	8	0.0	0.0	10.773	B
A-BCD	213	53	772	0.276	210	0.0	0.5	6.406	A
A-B	2	0.57			2				
A-C	200	50			200				
D-AB	289	72	602	0.480	285	0.0	0.9	11.243	B
D-BC	56	14	297	0.189	55	0.0	0.2	14.841	B
C-ABD	7	2	693	0.010	7	0.0	0.0	5.244	A
C-D	60	15			60				
C-A	301	75			301				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	3	310	0.033	10	0.0	0.0	12.012	B
A-BCD	281	70	793	0.354	280	0.5	0.8	7.023	A
A-B	2	0.60			2				
A-C	212	53			212				
D-AB	345	86	567	0.608	343	0.9	1.5	15.847	C
D-BC	67	17	241	0.278	67	0.2	0.4	20.537	C
C-ABD	9	2	734	0.013	9	0.0	0.0	4.997	A
C-D	72	18			72				
C-A	359	90			359				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	13	3	262	0.048	12	0.0	0.0	14.437	B
A-BCD	396	99	824	0.481	394	0.8	1.4	8.381	A
A-B	2	0.59			2				
A-C	209	52			209				
D-AB	423	106	505	0.837	412	1.5	4.2	35.327	E
D-BC	82	21	145	0.565	79	0.4	1.1	52.081	F
C-ABD	14	4	792	0.018	14	0.0	0.0	4.654	A
C-D	87	22			87				
C-A	437	109			437				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	13	3	259	0.048	13	0.0	0.1	14.584	B
A-BCD	397	99	825	0.481	397	1.4	1.4	8.487	A
A-B	2	0.59			2				
A-C	208	52			208				
D-AB	423	106	498	0.848	420	4.2	4.8	43.508	E
D-BC	82	21	135	0.607	81	1.1	1.4	64.845	F
C-ABD	14	4	792	0.018	14	0.0	0.0	4.630	A
C-D	87	22			87				
C-A	437	109			437				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	3	307	0.033	10	0.1	0.0	12.144	B
A-BCD	282	71	794	0.355	284	1.4	0.8	7.132	A
A-B	2	0.60			2				
A-C	211	53			211				
D-AB	345	86	561	0.615	357	4.8	1.7	18.606	C
D-BC	67	17	232	0.289	71	1.4	0.4	22.834	C
C-ABD	9	2	733	0.013	9	0.0	0.0	4.929	A
C-D	72	18			72				
C-A	359	90			359				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	9	2	341	0.025	9	0.0	0.0	10.833	B
A-BCD	214	53	772	0.277	215	0.8	0.6	6.492	A
A-B	2	0.56			2				
A-C	199	50			199				
D-AB	289	72	600	0.481	292	1.7	0.9	11.770	B
D-BC	56	14	294	0.191	57	0.4	0.2	15.229	C
C-ABD	7	2	693	0.010	7	0.0	0.0	5.208	A
C-D	60	15			60				
C-A	301	75			301				

Oxford Road - West Lane - Cambridge Chase - 2028 Base + Dev Kirklees Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Oxford Road - West Lane - Cambridge Chase	Crossroads	Two-way		7.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2028 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	680	100.000
B		ONE HOUR	✓	7	100.000
C		ONE HOUR	✓	473	100.000
D		ONE HOUR	✓	235	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	5	416	259
	B	3	0	3	1
	C	406	2	0	65
	D	165	3	67	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	12.88	0.0	B	7	10
A-BCD	0.71	14.57	3.5	B	458	686
A-B					2	3
A-C					164	246
D-AB	0.36	11.26	0.6	B	153	229
D-BC	0.34	24.26	0.5	C	63	94
C-ABD	0.01	4.85	0.0	A	4	7
C-D					60	89
C-A					370	555

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	374	0.015	5	0.0	0.0	9.764	A
A-BCD	322	80	802	0.401	318	0.0	0.9	7.410	A
A-B	2	0.58			2				
A-C	188	47			188				
D-AB	125	31	588	0.213	124	0.0	0.3	7.738	A
D-BC	52	13	319	0.162	51	0.0	0.2	13.415	B
C-ABD	3	0.74	747	0.004	3	0.0	0.0	4.839	A
C-D	49	12			49				
C-A	304	76			304				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	339	0.019	7	0.0	0.0	10.816	B
A-BCD	430	107	830	0.518	427	0.9	1.5	8.956	A
A-B	2	0.56			2				
A-C	179	45			179				
D-AB	150	37	558	0.268	149	0.3	0.4	8.800	A
D-BC	62	15	280	0.220	61	0.2	0.3	16.436	C
C-ABD	4	1	775	0.005	4	0.0	0.0	4.668	A
C-D	58	15			58				
C-A	363	91			363				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	289	0.028	8	0.0	0.0	12.785	B
A-BCD	615	154	870	0.707	608	1.5	3.4	13.738	B
A-B	2	0.41			2				
A-C	132	33			132				
D-AB	184	46	505	0.363	183	0.4	0.6	11.137	B
D-BC	75	19	225	0.335	75	0.3	0.5	23.742	C
C-ABD	6	2	818	0.008	6	0.0	0.0	4.432	A
C-D	71	18			71				
C-A	443	111			443				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	2	288	0.028	8	0.0	0.0	12.877	B
A-BCD	620	155	874	0.710	619	3.4	3.5	14.571	B
A-B	2	0.40			2				
A-C	127	32			127				
D-AB	184	46	503	0.365	184	0.6	0.6	11.261	B
D-BC	75	19	224	0.337	75	0.5	0.5	24.255	C
C-ABD	6	2	816	0.008	6	0.0	0.0	4.445	A
C-D	71	18			71				
C-A	443	111			443				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	337	0.019	7	0.0	0.0	10.903	B
A-BCD	434	109	834	0.520	442	3.5	1.6	9.447	A
A-B	2	0.54			2				
A-C	175	44			175				
D-AB	150	37	556	0.269	151	0.6	0.4	8.891	A
D-BC	62	15	278	0.222	63	0.5	0.3	16.785	C
C-ABD	4	1	773	0.005	4	0.0	0.0	4.690	A
C-D	58	15			58				
C-A	363	91			363				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	372	0.015	5	0.0	0.0	9.812	A
A-BCD	324	81	804	0.403	327	1.6	1.0	7.623	A
A-B	2	0.58			2				
A-C	185	46			185				
D-AB	125	31	587	0.213	126	0.4	0.3	7.808	A
D-BC	52	13	317	0.163	52	0.3	0.2	13.607	B
C-ABD	3	0.75	745	0.004	3	0.0	0.0	4.855	A
C-D	49	12			49				
C-A	304	76			304				



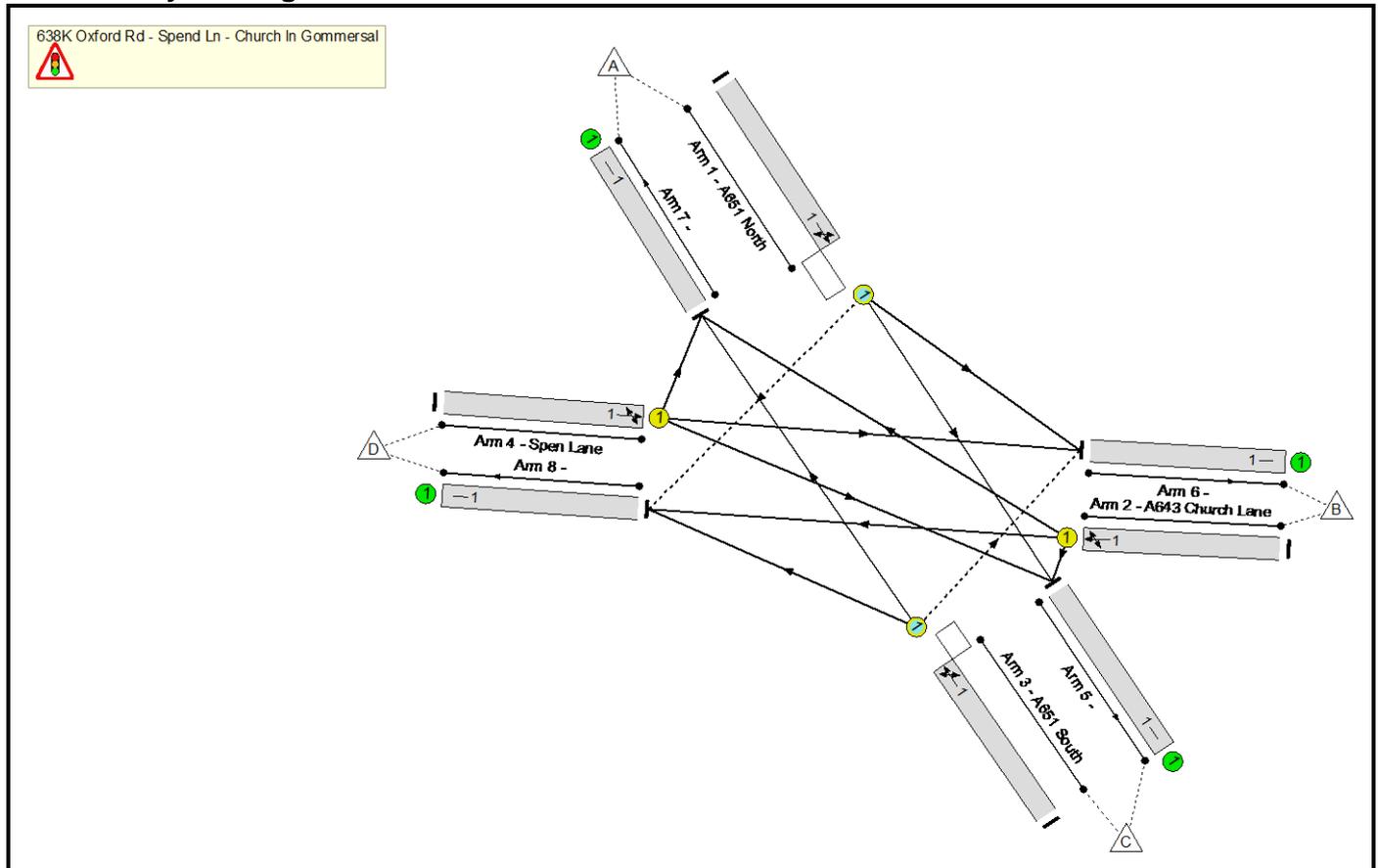
Appendix J

LinSig 3 Output – A643 Spen Lane/A651 Oxford Road/A643 Church Lane

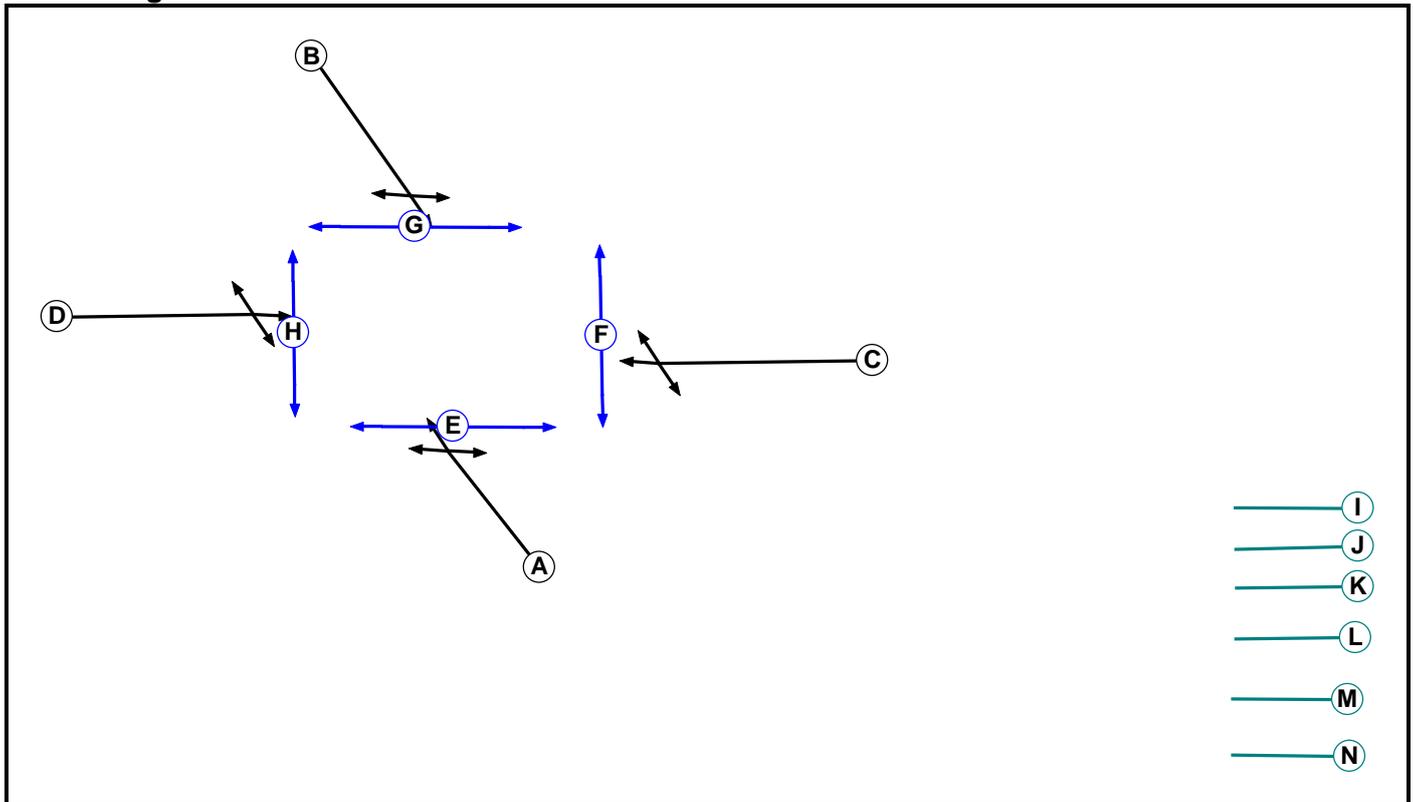
User and Project Details

Project:	Cliffe Lane Gomersal
Title:	638K Oxford Rd - Spend Ln - Church
Location:	638K Oxford Rd - Spend Ln - Church In Gomersal
Site Ref(s):	152130
Design Layout Ref:	638K
Date Started:	May 2023
Date Completed:	May 2023
Model Purpose:	Planning Application
Additional detail:	
File name:	638K Oxford Rd - Spend Ln - Church In Gomersal.lsg3x
Author:	Sanderson Assocaites
Company:	
Address:	

Junction Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		10	10
B	Traffic		10	10
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		9	9
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		9	9
I	Dummy		2	2
J	Dummy		2	2
K	Dummy		2	2
L	Dummy		12	12
M	Dummy		2	2
N	Dummy		2	2

Phase Intergreens Matrix

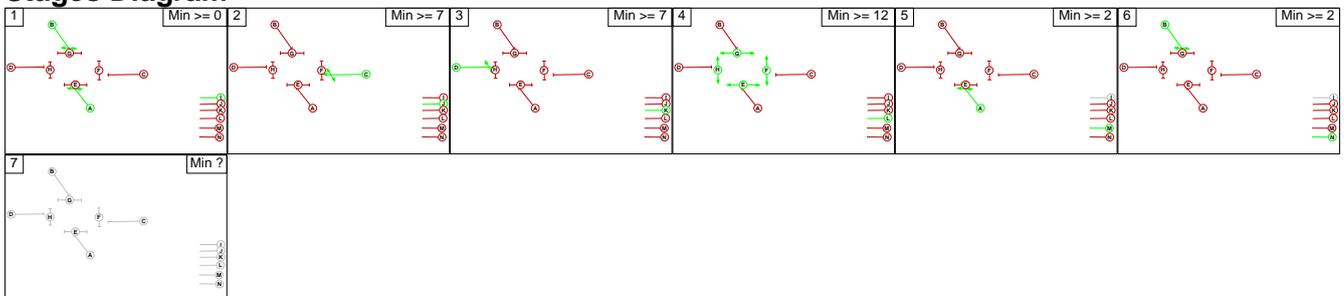
	Starting Phase													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
A	-	-	8	8	14	14	7	14	-	8	8	14	-	8
B	-	-	8	8	8	14	14	14	-	8	8	14	8	-
C	8	8	-	7	13	5	13	10	8	-	7	13	8	8
D	6	6	6	-	9	12	13	5	6	6	-	13	6	6
E	5	11	5	5	-	-	-	11	5	5	-	5	11	-
F	5	5	8	5	-	-	-	5	8	5	-	5	5	-
G	8	5	5	5	-	-	-	8	5	5	-	8	5	-
H	5	5	5	12	-	-	-	5	5	12	-	5	5	-
I	-	-	8	8	14	14	7	13	-	8	8	14	-	-
J	8	8	-	7	13	5	13	10	8	-	7	13	7	7
K	6	6	6	-	9	12	13	5	6	6	-	13	6	6
L	8	11	8	12	-	-	-	11	5	5	-	8	11	-
M	-	8	8	8	14	14	7	13	-	8	8	14	-	8
N	8	-	8	8	8	14	14	14	-	8	8	14	8	-

Terminating Phase

Phases in Stage

Stage No.	Phases in Stage
1	A B I
2	C J
3	D K
4	E F G H L
5	A M
6	B N
7	

Stages Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
4	1	A	Gaining absolute	3	3
4	1	F	Losing	6	6
4	1	G	Losing	3	3
4	1	H	Losing	6	6

Prohibited Stage Changes

		To Stage						
		1	2	3	4	5	6	7
From Stage	1	8	8	14	8	8	X	
	2	8	7	13	8	8	X	
	3	6	6	13	6	6	X	
	4	11	8	12	8	11	X	
	5	8	8	8	14	8	X	
	6	8	8	8	14	8	X	
	7	X	X	X	X	X	X	

Lane Input Data

Junction: 638K Oxford Rd - Spend Ln - Church In Gomersal												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A651 North)	O	B	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Left	10.00
											Arm 8 Right	10.00
2/1 (A643 Church Lane)	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Left	15.00
											Arm 7 Right	Inf
											Arm 8 Ahead	20.00
3/1 (A651 South)	O	A	2	3	60.0	Geom	-	3.60	0.00	Y	Arm 6 Right	10.00
											Arm 7 Ahead	Inf
											Arm 8 Left	25.00
4/1 (Spen Lane)	U	D	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Right	20.00
											Arm 6 Ahead	Inf
											Arm 7 Left	10.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

152130 Gomersal
Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 Base AM Peak'	07:30	08:30	01:00	
2: '2023 Base PM Peak'	16:30	17:30	01:00	
3: '2028 Base AM Peak '	07:30	08:30	01:00	F1*1.0367
4: '2028 Base PM Peak '	16:30	17:30	01:00	F2*1.0375
5: 'AM Approved Dev Rates '	07:30	08:30	01:00	
6: 'PM Approved Dev Rates'	16:30	17:30	01:00	
7: 'AM Kirklees Dev Rates '	07:30	08:30	01:00	
8: 'AM Kirklees Dev Rates '	16:30	17:30	01:00	
9: '2023 Base + App Dev Rates AM '	07:30	08:30	01:00	F1+F5
10: '2023 Base + App Dev Rates PM '	16:30	17:30	01:00	F2+F6
11: '2023 Base + Kirk Dev Rates AM '	07:30	08:30	01:00	F1+F7
12: '2023 Base + Kirk Dev Rates PM '	16:30	17:30	01:00	F2+F8
13: '2028 Base + App Dev Rates AM '	07:30	08:30	01:00	F3+F5
14: '2028 Base + App Dev Rates PM '	16:30	17:30	01:00	F4+F6
15: '2028 Base + Kirk Dev Rates AM '	07:30	08:30	01:00	F3+F7
16: '2028 Base + Kirk Dev Rates PM '	16:30	17:30	01:00	F4+F8

Link Results**Scenario 1: '2023 AM Base '** (FG1: '2023 Base AM Peak', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	96.3%	15.3	38.0	-
638K Oxford Rd - Spend Ln - Church In Gomersal	-	-	-		-	-	-	-	-	96.3%	15.3	38.0	-
1/1	A651 North Ahead Left Right	O	B		2	41	-	423	447	94.6%	4.0	10.0	17.2
2/1	A643 Church Lane Left Right Ahead	U	C		2	30	-	317	335	94.6%	3.3	8.8	14.3
3/1	A651 South Right Ahead Left	O	A		2	41	-	420	462	91.0%	3.9	8.3	15.3
4/1	Spenn Lane Right Ahead Left	U	D		2	37	-	394	409	96.3%	4.1	10.9	19.1
C1 PRC for Signalled Lanes (%): -7.0 Total Delay for Signalled Lanes (pcuHr): 37.95 Cycle Time (s): 180 PRC Over All Lanes (%): -7.0 Total Delay Over All Lanes(pcuHr): 37.95													

Scenario 2: '2028 AM Base ' (FG2: '2023 Base PM Peak', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	98.6%	15.7	42.9	-
638K Oxford Rd - Spend Ln - Church In Gomersal	-	-	-		-	-	-	-	-	98.6%	15.7	42.9	-
1/1	A651 North Ahead Left Right	O	B		2	44	-	471	478	98.6%	4.4	13.8	22.1
2/1	A643 Church Lane Left Right Ahead	U	C		2	35	-	373	383	97.4%	3.8	11.3	18.4
3/1	A651 South Right Ahead Left	O	A		2	44	-	444	493	90.1%	4.0	8.1	15.7
4/1	Spenn Lane Right Ahead Left	U	D		2	29	-	309	321	96.3%	3.4	9.7	16.0
C1 PRC for Signalled Lanes (%): -9.6 Total Delay for Signalled Lanes (pcuHr): 42.89 Cycle Time (s): 180 PRC Over All Lanes (%): -9.6 Total Delay Over All Lanes(pcuHr): 42.89													

Scenario 3: '2028 AM Base ' (FG3: '2028 Base AM Peak ', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	99.7%	16.1	48.3	-
638K Oxford Rd - Spend Ln - Church In Gommersal	-	-	-		-	-	-	-	-	99.7%	16.1	48.3	-
1/1	A651 North Ahead Left Right	O	B		2	41	-	439	447	98.2%	4.2	13.0	20.5
2/1	A643 Church Lane Left Right Ahead	U	C		2	30	-	329	335	98.2%	3.5	11.2	17.3
3/1	A651 South Right Ahead Left	O	A		2	41	-	435	462	94.3%	4.1	10.0	17.3
4/1	Spenn Lane Right Ahead Left	U	D		2	37	-	408	409	99.7%	4.3	14.2	23.0
C1 PRC for Signalled Lanes (%): -10.8 Total Delay for Signalled Lanes (pcuHr): 48.29 Cycle Time (s): 180 PRC Over All Lanes (%): -10.8 Total Delay Over All Lanes(pcuHr): 48.29													

Scenario 4: '2028 PM Base ' (FG4: '2028 Base PM Peak ', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	102.4%	17.9	57.4	-
638K Oxford Rd - Spend Ln - Church In Gommersal	-	-	-		-	-	-	-	-	102.4%	17.9	57.4	-
1/1	A651 North Ahead Left Right	O	B		2	44	-	489	478	102.4%	5.7	20.1	29.0
2/1	A643 Church Lane Left Right Ahead	U	C		2	35	-	387	383	101.1%	4.4	15.3	22.8
3/1	A651 South Right Ahead Left	O	A		2	44	-	461	493	93.5%	4.2	9.8	17.8
4/1	Spenn Lane Right Ahead Left	U	D		2	29	-	320	321	99.7%	3.6	12.3	18.9
C1 PRC for Signalled Lanes (%): -13.8 Total Delay for Signalled Lanes (pcuHr): 57.43 Cycle Time (s): 180 PRC Over All Lanes (%): -13.8 Total Delay Over All Lanes(pcuHr): 57.43													

Scenario 5: '2023 Base + App Dev Rates AM ' (FG9: '2023 Base + App Dev Rates AM ', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	96.8%	15.5	41.1	-
638K Oxford Rd - Spend Ln - Church In Gomersal	-	-	-		-	-	-	-	-	96.8%	15.5	41.1	-
1/1	A651 North Ahead Left Right	O	B		2	40	-	423	437	96.8%	4.1	11.6	18.9
2/1	A643 Church Lane Left Right Ahead	U	C		2	30	-	318	335	94.9%	3.3	8.9	14.6
3/1	A651 South Right Ahead Left	O	A		2	40	-	421	451	93.4%	4.0	9.4	16.6
4/1	Spenn Lane Right Ahead Left	U	D		2	38	-	405	420	96.5%	4.2	11.2	19.7
C1		PRC for Signalled Lanes (%):		-7.6	Total Delay for Signalled Lanes (pcuHr):		41.09	Cycle Time (s):		180			
		PRC Over All Lanes (%):		-7.6	Total Delay Over All Lanes(pcuHr):		41.09						

Scenario 6: '2023 Base + App Dev Rates PM ' (FG10: '2023 Base + App Dev Rates PM ', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	99.0%	15.8	45.3	-
638K Oxford Rd - Spend Ln - Church In Gomersal	-	-	-		-	-	-	-	-	99.0%	15.8	45.3	-
1/1	A651 North Ahead Left Right	O	B		2	44	-	471	478	98.6%	4.4	13.8	22.1
2/1	A643 Church Lane Left Right Ahead	U	C		2	35	-	379	383	99.0%	3.9	12.7	19.9
3/1	A651 South Right Ahead Left	O	A		2	44	-	446	493	90.5%	4.1	8.2	15.9
4/1	Spenn Lane Right Ahead Left	U	D		2	29	-	313	321	97.5%	3.5	10.5	17.0
C1		PRC for Signalled Lanes (%):		-10.0	Total Delay for Signalled Lanes (pcuHr):		45.29	Cycle Time (s):		180			
		PRC Over All Lanes (%):		-10.0	Total Delay Over All Lanes(pcuHr):		45.29						

Scenario 7: '2023 Base + Kirk Dev Rates AM ' (FG11: '2023 Base + Kirk Dev Rates AM ', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	96.8%	15.6	41.6	-
638K Oxford Rd - Spend Ln - Church In Gomersal	-	-	-		-	-	-	-	-	96.8%	15.6	41.6	-
1/1	A651 North Ahead Left Right	O	B		2	40	-	423	437	96.8%	4.0	11.6	18.7
2/1	A643 Church Lane Left Right Ahead	U	C		2	30	-	320	335	95.6%	3.3	9.3	15.0
3/1	A651 South Right Ahead Left	O	A		2	40	-	421	451	93.4%	4.0	9.3	16.3
4/1	Spenn Lane Right Ahead Left	U	D		2	38	-	406	420	96.7%	4.2	11.4	19.9
C1		PRC for Signalled Lanes (%):		-7.6	Total Delay for Signalled Lanes (pcuHr):		41.65	Cycle Time (s):		180			
		PRC Over All Lanes (%):		-7.6	Total Delay Over All Lanes(pcuHr):		41.65						

Scenario 8: '2023 Base + Kirk Dev Rates PM ' (FG12: '2023 Base + Kirk Dev Rates PM ', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	99.8%	15.9	46.3	-
638K Oxford Rd - Spend Ln - Church In Gomersal	-	-	-		-	-	-	-	-	99.8%	15.9	46.3	-
1/1	A651 North Ahead Left Right	O	B		2	44	-	471	478	98.6%	4.4	13.8	22.1
2/1	A643 Church Lane Left Right Ahead	U	C		2	35	-	382	383	99.8%	4.0	13.6	20.8
3/1	A651 South Right Ahead Left	O	A		2	44	-	447	493	90.7%	4.1	8.3	16.1
4/1	Spenn Lane Right Ahead Left	U	D		2	29	-	313	321	97.5%	3.5	10.5	17.0
C1		PRC for Signalled Lanes (%):		-10.9	Total Delay for Signalled Lanes (pcuHr):		46.26	Cycle Time (s):		180			
		PRC Over All Lanes (%):		-10.9	Total Delay Over All Lanes(pcuHr):		46.26						

Scenario 9: '2028 Base + App Dev Rates AM ' (FG13: '2028 Base + App Dev Rates AM ', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	100.5%	16.6	53.3	-
638K Oxford Rd - Spend Ln - Church In Gommersal	-	-	-		-	-	-	-	-	100.5%	16.6	53.3	-
1/1	A651 North Ahead Left Right	O	B		2	40	-	439	437	100.5%	4.5	15.6	23.2
2/1	A643 Church Lane Left Right Ahead	U	C		2	30	-	330	335	98.5%	3.5	11.5	17.5
3/1	A651 South Right Ahead Left	O	A		2	40	-	436	451	96.7%	4.2	11.7	19.0
4/1	Spenn Lane Right Ahead Left	U	D		2	38	-	419	420	99.8%	4.5	14.5	23.5
C1		PRC for Signalled Lanes (%):		-11.7	Total Delay for Signalled Lanes (pcuHr):		53.31	Cycle Time (s):		180			
		PRC Over All Lanes (%):		-11.7	Total Delay Over All Lanes(pcuHr):		53.31						

Scenario 10: '2028 Base + App Dev Rates PM ' (FG14: '2028 Base + App Dev Rates PM ', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	102.6%	18.9	61.6	-
638K Oxford Rd - Spend Ln - Church In Gommersal	-	-	-		-	-	-	-	-	102.6%	18.9	61.6	-
1/1	A651 North Ahead Left Right	O	B		2	44	-	489	478	102.4%	5.7	20.1	28.9
2/1	A643 Church Lane Left Right Ahead	U	C		2	35	-	393	383	102.6%	5.0	17.7	25.6
3/1	A651 South Right Ahead Left	O	A		2	44	-	463	493	93.9%	4.3	10.0	18.0
4/1	Spenn Lane Right Ahead Left	U	D		2	29	-	324	321	100.9%	4.0	13.7	20.5
C1		PRC for Signalled Lanes (%):		-14.0	Total Delay for Signalled Lanes (pcuHr):		61.57	Cycle Time (s):		180			
		PRC Over All Lanes (%):		-14.0	Total Delay Over All Lanes(pcuHr):		61.57						

Scenario 11: '2028 Base + Kirk Dev Rates AM ' (FG15: '2028 Base + Kirk Dev Rates AM ', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	100.5%	16.7	54.2	-
638K Oxford Rd - Spend Ln - Church In Gommersal	-	-	-		-	-	-	-	-	100.5%	16.7	54.2	-
1/1	A651 North Ahead Left Right	O	B		2	40	-	439	437	100.5%	4.5	15.6	23.2
2/1	A643 Church Lane Left Right Ahead	U	C		2	30	-	332	335	99.2%	3.6	12.0	18.2
3/1	A651 South Right Ahead Left	O	A		2	40	-	436	451	96.7%	4.2	11.7	19.0
4/1	Spenn Lane Right Ahead Left	U	D		2	38	-	420	420	100.1%	4.5	14.8	24.0
C1		PRC for Signalled Lanes (%):		-11.7	Total Delay for Signalled Lanes (pcuHr):		54.18	Cycle Time (s):		180			
		PRC Over All Lanes (%):		-11.7	Total Delay Over All Lanes(pcuHr):		54.18						

Scenario 12: '2028 Base + Kirk Dev Rates PM ' (FG16: '2028 Base + Kirk Dev Rates PM ', Plan 2: 'Peds Alt Cycle ')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network: 638K Oxford Rd - Spend Ln - Church	-	-	-		-	-	-	-	-	103.5%	19.2	63.0	-
638K Oxford Rd - Spend Ln - Church In Gommersal	-	-	-		-	-	-	-	-	103.5%	19.2	63.0	-
1/1	A651 North Ahead Left Right	O	B		2	44	-	489	478	102.4%	5.7	20.1	28.9
2/1	A643 Church Lane Left Right Ahead	U	C		2	35	-	396	383	103.5%	5.3	19.1	27.0
3/1	A651 South Right Ahead Left	O	A		2	44	-	464	493	94.2%	4.3	10.2	18.1
4/1	Spenn Lane Right Ahead Left	U	D		2	29	-	324	321	100.9%	4.0	13.7	20.5
C1		PRC for Signalled Lanes (%):		-15.0	Total Delay for Signalled Lanes (pcuHr):		63.05	Cycle Time (s):		180			
		PRC Over All Lanes (%):		-15.0	Total Delay Over All Lanes(pcuHr):		63.05						



Appendix K

Junctions 9 Output – Woodlands Road/Spen Lane

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
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Filename: Woodlands Road - Spen Lane.j9
Path: V:\152000\152130_Cliffe_Lane_Gomersal\07 Design and other outputs\Traffic programs\Junctions
Report generation date: 28/04/2023 10:09:04

- »Woodlands Road - Spen Lane - 2023 Base, AM
- »Woodlands Road - Spen Lane - 2023 Base, PM
- »Woodlands Road - Spen Lane - 2028 Base, AM
- »Woodlands Road - Spen Lane - 2028 Base, PM
- »Woodlands Road - Spen Lane - 2023 Base + Dev Approved Rates, AM
- »Woodlands Road - Spen Lane - 2023 Base + Dev Approved Rates, PM
- »Woodlands Road - Spen Lane - 2023 Base + Dev Kirklees Rates, AM
- »Woodlands Road - Spen Lane - 2023 Base + Dev Kirklees Rates, PM
- »Woodlands Road - Spen Lane - 2028 Base + Dev Approved Rates, AM
- »Woodlands Road - Spen Lane - 2028 Base + Dev Approved Rates, PM
- »Woodlands Road - Spen Lane - 2028 Base + Dev Kirklees Rates, AM
- »Woodlands Road - Spen Lane - 2028 Base + Dev Kirklees Rates, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
Woodlands Road - Spen Lane - 2023 Base										
Stream B-AC	D1	0.3	10.69	0.22	B	D2	0.5	11.52	0.32	B
Stream C-AB		0.3	5.91	0.14	A		0.4	5.72	0.19	A
Woodlands Road - Spen Lane - 2028 Base										
Stream B-AC	D3	0.3	10.94	0.23	B	D4	0.5	11.89	0.33	B
Stream C-AB		0.3	5.94	0.15	A		0.4	5.75	0.19	A
Woodlands Road - Spen Lane - 2023 Base + Dev Approved Rates										
Stream B-AC	D9	0.4	11.38	0.27	B	D10	0.5	11.96	0.34	B
Stream C-AB		0.3	5.94	0.15	A		0.4	5.87	0.20	A
Woodlands Road - Spen Lane - 2023 Base + Dev Kirklees Rates										
Stream B-AC	D11	0.4	11.50	0.28	B	D12	0.5	11.98	0.34	B
Stream C-AB		0.3	5.98	0.15	A		0.4	5.97	0.22	A
Woodlands Road - Spen Lane - 2028 Base + Dev Approved Rates										
Stream B-AC	D13	0.4	11.67	0.28	B	D14	0.5	12.35	0.36	B
Stream C-AB		0.3	5.97	0.15	A		0.4	5.90	0.21	A
Woodlands Road - Spen Lane - 2028 Base + Dev Kirklees Rates										
Stream B-AC	D15	0.4	11.79	0.29	B	D16	0.5	12.38	0.35	B
Stream C-AB		0.3	6.01	0.16	A		0.5	6.00	0.23	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

Title	Woodlands Road - Spen Lane
Location	Gomersal
Site number	
Date	27/04/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	FAIRHURST\ashley.armitage
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2023 Base	AM	ONE HOUR	07:15	08:45	15	✓		
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓		
D3	2028 Base	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1*1.0367
D4	2028 Base	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2*1.0375
D5	Dev - Approved Rates	AM	ONE HOUR	07:15	08:45	15			
D6	Dev - Approved Rates	PM	ONE HOUR	16:15	17:45	15			
D7	Dev - Kirklees Rates	AM	ONE HOUR	07:15	08:45	15			
D8	Dev - Kirklees Rates	PM	ONE HOUR	16:15	17:45	15			
D9	2023 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D5
D10	2023 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D6
D11	2023 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D7
D12	2023 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D8
D13	2028 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D5
D14	2028 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D6
D15	2028 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D7
D16	2028 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D8

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Woodlands Road - Spen Lane	✓	100.000	100.000

Woodlands Road - Spen Lane - 2023 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Road - Spen Lane	T-Junction	Two-way		1.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Spen Lane (west)		Major
B	Woodlands Road		Minor
C	Spen Lane (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	7.20			125.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.75	25	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	483	0.083	0.211	0.133	0.301
B-C	621	0.090	0.228	-	-
C-B	646	0.237	0.237	-	-

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	2023 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	359	100.000
B		ONE HOUR	✓	86	100.000
C		ONE HOUR	✓	285	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	50	309
	B	32	0	54
	C	226	59	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.22	10.69	0.3	B	79	118
C-AB	0.14	5.91	0.3	A	78	117
C-A					183	275
A-B					46	69
A-C					284	425

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	467	0.139	64	0.0	0.2	8.930	A
C-AB	59	15	683	0.087	59	0.0	0.1	5.766	A
C-A	155	39			155				
A-B	38	9			38				
A-C	233	58			233				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	452	0.171	77	0.2	0.2	9.590	A
C-AB	75	19	694	0.108	75	0.1	0.2	5.819	A
C-A	181	45			181				
A-B	45	11			45				
A-C	278	69			278				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	431	0.219	94	0.2	0.3	10.670	B
C-AB	100	25	710	0.141	100	0.2	0.2	5.905	A
C-A	213	53			213				
A-B	55	14			55				
A-C	340	85			340				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	431	0.219	95	0.3	0.3	10.690	B
C-AB	100	25	710	0.141	100	0.2	0.3	5.911	A
C-A	213	53			213				
A-B	55	14			55				
A-C	340	85			340				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	452	0.171	78	0.3	0.2	9.617	A
C-AB	75	19	694	0.108	76	0.3	0.2	5.834	A
C-A	181	45			181				
A-B	45	11			45				
A-C	278	69			278				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	467	0.139	65	0.2	0.2	8.953	A
C-AB	59	15	683	0.087	60	0.2	0.1	5.784	A
C-A	155	39			155				
A-B	38	9			38				
A-C	233	58			233				

Woodlands Road - Spen Lane - 2023 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Road - Spen Lane	T-Junction	Two-way		2.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	308	100.000
B		ONE HOUR	✓	133	100.000
C		ONE HOUR	✓	358	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	40	268
	B	43	0	90
	C	280	78	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	11.52	0.5	B	122	183
C-AB	0.19	5.72	0.4	A	111	166
C-A					218	327
A-B					37	55
A-C					246	369

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	100	25	494	0.203	99	0.0	0.3	9.102	A
C-AB	83	21	730	0.113	82	0.0	0.2	5.554	A
C-A	187	47			187				
A-B	30	8			30				
A-C	202	50			202				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	479	0.250	119	0.3	0.3	9.993	A
C-AB	106	26	748	0.142	106	0.2	0.2	5.603	A
C-A	216	54			216				
A-B	36	9			36				
A-C	241	60			241				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	146	37	459	0.319	146	0.3	0.5	11.480	B
C-AB	143	36	774	0.185	143	0.2	0.4	5.706	A
C-A	251	63			251				
A-B	44	11			44				
A-C	295	74			295				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	146	37	459	0.319	146	0.5	0.5	11.517	B
C-AB	143	36	774	0.185	143	0.4	0.4	5.719	A
C-A	251	63			251				
A-B	44	11			44				
A-C	295	74			295				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	479	0.250	120	0.5	0.3	10.041	B
C-AB	106	27	748	0.142	107	0.4	0.3	5.624	A
C-A	216	54			216				
A-B	36	9			36				
A-C	241	60			241				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	100	25	494	0.203	100	0.3	0.3	9.167	A
C-AB	83	21	730	0.113	83	0.3	0.2	5.570	A
C-A	187	47			187				
A-B	30	8			30				
A-C	202	50			202				

Woodlands Road - Spen Lane - 2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Road - Spen Lane	T-Junction	Two-way		1.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Base	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1*1.0367

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	372	100.000
B		ONE HOUR	✓	89	100.000
C		ONE HOUR	✓	295	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	52	320
	B	33	0	56
	C	234	61	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.23	10.94	0.3	B	82	123
C-AB	0.15	5.94	0.3	A	82	124
C-A					189	283
A-B					48	71
A-C					294	441

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	464	0.145	66	0.0	0.2	9.031	A
C-AB	62	16	685	0.091	61	0.0	0.1	5.773	A
C-A	160	40			160				
A-B	39	10			39				
A-C	241	60			241				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	449	0.179	80	0.2	0.2	9.751	A
C-AB	79	20	696	0.113	79	0.1	0.2	5.829	A
C-A	187	47			187				
A-B	47	12			47				
A-C	288	72			288				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	25	427	0.230	98	0.2	0.3	10.917	B
C-AB	106	26	713	0.148	106	0.2	0.3	5.926	A
C-A	219	55			219				
A-B	57	14			57				
A-C	353	88			353				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	25	427	0.230	98	0.3	0.3	10.940	B
C-AB	106	26	713	0.148	106	0.3	0.3	5.935	A
C-A	219	55			219				
A-B	57	14			57				
A-C	353	88			353				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	449	0.179	80	0.3	0.2	9.779	A
C-AB	79	20	696	0.114	79	0.3	0.2	5.845	A
C-A	186	47			186				
A-B	47	12			47				
A-C	288	72			288				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	464	0.145	67	0.2	0.2	9.073	A
C-AB	62	16	685	0.091	62	0.2	0.1	5.790	A
C-A	160	40			160				
A-B	39	10			39				
A-C	241	60			241				

Woodlands Road - Spen Lane - 2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Road - Spen Lane	T-Junction	Two-way		2.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Base	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2*1.0375

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	320	100.000
B		ONE HOUR	✓	138	100.000
C		ONE HOUR	✓	371	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	42	278
	B	45	0	93
	C	291	81	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.33	11.89	0.5	B	127	190
C-AB	0.19	5.75	0.4	A	117	175
C-A					224	336
A-B					38	57
A-C					255	383

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	104	26	491	0.212	103	0.0	0.3	9.252	A
C-AB	87	22	734	0.118	86	0.0	0.2	5.556	A
C-A	193	48			193				
A-B	31	8			31				
A-C	209	52			209				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	124	31	476	0.261	124	0.3	0.3	10.214	B
C-AB	112	28	752	0.149	111	0.2	0.3	5.619	A
C-A	222	56			222				
A-B	37	9			37				
A-C	250	62			250				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	152	38	455	0.334	151	0.3	0.5	11.846	B
C-AB	152	38	779	0.195	151	0.3	0.4	5.736	A
C-A	257	64			257				
A-B	46	11			46				
A-C	306	77			306				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	152	38	455	0.334	152	0.5	0.5	11.886	B
C-AB	152	38	779	0.195	152	0.4	0.4	5.746	A
C-A	257	64			257				
A-B	46	11			46				
A-C	306	77			306				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	124	31	476	0.261	125	0.5	0.4	10.269	B
C-AB	112	28	753	0.149	112	0.4	0.3	5.637	A
C-A	222	55			222				
A-B	37	9			37				
A-C	250	62			250				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	104	26	491	0.212	104	0.4	0.3	9.323	A
C-AB	87	22	734	0.119	87	0.3	0.2	5.578	A
C-A	193	48			193				
A-B	31	8			31				
A-C	209	52			209				

Woodlands Road - Spen Lane - 2023 Base + Dev Approved Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Road - Spen Lane	T-Junction	Two-way		2.27	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)	Run automatically	Relationship type	Relationship
D9	2023 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	360	100.000
B		ONE HOUR	✓	105	100.000
C		ONE HOUR	✓	287	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	51	309
	B	40	0	65
	C	226	61	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	11.38	0.4	B	96	145
C-AB	0.15	5.94	0.3	A	81	121
C-A					182	274
A-B					47	70
A-C					284	425

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	468	0.169	78	0.0	0.2	9.211	A
C-AB	61	15	683	0.090	61	0.0	0.1	5.783	A
C-A	155	39			155				
A-B	38	10			38				
A-C	233	58			233				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	94	24	453	0.208	94	0.2	0.3	10.022	B
C-AB	78	19	694	0.112	78	0.1	0.2	5.839	A
C-A	180	45			180				
A-B	46	11			46				
A-C	278	69			278				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	432	0.268	115	0.3	0.4	11.349	B
C-AB	104	26	710	0.146	103	0.2	0.3	5.935	A
C-A	212	53			212				
A-B	56	14			56				
A-C	340	85			340				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	432	0.268	116	0.4	0.4	11.379	B
C-AB	104	26	710	0.146	104	0.3	0.3	5.944	A
C-A	212	53			212				
A-B	56	14			56				
A-C	340	85			340				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	94	24	453	0.208	95	0.4	0.3	10.057	B
C-AB	78	19	694	0.112	78	0.3	0.2	5.855	A
C-A	180	45			180				
A-B	46	11			46				
A-C	278	69			278				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	468	0.169	79	0.3	0.2	9.261	A
C-AB	61	15	683	0.090	62	0.2	0.1	5.799	A
C-A	155	39			155				
A-B	38	10			38				
A-C	233	58			233				

Woodlands Road - Spen Lane - 2023 Base + Dev Approved Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Road - Spen Lane	T-Junction	Two-way		2.97	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	Relationship type	Relationship
D10	2023 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	314	100.000
B		ONE HOUR	✓	141	100.000
C		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	46	268
	B	46	0	95
	C	280	86	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.34	11.96	0.5	B	129	194
C-AB	0.20	5.87	0.4	A	122	183
C-A					214	321
A-B					42	63
A-C					246	369

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	106	27	492	0.216	105	0.0	0.3	9.281	A
C-AB	91	23	729	0.125	90	0.0	0.2	5.631	A
C-A	184	46			184				
A-B	35	9			35				
A-C	202	50			202				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32	477	0.266	126	0.3	0.4	10.255	B
C-AB	117	29	747	0.156	117	0.2	0.3	5.710	A
C-A	212	53			212				
A-B	41	10			41				
A-C	241	60			241				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	155	39	456	0.340	155	0.4	0.5	11.908	B
C-AB	158	40	772	0.205	158	0.3	0.4	5.855	A
C-A	245	61			245				
A-B	51	13			51				
A-C	295	74			295				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	155	39	456	0.340	155	0.5	0.5	11.955	B
C-AB	158	40	773	0.205	158	0.4	0.4	5.870	A
C-A	245	61			245				
A-B	51	13			51				
A-C	295	74			295				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32	477	0.266	127	0.5	0.4	10.313	B
C-AB	117	29	747	0.157	118	0.4	0.3	5.731	A
C-A	212	53			212				
A-B	41	10			41				
A-C	241	60			241				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	106	27	492	0.216	107	0.4	0.3	9.352	A
C-AB	91	23	729	0.125	92	0.3	0.2	5.656	A
C-A	184	46			184				
A-B	35	9			35				
A-C	202	50			202				

Woodlands Road - Spen Lane - 2023 Base + Dev Kirklees Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Road - Spen Lane	T-Junction	Two-way		2.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2023 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	362	100.000
B		ONE HOUR	✓	108	100.000
C		ONE HOUR	✓	289	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	53	309
	B	41	0	67
	C	226	63	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.28	11.50	0.4	B	99	149
C-AB	0.15	5.98	0.3	A	84	125
C-A					182	272
A-B					49	73
A-C					284	425

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	469	0.174	80	0.0	0.2	9.257	A
C-AB	63	16	683	0.093	63	0.0	0.1	5.801	A
C-A	154	39			154				
A-B	40	10			40				
A-C	233	58			233				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	97	24	453	0.214	97	0.2	0.3	10.092	B
C-AB	80	20	694	0.116	80	0.1	0.2	5.866	A
C-A	180	45			180				
A-B	48	12			48				
A-C	278	69			278				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	432	0.275	118	0.3	0.4	11.470	B
C-AB	107	27	710	0.151	107	0.2	0.3	5.972	A
C-A	211	53			211				
A-B	58	15			58				
A-C	340	85			340				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	432	0.275	119	0.4	0.4	11.500	B
C-AB	107	27	710	0.151	107	0.3	0.3	5.979	A
C-A	211	53			211				
A-B	58	15			58				
A-C	340	85			340				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	97	24	453	0.214	97	0.4	0.3	10.133	B
C-AB	80	20	694	0.116	81	0.3	0.2	5.883	A
C-A	179	45			179				
A-B	48	12			48				
A-C	278	69			278				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	468	0.174	82	0.3	0.2	9.311	A
C-AB	63	16	683	0.093	64	0.2	0.1	5.819	A
C-A	154	39			154				
A-B	40	10			40				
A-C	233	58			233				

Woodlands Road - Spen Lane - 2023 Base + Dev Kirklees Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

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

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2023 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	317	100.000
B		ONE HOUR	✓	140	100.000
C		ONE HOUR	✓	371	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	49	268
	B	46	0	94
	C	280	91	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.34	11.98	0.5	B	128	193
C-AB	0.22	5.97	0.4	A	129	194
C-A					211	317
A-B					45	67
A-C					246	369

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	105	26	491	0.215	104	0.0	0.3	9.293	A
C-AB	96	24	729	0.132	96	0.0	0.2	5.683	A
C-A	183	46			183				
A-B	37	9			37				
A-C	202	50			202				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	126	31	476	0.265	126	0.3	0.4	10.272	B
C-AB	124	31	747	0.166	123	0.2	0.3	5.780	A
C-A	210	52			210				
A-B	44	11			44				
A-C	241	60			241				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	39	455	0.339	154	0.4	0.5	11.936	B
C-AB	167	42	772	0.217	167	0.3	0.4	5.953	A
C-A	241	60			241				
A-B	54	13			54				
A-C	295	74			295				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	39	454	0.339	154	0.5	0.5	11.983	B
C-AB	168	42	772	0.217	168	0.4	0.4	5.967	A
C-A	241	60			241				
A-B	54	13			54				
A-C	295	74			295				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	126	31	476	0.265	126	0.5	0.4	10.329	B
C-AB	124	31	747	0.166	124	0.4	0.3	5.802	A
C-A	210	52			210				
A-B	44	11			44				
A-C	241	60			241				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	105	26	490	0.215	106	0.4	0.3	9.365	A
C-AB	97	24	729	0.133	97	0.3	0.2	5.708	A
C-A	183	46			183				
A-B	37	9			37				
A-C	202	50			202				

Woodlands Road - Spen Lane - 2028 Base + Dev Approved Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Road - Spen Lane	T-Junction	Two-way		2.31	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	Relationship type	Relationship
D13	2028 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	373	100.000
B		ONE HOUR	✓	108	100.000
C		ONE HOUR	✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	53	320
	B	41	0	67
	C	234	63	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.28	11.67	0.4	B	99	149
C-AB	0.15	5.97	0.3	A	85	128
C-A					188	282
A-B					48	73
A-C					294	441

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	465	0.175	81	0.0	0.2	9.335	A
C-AB	64	16	685	0.094	63	0.0	0.1	5.790	A
C-A	160	40			160				
A-B	40	10			40				
A-C	241	60			241				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	97	24	450	0.216	97	0.2	0.3	10.199	B
C-AB	82	20	696	0.117	81	0.1	0.2	5.854	A
C-A	186	46			186				
A-B	47	12			47				
A-C	288	72			288				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	428	0.278	119	0.3	0.4	11.632	B
C-AB	109	27	713	0.153	109	0.2	0.3	5.959	A
C-A	218	55			218				
A-B	58	15			58				
A-C	353	88			353				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	428	0.278	119	0.4	0.4	11.666	B
C-AB	109	27	713	0.153	109	0.3	0.3	5.967	A
C-A	218	55			218				
A-B	58	15			58				
A-C	353	88			353				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	97	24	450	0.216	98	0.4	0.3	10.241	B
C-AB	82	20	697	0.117	82	0.3	0.2	5.869	A
C-A	186	46			186				
A-B	47	12			47				
A-C	288	72			288				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	465	0.175	82	0.3	0.2	9.390	A
C-AB	64	16	685	0.094	64	0.2	0.1	5.808	A
C-A	160	40			160				
A-B	40	10			40				
A-C	241	60			241				

Woodlands Road - Spen Lane - 2028 Base + Dev Approved Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Road - Spen Lane	T-Junction	Two-way		3.06	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	Relationship type	Relationship
D14	2028 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	326	100.000
B		ONE HOUR	✓	146	100.000
C		ONE HOUR	✓	379	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	48	278
	B	48	0	98
	C	291	89	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	12.35	0.5	B	134	201
C-AB	0.21	5.90	0.4	A	129	193
C-A					220	329
A-B					44	65
A-C					255	383

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	489	0.225	109	0.0	0.3	9.436	A
C-AB	95	24	733	0.130	95	0.0	0.2	5.639	A
C-A	190	48			190				
A-B	36	9			36				
A-C	209	52			209				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	474	0.277	131	0.3	0.4	10.487	B
C-AB	123	31	751	0.164	123	0.2	0.3	5.728	A
C-A	218	55			218				
A-B	43	11			43				
A-C	250	62			250				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	452	0.356	160	0.4	0.5	12.298	B
C-AB	167	42	778	0.215	166	0.3	0.4	5.890	A
C-A	251	63			251				
A-B	52	13			52				
A-C	306	77			306				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	452	0.356	161	0.5	0.5	12.353	B
C-AB	167	42	778	0.215	167	0.4	0.4	5.902	A
C-A	251	63			251				
A-B	52	13			52				
A-C	306	77			306				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	474	0.277	132	0.5	0.4	10.552	B
C-AB	123	31	752	0.164	124	0.4	0.3	5.750	A
C-A	218	54			218				
A-B	43	11			43				
A-C	250	62			250				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	489	0.225	110	0.4	0.3	9.517	A
C-AB	96	24	733	0.131	96	0.3	0.2	5.663	A
C-A	190	47			190				
A-B	36	9			36				
A-C	209	52			209				

Woodlands Road - Spen Lane - 2028 Base + Dev Kirklees Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Road - Spen Lane	T-Junction	Two-way		2.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2028 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	375	100.000
B		ONE HOUR	✓	111	100.000
C		ONE HOUR	✓	299	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	55	320
	B	42	0	69
	C	234	65	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.29	11.79	0.4	B	102	153
C-AB	0.16	6.01	0.3	A	88	132
C-A					187	281
A-B					50	75
A-C					294	441

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	466	0.180	83	0.0	0.2	9.383	A
C-AB	66	17	685	0.096	65	0.0	0.1	5.810	A
C-A	159	40			159				
A-B	41	10			41				
A-C	241	60			241				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	100	25	450	0.222	100	0.2	0.3	10.274	B
C-AB	84	21	696	0.121	84	0.1	0.2	5.877	A
C-A	185	46			185				
A-B	49	12			49				
A-C	288	72			288				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	122	31	428	0.286	122	0.3	0.4	11.757	B
C-AB	113	28	713	0.158	112	0.2	0.3	5.995	A
C-A	217	54			217				
A-B	60	15			60				
A-C	353	88			353				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	122	31	428	0.286	122	0.4	0.4	11.793	B
C-AB	113	28	713	0.158	113	0.3	0.3	6.005	A
C-A	217	54			217				
A-B	60	15			60				
A-C	353	88			353				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	100	25	450	0.222	100	0.4	0.3	10.318	B
C-AB	84	21	697	0.121	85	0.3	0.2	5.895	A
C-A	185	46			185				
A-B	49	12			49				
A-C	288	72			288				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	466	0.180	84	0.3	0.2	9.442	A
C-AB	66	17	685	0.097	66	0.2	0.2	5.830	A
C-A	159	40			159				
A-B	41	10			41				
A-C	241	60			241				

Woodlands Road - Spen Lane - 2028 Base + Dev Kirklees Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Woodlands Road - Spen Lane	T-Junction	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)	Run automatically	Relationship type	Relationship
D16	2028 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	329	100.000
B		ONE HOUR	✓	145	100.000
C		ONE HOUR	✓	384	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	51	278
	B	48	0	97
	C	291	94	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.35	12.38	0.5	B	133	200
C-AB	0.23	6.00	0.5	A	136	204
C-A					217	325
A-B					46	70
A-C					255	383

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	488	0.224	108	0.0	0.3	9.449	A
C-AB	101	25	732	0.138	100	0.0	0.2	5.690	A
C-A	189	47			189				
A-B	38	10			38				
A-C	209	52			209				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	130	33	472	0.276	130	0.3	0.4	10.505	B
C-AB	130	32	751	0.173	130	0.2	0.3	5.795	A
C-A	216	54			216				
A-B	45	11			45				
A-C	250	62			250				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	160	40	450	0.354	159	0.4	0.5	12.327	B
C-AB	176	44	777	0.227	176	0.3	0.4	5.987	A
C-A	247	62			247				
A-B	56	14			56				
A-C	306	77			306				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	160	40	450	0.355	160	0.5	0.5	12.384	B
C-AB	177	44	777	0.227	177	0.4	0.5	6.004	A
C-A	247	62			247				
A-B	56	14			56				
A-C	306	77			306				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	130	33	472	0.276	131	0.5	0.4	10.572	B
C-AB	130	33	751	0.173	131	0.5	0.3	5.821	A
C-A	216	54			216				
A-B	45	11			45				
A-C	250	62			250				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	488	0.224	110	0.4	0.3	9.528	A
C-AB	101	25	732	0.138	102	0.3	0.2	5.716	A
C-A	188	47			188				
A-B	38	10			38				
A-C	209	52			209				



Appendix L

Junctions 9 Output – A638 Bradford Road/High Street

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Bradford Road - Balme Road - High Street.j9

Path: V:\152000\152130_Cliffe_Lane_Gomersal\07 Design and other outputs\Traffic programs\Junctions

Report generation date: 28/04/2023 10:06:31

-
- »Bradford Road - Balme Road - High Street - 2023 Base, AM
 - »Bradford Road - Balme Road - High Street - 2023 Base, PM
 - »Bradford Road - Balme Road - High Street - 2028 Base, AM
 - »Bradford Road - Balme Road - High Street - 2028 Base, PM
 - »Bradford Road - Balme Road - High Street - 2023 Base + Dev Approved Rates, AM
 - »Bradford Road - Balme Road - High Street - 2023 Base + Dev Approved Rates, PM
 - »Bradford Road - Balme Road - High Street - 2023 Base + Dev Kirklees Rates, AM
 - »Bradford Road - Balme Road - High Street - 2023 Base + Dev Kirklees Rates, PM
 - »Bradford Road - Balme Road - High Street - 2028 Base + Dev Approved Rates, AM
 - »Bradford Road - Balme Road - High Street - 2028 Base + Dev Approved Rates, PM
 - »Bradford Road - Balme Road - High Street - 2028 Base + Dev Kirklees Rates, AM
 - »Bradford Road - Balme Road - High Street - 2028 Base + Dev Kirklees Rates, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (Veh)	Delay (s)	RFC	Set ID	Queue (Veh)	Delay (s)	RFC
Bradford Road - Balme Road - High Street - 2023 Base								
Stream B-ACD	D1	0.7	16.79	0.43	D2	1.1	21.41	0.52
Stream A-BCD		0.0	5.30	0.01		0.0	3.91	0.04
Stream D-ABC		0.1	13.92	0.06		0.1	13.98	0.06
Stream C-ABD		0.7	4.87	0.26		0.9	6.02	0.31
Bradford Road - Balme Road - High Street - 2028 Base								
Stream B-ACD	D3	0.8	17.99	0.45	D4	1.2	23.92	0.56
Stream A-BCD		0.0	5.25	0.01		0.1	3.87	0.04
Stream D-ABC		0.1	14.43	0.06		0.1	14.56	0.06
Stream C-ABD		0.8	4.94	0.28		1.0	6.17	0.34
Bradford Road - Balme Road - High Street - 2023 Base + Dev Approved Rates								
Stream B-ACD	D9	0.8	18.07	0.46	D10	1.1	22.50	0.54
Stream A-BCD		0.0	5.29	0.01		0.0	3.89	0.04
Stream D-ABC		0.1	13.95	0.06		0.1	14.02	0.06
Stream C-ABD		0.7	4.88	0.26		0.9	6.04	0.32
Bradford Road - Balme Road - High Street - 2023 Base + Dev Kirklees Rates								
Stream B-ACD	D11	0.8	18.24	0.46	D12	1.1	22.31	0.53
Stream A-BCD		0.0	5.28	0.01		0.0	3.89	0.04
Stream D-ABC		0.1	13.96	0.06		0.1	14.03	0.06
Stream C-ABD		0.7	4.88	0.26		0.9	6.05	0.32
Bradford Road - Balme Road - High Street - 2028 Base + Dev Approved Rates								
Stream B-ACD	D13	0.9	19.45	0.49	D14	1.3	25.28	0.57
Stream A-BCD		0.0	5.24	0.01		0.1	3.86	0.04
Stream D-ABC		0.1	14.47	0.06		0.1	14.60	0.06
Stream C-ABD		0.8	4.94	0.28		1.0	6.19	0.34
Bradford Road - Balme Road - High Street - 2028 Base + Dev Kirklees Rates								
Stream B-ACD	D15	0.9	19.65	0.49	D16	1.3	25.04	0.57
Stream A-BCD		0.0	5.23	0.01		0.1	3.85	0.04
Stream D-ABC		0.1	14.48	0.06		0.1	14.61	0.07
Stream C-ABD		0.8	4.94	0.28		1.0	6.20	0.34

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

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

File summary

File Description

Title	Bradford Road - Balme Road - High Street
Location	Gomersal
Site number	
Date	27/04/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	FAIRHURST\ashley.armitage
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2023 Base	AM	ONE HOUR	07:15	08:45	15	✓		
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓		
D3	2028 Base	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1*1.0367
D4	2028 Base	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2*1.0375
D5	Dev - Approved Rates	AM	ONE HOUR	07:15	08:45	15			
D6	Dev - Approved Rates	PM	ONE HOUR	16:15	17:45	15			
D7	Dev - Kirklees Rates	AM	ONE HOUR	07:15	08:45	15			
D8	Dev - Kirklees Rates	PM	ONE HOUR	16:15	17:45	15			
D9	2023 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D5
D10	2023 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D6
D11	2023 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D7
D12	2023 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D8
D13	2028 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D5
D14	2028 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D6
D15	2028 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D7
D16	2028 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D8

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Bradford Road - Balme Road - High Street	✓	100.000	100.000

Bradford Road - Balme Road - High Street - 2023 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	Two-way		2.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Bradford Road (NW)		Major
B	Balme Road		Minor
C	Bradford Road (SE)		Major
D	High Street		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	8.00			200.0	✓	0.00
C	8.00			250.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.65	60	26
D	One lane	2.50	17	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	690	-	-	-	-	-	-	0.244	0.349	0.244	-	-	-
B-A	543	0.090	0.228	0.228	-	-	-	0.144	0.326	-	0.228	0.228	0.114
B-C	682	0.095	0.241	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	543	0.090	0.228	0.228	-	-	-	0.144	0.326	0.144	-	-	-
B-D, offside lane	543	0.090	0.228	0.228	-	-	-	0.144	0.326	0.144	-	-	-
C-B	719	0.254	0.254	0.363	-	-	-	-	-	-	-	-	-
D-A	602	-	-	-	-	-	-	0.213	-	0.084	-	-	-
D-B, nearside lane	466	0.123	0.123	0.280	-	-	-	0.196	0.196	0.077	-	-	-
D-B, offside lane	466	0.123	0.123	0.280	-	-	-	0.196	0.196	0.077	-	-	-
D-C	466	-	0.123	0.280	0.098	0.196	0.196	0.196	0.196	0.077	-	-	-

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	2023 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	474	100.000
B		ONE HOUR	✓	144	100.000
C		ONE HOUR	✓	665	100.000
D		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	
From	A	0	85	386	3	
	B	69	0	70	5	
	C	572	83	0	10	
	D	4	5	6	0	

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	
From	A	0	2	8	33	
	B	6	0	1	0	
	C	5	1	0	10	
	D	0	0	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.43	16.79	0.7	C	132	198
A-BCD	0.01	5.30	0.0	A	7	11
A-B					77	116
A-C					351	526
D-ABC	0.06	13.92	0.1	B	14	21
C-ABD	0.26	4.87	0.7	A	183	275
C-D					7	11
C-A					420	629

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	108	27	443	0.245	107	0.0	0.3	10.674	B
A-BCD	5	1	684	0.007	5	0.0	0.0	5.296	A
A-B	64	16			64				
A-C	289	72			289				
D-ABC	11	3	348	0.033	11	0.0	0.0	10.703	B
C-ABD	122	31	896	0.137	121	0.0	0.3	4.645	A
C-D	7	2			7				
C-A	372	93			372				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	129	32	414	0.313	129	0.3	0.4	12.598	B
A-BCD	7	2	721	0.009	7	0.0	0.0	5.068	A
A-B	76	19			76				
A-C	344	86			344				
D-ABC	13	3	317	0.042	13	0.0	0.0	11.840	B
C-ABD	170	42	938	0.181	169	0.3	0.4	4.683	A
C-D	7	2			7				
C-A	421	105			421				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	159	40	373	0.425	157	0.4	0.7	16.616	C
A-BCD	10	3	775	0.013	10	0.0	0.0	4.739	A
A-B	92	23			92				
A-C	419	105			419				
D-ABC	17	4	275	0.060	16	0.0	0.1	13.892	B
C-ABD	257	64	998	0.257	256	0.4	0.7	4.849	A
C-D	8	2			8				
C-A	467	117			467				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	159	40	373	0.425	159	0.7	0.7	16.789	C
A-BCD	10	3	775	0.013	10	0.0	0.0	4.707	A
A-B	92	23			92				
A-C	419	105			419				
D-ABC	17	4	275	0.060	17	0.1	0.1	13.918	B
C-ABD	257	64	999	0.258	257	0.7	0.7	4.873	A
C-D	8	2			8				
C-A	467	117			467				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	129	32	414	0.313	131	0.7	0.5	12.749	B
A-BCD	7	2	721	0.009	7	0.0	0.0	4.984	A
A-B	76	19			76				
A-C	344	86			344				
D-ABC	13	3	317	0.043	14	0.1	0.0	11.869	B
C-ABD	170	43	938	0.181	171	0.7	0.4	4.721	A
C-D	7	2			7				
C-A	420	105			420				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	108	27	443	0.245	109	0.5	0.3	10.800	B
A-BCD	5	1	684	0.007	5	0.0	0.0	5.250	A
A-B	64	16			64				
A-C	289	72			289				
D-ABC	11	3	347	0.033	11	0.0	0.0	10.725	B
C-ABD	123	31	896	0.137	124	0.4	0.3	4.678	A
C-D	6	2			6				
C-A	371	93			371				

Bradford Road - Balme Road - High Street - 2023 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	Two-way		3.40	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	2023 Base	PM	ONE HOUR	16:15	17:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	734	100.000
B		ONE HOUR	✓	164	100.000
C		ONE HOUR	✓	578	100.000
D		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	105	620	9
	B	64	0	95	5
	C	476	99	0	3
	D	5	5	5	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	D
A	0	2	3	0
B	2	0	1	0
C	4	1	0	0
D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.52	21.41	1.1	C	150	226
A-BCD	0.04	3.91	0.0	A	26	39
A-B					94	141
A-C					554	831
D-ABC	0.06	13.98	0.1	B	14	21
C-ABD	0.31	6.02	0.9	A	198	298
C-D					2	3
C-A					330	495

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	123	31	436	0.283	122	0.0	0.4	11.399	B
A-BCD	16	4	939	0.017	16	0.0	0.0	3.898	A
A-B	78	19			78				
A-C	459	115			459				
D-ABC	11	3	351	0.032	11	0.0	0.0	10.580	B
C-ABD	134	34	810	0.166	133	0.0	0.3	5.315	A
C-D	2	0.47			2				
C-A	299	75			299				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	147	37	400	0.368	147	0.4	0.6	14.156	B
A-BCD	23	6	996	0.024	23	0.0	0.0	3.696	A
A-B	92	23			92				
A-C	544	136			544				
D-ABC	13	3	320	0.042	13	0.0	0.0	11.758	B
C-ABD	184	46	837	0.220	184	0.3	0.5	5.517	A
C-D	2	0.53			2				
C-A	333	83			333				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	349	0.518	179	0.6	1.0	20.961	C
A-BCD	38	10	1079	0.035	38	0.0	0.0	3.453	A
A-B	112	28			112				
A-C	658	165			658				
D-ABC	17	4	274	0.060	16	0.0	0.1	13.947	B
C-ABD	275	69	877	0.314	274	0.5	0.9	5.984	A
C-D	2	0.57			2				
C-A	359	90			359				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	348	0.518	180	1.0	1.1	21.409	C
A-BCD	38	10	1079	0.035	38	0.0	0.0	3.457	A
A-B	112	28			112				
A-C	658	165			658				
D-ABC	17	4	274	0.060	17	0.1	0.1	13.982	B
C-ABD	276	69	877	0.315	276	0.9	0.9	6.021	A
C-D	2	0.56			2				
C-A	358	89			358				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	147	37	400	0.369	149	1.1	0.6	14.462	B
A-BCD	24	6	996	0.024	24	0.0	0.0	3.707	A
A-B	92	23			92				
A-C	544	136			544				
D-ABC	13	3	319	0.042	14	0.1	0.0	11.792	B
C-ABD	185	46	838	0.221	187	0.9	0.5	5.567	A
C-D	2	0.52			2				
C-A	332	83			332				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	123	31	436	0.283	124	0.6	0.4	11.582	B
A-BCD	16	4	939	0.017	16	0.0	0.0	3.907	A
A-B	78	19			78				
A-C	459	115			459				
D-ABC	11	3	351	0.032	11	0.0	0.0	10.605	B
C-ABD	135	34	811	0.167	136	0.5	0.3	5.355	A
C-D	2	0.47			2				
C-A	298	75			298				

Bradford Road - Balme Road - High Street - 2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	Two-way		2.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Base	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1*1.0367

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	491	100.000
B		ONE HOUR	✓	149	100.000
C		ONE HOUR	✓	689	100.000
D		ONE HOUR	✓	16	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	88	400	3
	B	72	0	73	5
	C	593	86	0	10
	D	4	5	6	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	D
A	0	2	8	33
B	6	0	1	0
C	5	1	0	10
D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.45	17.99	0.8	C	137	205
A-BCD	0.01	5.25	0.0	A	8	11
A-B					80	120
A-C					363	545
D-ABC	0.06	14.43	0.1	B	14	21
C-ABD	0.28	4.94	0.8	A	197	296
C-D					7	11
C-A					428	642

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	112	28	438	0.257	111	0.0	0.3	10.974	B
A-BCD	5	1	691	0.007	5	0.0	0.0	5.246	A
A-B	66	16			66				
A-C	299	75			299				
D-ABC	12	3	342	0.034	12	0.0	0.0	10.892	B
C-ABD	130	33	904	0.144	129	0.0	0.3	4.647	A
C-D	7	2			7				
C-A	382	96			382				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	134	34	408	0.329	134	0.3	0.5	13.114	B
A-BCD	7	2	730	0.010	7	0.0	0.0	5.012	A
A-B	78	20			78				
A-C	356	89			356				
D-ABC	14	3	311	0.045	14	0.0	0.0	12.131	B
C-ABD	182	45	947	0.192	181	0.3	0.5	4.701	A
C-D	8	2			8				
C-A	430	108			430				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	164	41	365	0.451	163	0.5	0.8	17.760	C
A-BCD	11	3	786	0.014	11	0.0	0.0	4.676	A
A-B	96	24			96				
A-C	434	109			434				
D-ABC	17	4	267	0.064	17	0.0	0.1	14.400	B
C-ABD	278	70	1011	0.275	277	0.5	0.8	4.908	A
C-D	8	2			8				
C-A	472	118			472				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	164	41	364	0.451	164	0.8	0.8	17.987	C
A-BCD	11	3	786	0.014	11	0.0	0.0	4.643	A
A-B	96	24			96				
A-C	434	109			434				
D-ABC	17	4	267	0.064	17	0.1	0.1	14.430	B
C-ABD	279	70	1012	0.276	279	0.8	0.8	4.936	A
C-D	8	2			8				
C-A	472	118			472				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	134	34	407	0.330	135	0.8	0.5	13.303	B
A-BCD	7	2	730	0.010	7	0.0	0.0	4.925	A
A-B	78	20			78				
A-C	356	89			356				
D-ABC	14	3	310	0.045	14	0.1	0.0	12.165	B
C-ABD	183	46	948	0.193	184	0.8	0.5	4.740	A
C-D	8	2			8				
C-A	430	107			430				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	112	28	437	0.257	113	0.5	0.4	11.117	B
A-BCD	5	1	691	0.007	5	0.0	0.0	5.201	A
A-B	66	16			66				
A-C	299	75			299				
D-ABC	12	3	341	0.034	12	0.0	0.0	10.922	B
C-ABD	131	33	904	0.145	132	0.5	0.3	4.681	A
C-D	7	2			7				
C-A	381	95			381				

Bradford Road - Balme Road - High Street - 2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	Two-way		3.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Base	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2*1.0375

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	762	100.000
B		ONE HOUR	✓	170	100.000
C		ONE HOUR	✓	600	100.000
D		ONE HOUR	✓	16	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	
From	A	0	109	643	9	
	B	66	0	99	5	
	C	494	103	0	3	
	D	5	5	5	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	D
A	0	2	3	0
B	2	0	1	0
C	4	1	0	0
D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.56	23.92	1.2	C	156	234
A-BCD	0.04	3.87	0.1	A	28	43
A-B					97	146
A-C					573	860
D-ABC	0.06	14.56	0.1	B	14	21
C-ABD	0.34	6.17	1.0	A	213	320
C-D					2	3
C-A					335	502

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	128	32	429	0.298	126	0.0	0.4	11.818	B
A-BCD	17	4	950	0.018	17	0.0	0.0	3.858	A
A-B	81	20			81				
A-C	475	119			475				
D-ABC	12	3	345	0.034	12	0.0	0.0	10.779	B
C-ABD	143	36	815	0.175	141	0.0	0.4	5.343	A
C-D	2	0.48			2				
C-A	307	77			307				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	153	38	392	0.390	152	0.4	0.6	14.956	B
A-BCD	25	6	1010	0.025	25	0.0	0.0	3.653	A
A-B	95	24			95				
A-C	564	141			564				
D-ABC	14	3	312	0.045	14	0.0	0.0	12.070	B
C-ABD	197	49	843	0.234	197	0.4	0.5	5.573	A
C-D	2	0.53			2				
C-A	339	85			339				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	187	47	338	0.555	185	0.6	1.2	23.257	C
A-BCD	42	11	1097	0.038	42	0.0	0.1	3.408	A
A-B	115	29			115				
A-C	681	170			681				
D-ABC	17	4	265	0.065	17	0.0	0.1	14.515	B
C-ABD	298	75	885	0.337	297	0.5	1.0	6.124	A
C-D	2	0.57			2				
C-A	360	90			360				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	187	47	337	0.555	187	1.2	1.2	23.920	C
A-BCD	42	11	1097	0.038	42	0.1	0.1	3.415	A
A-B	115	29			115				
A-C	681	170			681				
D-ABC	17	4	264	0.065	17	0.1	0.1	14.557	B
C-ABD	299	75	886	0.338	299	1.0	1.0	6.168	A
C-D	2	0.57			2				
C-A	359	90			359				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	153	38	391	0.391	155	1.2	0.7	15.374	C
A-BCD	26	6	1009	0.025	26	0.1	0.0	3.667	A
A-B	95	24			95				
A-C	564	141			564				
D-ABC	14	3	311	0.045	14	0.1	0.0	12.114	B
C-ABD	198	50	844	0.235	200	1.0	0.6	5.634	A
C-D	2	0.53			2				
C-A	339	85			339				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	128	32	429	0.299	129	0.7	0.4	12.037	B
A-BCD	17	4	950	0.018	18	0.0	0.0	3.866	A
A-B	81	20			81				
A-C	475	119			475				
D-ABC	12	3	345	0.034	12	0.0	0.0	10.813	B
C-ABD	144	36	816	0.176	145	0.6	0.4	5.390	A
C-D	2	0.48			2				
C-A	306	76			306				

Bradford Road - Balme Road - High Street - 2023 Base + Dev Approved Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	Two-way		2.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2023 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	475	100.000
B		ONE HOUR	✓	153	100.000
C		ONE HOUR	✓	665	100.000
D		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	86	386	3
	B	78	0	70	5
	C	572	83	0	10
	D	4	5	6	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	D
A	0	2	8	33
B	5	0	1	0
C	5	1	0	10
D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.46	18.07	0.8	C	140	211
A-BCD	0.01	5.29	0.0	A	7	11
A-B					78	117
A-C					351	526
D-ABC	0.06	13.95	0.1	B	14	21
C-ABD	0.26	4.88	0.7	A	183	275
C-D					7	11
C-A					420	629

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	115	29	439	0.263	114	0.0	0.4	11.038	B
A-BCD	5	1	685	0.007	5	0.0	0.0	5.292	A
A-B	64	16			64				
A-C	289	72			289				
D-ABC	11	3	347	0.033	11	0.0	0.0	10.715	B
C-ABD	122	31	896	0.137	121	0.0	0.3	4.646	A
C-D	7	2			7				
C-A	372	93			372				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	34	409	0.336	137	0.4	0.5	13.191	B
A-BCD	7	2	722	0.009	7	0.0	0.0	5.064	A
A-B	77	19			77				
A-C	344	86			344				
D-ABC	13	3	317	0.043	13	0.0	0.0	11.858	B
C-ABD	170	42	938	0.181	169	0.3	0.4	4.684	A
C-D	7	2			7				
C-A	421	105			421				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	168	42	368	0.458	167	0.5	0.8	17.840	C
A-BCD	10	3	776	0.013	10	0.0	0.0	4.734	A
A-B	93	23			93				
A-C	419	105			419				
D-ABC	17	4	275	0.060	16	0.0	0.1	13.925	B
C-ABD	257	64	998	0.257	256	0.4	0.7	4.851	A
C-D	8	2			8				
C-A	467	117			467				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	168	42	367	0.458	168	0.8	0.8	18.072	C
A-BCD	10	3	776	0.013	10	0.0	0.0	4.702	A
A-B	93	23			93				
A-C	419	105			419				
D-ABC	17	4	275	0.060	17	0.1	0.1	13.952	B
C-ABD	258	64	999	0.258	258	0.7	0.7	4.876	A
C-D	8	2			8				
C-A	466	117			466				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	34	409	0.336	139	0.8	0.5	13.388	B
A-BCD	7	2	722	0.009	7	0.0	0.0	4.977	A
A-B	77	19			77				
A-C	344	86			344				
D-ABC	13	3	316	0.043	14	0.1	0.0	11.888	B
C-ABD	170	43	938	0.182	171	0.7	0.4	4.722	A
C-D	7	2			7				
C-A	420	105			420				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	115	29	438	0.263	116	0.5	0.4	11.187	B
A-BCD	5	1	685	0.007	5	0.0	0.0	5.248	A
A-B	64	16			64				
A-C	289	72			289				
D-ABC	11	3	347	0.033	11	0.0	0.0	10.738	B
C-ABD	123	31	896	0.137	124	0.4	0.3	4.677	A
C-D	6	2			6				
C-A	371	93			371				

Bradford Road - Balme Road - High Street - 2023 Base + Dev Approved Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	Two-way		3.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2023 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	740	100.000
B		ONE HOUR	✓	168	100.000
C		ONE HOUR	✓	578	100.000
D		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	111	620	9
	B	68	0	95	5
	C	476	99	0	3
	D	5	5	5	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	D
A	0	2	3	0
B	2	0	1	0
C	4	1	0	0
D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.54	22.50	1.1	C	154	231
A-BCD	0.04	3.89	0.0	A	26	39
A-B					99	149
A-C					554	831
D-ABC	0.06	14.02	0.1	B	14	21
C-ABD	0.32	6.04	0.9	A	199	298
C-D					2	3
C-A					330	494

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	126	32	433	0.292	125	0.0	0.4	11.623	B
A-BCD	16	4	943	0.017	16	0.0	0.0	3.886	A
A-B	82	21			82				
A-C	459	115			459				
D-ABC	11	3	351	0.032	11	0.0	0.0	10.592	B
C-ABD	134	34	809	0.166	133	0.0	0.3	5.323	A
C-D	2	0.47			2				
C-A	299	75			299				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	151	38	397	0.381	150	0.4	0.6	14.553	B
A-BCD	24	6	1000	0.024	24	0.0	0.0	3.683	A
A-B	97	24			97				
A-C	544	136			544				
D-ABC	13	3	319	0.042	13	0.0	0.0	11.777	B
C-ABD	185	46	836	0.221	184	0.3	0.5	5.528	A
C-D	2	0.52			2				
C-A	333	83			333				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	185	46	345	0.536	183	0.6	1.1	21.969	C
A-BCD	39	10	1084	0.036	39	0.0	0.0	3.439	A
A-B	118	29			118				
A-C	658	165			658				
D-ABC	17	4	274	0.060	16	0.0	0.1	13.981	B
C-ABD	276	69	876	0.315	275	0.5	0.9	6.001	A
C-D	2	0.56			2				
C-A	358	90			358				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	185	46	345	0.537	185	1.1	1.1	22.504	C
A-BCD	39	10	1084	0.036	39	0.0	0.0	3.443	A
A-B	118	29			118				
A-C	658	165			658				
D-ABC	17	4	273	0.060	17	0.1	0.1	14.016	B
C-ABD	277	69	876	0.316	277	0.9	0.9	6.039	A
C-D	2	0.56			2				
C-A	357	89			357				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	151	38	396	0.381	153	1.1	0.6	14.904	B
A-BCD	24	6	1000	0.024	24	0.0	0.0	3.697	A
A-B	97	24			97				
A-C	544	136			544				
D-ABC	13	3	318	0.042	14	0.1	0.0	11.812	B
C-ABD	185	46	837	0.222	187	0.9	0.5	5.580	A
C-D	2	0.52			2				
C-A	332	83			332				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	126	32	433	0.292	127	0.6	0.4	11.822	B
A-BCD	16	4	942	0.017	16	0.0	0.0	3.893	A
A-B	82	21			82				
A-C	459	115			459				
D-ABC	11	3	350	0.032	11	0.0	0.0	10.620	B
C-ABD	135	34	810	0.167	136	0.5	0.3	5.363	A
C-D	2	0.47			2				
C-A	298	74			298				

Bradford Road - Balme Road - High Street - 2023 Base + Dev Kirklees Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	Two-way		3.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2023 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	477	100.000
B		ONE HOUR	✓	154	100.000
C		ONE HOUR	✓	665	100.000
D		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	88	386	3
	B	79	0	70	5
	C	572	83	0	10
	D	4	5	6	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	D
A	0	2	8	33
B	5	0	1	0
C	5	1	0	10
D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.46	18.24	0.8	C	141	212
A-BCD	0.01	5.28	0.0	A	7	11
A-B					80	120
A-C					351	526
D-ABC	0.06	13.96	0.1	B	14	21
C-ABD	0.26	4.88	0.7	A	183	275
C-D					7	11
C-A					419	629

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	116	29	438	0.265	115	0.0	0.4	11.088	B
A-BCD	5	1	686	0.007	5	0.0	0.0	5.283	A
A-B	66	16			66				
A-C	289	72			289				
D-ABC	11	3	347	0.033	11	0.0	0.0	10.710	B
C-ABD	122	31	896	0.137	121	0.0	0.3	4.648	A
C-D	6	2			6				
C-A	372	93			372				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	35	409	0.339	138	0.4	0.5	13.268	B
A-BCD	7	2	723	0.009	7	0.0	0.0	5.054	A
A-B	78	20			78				
A-C	344	86			344				
D-ABC	13	3	317	0.043	13	0.0	0.0	11.863	B
C-ABD	170	42	937	0.181	169	0.3	0.4	4.686	A
C-D	7	2			7				
C-A	421	105			421				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	170	42	367	0.462	168	0.5	0.8	18.001	C
A-BCD	10	3	778	0.013	10	0.0	0.0	4.723	A
A-B	96	24			96				
A-C	419	105			419				
D-ABC	17	4	275	0.060	16	0.0	0.1	13.934	B
C-ABD	257	64	998	0.258	256	0.4	0.7	4.854	A
C-D	8	2			8				
C-A	467	117			467				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	170	42	367	0.462	169	0.8	0.8	18.242	C
A-BCD	10	3	778	0.013	10	0.0	0.0	4.691	A
A-B	96	24			96				
A-C	419	105			419				
D-ABC	17	4	274	0.060	17	0.1	0.1	13.961	B
C-ABD	258	64	998	0.258	258	0.7	0.7	4.880	A
C-D	8	2			8				
C-A	466	117			466				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	35	408	0.339	140	0.8	0.5	13.466	B
A-BCD	7	2	723	0.009	7	0.0	0.0	4.967	A
A-B	78	20			78				
A-C	344	86			344				
D-ABC	13	3	316	0.043	14	0.1	0.0	11.894	B
C-ABD	170	43	938	0.182	172	0.7	0.4	4.724	A
C-D	7	2			7				
C-A	420	105			420				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	116	29	438	0.265	117	0.5	0.4	11.235	B
A-BCD	5	1	686	0.007	5	0.0	0.0	5.239	A
A-B	66	16			66				
A-C	289	72			289				
D-ABC	11	3	347	0.033	11	0.0	0.0	10.741	B
C-ABD	123	31	896	0.137	124	0.4	0.3	4.681	A
C-D	6	2			6				
C-A	371	93			371				

Bradford Road - Balme Road - High Street - 2023 Base + Dev Kirklees Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	Two-way		3.52	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)	Run automatically	Relationship type	Relationship
D12	2023 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D2+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	744	100.000
B		ONE HOUR	✓	167	100.000
C		ONE HOUR	✓	578	100.000
D		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	115	620	9
	B	67	0	95	5
	C	476	99	0	3
	D	5	5	5	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	D
A	0	2	3	0
B	2	0	1	0
C	4	1	0	0
D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.53	22.31	1.1	C	153	230
A-BCD	0.04	3.89	0.0	A	26	40
A-B					103	154
A-C					554	830
D-ABC	0.06	14.03	0.1	B	14	21
C-ABD	0.32	6.05	0.9	A	199	298
C-D					2	3
C-A					329	494

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	126	31	433	0.290	124	0.0	0.4	11.586	B
A-BCD	16	4	945	0.017	16	0.0	0.0	3.878	A
A-B	85	21			85				
A-C	459	115			459				
D-ABC	11	3	351	0.032	11	0.0	0.0	10.596	B
C-ABD	135	34	809	0.166	133	0.0	0.3	5.329	A
C-D	2	0.47			2				
C-A	299	75			299				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	150	38	397	0.378	149	0.4	0.6	14.479	B
A-BCD	24	6	1002	0.024	24	0.0	0.0	3.674	A
A-B	101	25			101				
A-C	544	136			544				
D-ABC	13	3	319	0.042	13	0.0	0.0	11.783	B
C-ABD	185	46	835	0.221	184	0.3	0.5	5.535	A
C-D	2	0.52			2				
C-A	333	83			333				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	184	46	345	0.533	182	0.6	1.1	21.790	C
A-BCD	39	10	1087	0.036	39	0.0	0.0	3.429	A
A-B	122	31			122				
A-C	658	165			658				
D-ABC	17	4	274	0.060	16	0.0	0.1	13.991	B
C-ABD	276	69	875	0.316	275	0.5	0.9	6.012	A
C-D	2	0.56			2				
C-A	358	89			358				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	184	46	345	0.533	184	1.1	1.1	22.307	C
A-BCD	39	10	1087	0.036	39	0.0	0.0	3.436	A
A-B	122	31			122				
A-C	658	165			658				
D-ABC	17	4	273	0.060	17	0.1	0.1	14.026	B
C-ABD	277	69	876	0.317	277	0.9	0.9	6.050	A
C-D	2	0.56			2				
C-A	357	89			357				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	150	38	397	0.378	152	1.1	0.6	14.822	B
A-BCD	24	6	1002	0.024	24	0.0	0.0	3.685	A
A-B	101	25			101				
A-C	544	136			544				
D-ABC	13	3	318	0.042	14	0.1	0.0	11.820	B
C-ABD	186	46	836	0.222	187	0.9	0.5	5.585	A
C-D	2	0.52			2				
C-A	332	83			332				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	126	31	433	0.290	127	0.6	0.4	11.777	B
A-BCD	16	4	944	0.017	16	0.0	0.0	3.886	A
A-B	85	21			85				
A-C	459	115			459				
D-ABC	11	3	350	0.032	11	0.0	0.0	10.622	B
C-ABD	135	34	809	0.167	136	0.5	0.3	5.368	A
C-D	2	0.47			2				
C-A	298	74			298				

Bradford Road - Balme Road - High Street - 2028 Base + Dev Approved Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	Two-way		3.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2028 Base + Dev Approved Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	492	100.000
B		ONE HOUR	✓	158	100.000
C		ONE HOUR	✓	689	100.000
D		ONE HOUR	✓	16	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	89	400	3
	B	81	0	73	5
	C	593	86	0	10
	D	4	5	6	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	D
A	0	2	8	33
B	5	0	1	0
C	5	1	0	10
D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.49	19.45	0.9	C	145	218
A-BCD	0.01	5.24	0.0	A	8	11
A-B					81	121
A-C					363	545
D-ABC	0.06	14.47	0.1	B	14	21
C-ABD	0.28	4.94	0.8	A	197	296
C-D					7	11
C-A					428	642

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	119	30	433	0.275	118	0.0	0.4	11.355	B
A-BCD	5	1	692	0.007	5	0.0	0.0	5.241	A
A-B	67	17			67				
A-C	299	75			299				
D-ABC	12	3	342	0.034	12	0.0	0.0	10.905	B
C-ABD	130	33	903	0.144	129	0.0	0.3	4.648	A
C-D	7	2			7				
C-A	382	96			382				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	142	36	403	0.353	142	0.4	0.5	13.756	B
A-BCD	7	2	731	0.010	7	0.0	0.0	5.007	A
A-B	79	20			79				
A-C	356	89			356				
D-ABC	14	3	310	0.045	14	0.0	0.0	12.150	B
C-ABD	182	45	947	0.192	181	0.3	0.5	4.700	A
C-D	8	2			8				
C-A	430	108			430				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	174	44	359	0.485	173	0.5	0.9	19.147	C
A-BCD	11	3	787	0.014	11	0.0	0.0	4.671	A
A-B	97	24			97				
A-C	434	109			434				
D-ABC	17	4	266	0.064	17	0.0	0.1	14.435	B
C-ABD	278	70	1011	0.275	277	0.5	0.8	4.910	A
C-D	8	2			8				
C-A	472	118			472				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	174	44	359	0.485	174	0.9	0.9	19.454	C
A-BCD	11	3	787	0.014	11	0.0	0.0	4.639	A
A-B	97	24			97				
A-C	434	109			434				
D-ABC	17	4	266	0.064	17	0.1	0.1	14.467	B
C-ABD	279	70	1011	0.276	279	0.8	0.8	4.936	A
C-D	8	2			8				
C-A	472	118			472				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	142	36	402	0.354	144	0.9	0.6	13.996	B
A-BCD	7	2	731	0.010	7	0.0	0.0	4.923	A
A-B	79	20			79				
A-C	356	89			356				
D-ABC	14	3	310	0.045	14	0.1	0.0	12.183	B
C-ABD	183	46	948	0.193	184	0.8	0.5	4.741	A
C-D	8	2			8				
C-A	430	107			430				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	119	30	433	0.275	120	0.6	0.4	11.524	B
A-BCD	5	1	692	0.007	5	0.0	0.0	5.197	A
A-B	67	17			67				
A-C	299	75			299				
D-ABC	12	3	341	0.034	12	0.0	0.0	10.935	B
C-ABD	131	33	904	0.145	132	0.5	0.3	4.681	A
C-D	7	2			7				
C-A	381	95			381				

Bradford Road - Balme Road - High Street - 2028 Base + Dev Approved Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	Two-way		3.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2028 Base + Dev Approved Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	768	100.000
B		ONE HOUR	✓	174	100.000
C		ONE HOUR	✓	600	100.000
D		ONE HOUR	✓	16	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	115	643	9
	B	70	0	99	5
	C	494	103	0	3
	D	5	5	5	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	D
A	0	2	3	0
B	2	0	1	0
C	4	1	0	0
D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.57	25.28	1.3	D	160	240
A-BCD	0.04	3.86	0.1	A	29	43
A-B					102	154
A-C					573	860
D-ABC	0.06	14.60	0.1	B	14	21
C-ABD	0.34	6.19	1.0	A	214	321
C-D					2	3
C-A					334	502

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	131	33	426	0.308	129	0.0	0.4	12.057	B
A-BCD	18	4	953	0.018	17	0.0	0.0	3.846	A
A-B	85	21			85				
A-C	475	119			475				
D-ABC	12	3	345	0.034	12	0.0	0.0	10.792	B
C-ABD	143	36	814	0.176	142	0.0	0.4	5.351	A
C-D	2	0.48			2				
C-A	306	77			306				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	157	39	388	0.403	156	0.4	0.7	15.403	C
A-BCD	26	6	1013	0.025	26	0.0	0.0	3.640	A
A-B	101	25			101				
A-C	564	141			564				
D-ABC	14	3	312	0.045	14	0.0	0.0	12.090	B
C-ABD	198	49	842	0.235	197	0.4	0.5	5.586	A
C-D	2	0.53			2				
C-A	339	85			339				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	192	48	334	0.574	189	0.7	1.3	24.480	C
A-BCD	43	11	1102	0.039	42	0.0	0.1	3.394	A
A-B	122	30			122				
A-C	681	170			681				
D-ABC	17	4	264	0.065	17	0.0	0.1	14.552	B
C-ABD	299	75	884	0.338	297	0.5	1.0	6.142	A
C-D	2	0.57			2				
C-A	359	90			359				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	192	48	334	0.575	192	1.3	1.3	25.279	D
A-BCD	43	11	1102	0.039	43	0.1	0.1	3.401	A
A-B	122	30			122				
A-C	681	170			681				
D-ABC	17	4	264	0.065	17	0.1	0.1	14.595	B
C-ABD	300	75	885	0.339	300	1.0	1.0	6.190	A
C-D	2	0.56			2				
C-A	358	90			358				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	157	39	388	0.403	159	1.3	0.7	15.881	C
A-BCD	26	6	1013	0.025	26	0.1	0.0	3.651	A
A-B	101	25			101				
A-C	564	141			564				
D-ABC	14	3	311	0.045	14	0.1	0.0	12.135	B
C-ABD	199	50	843	0.236	200	1.0	0.6	5.645	A
C-D	2	0.53			2				
C-A	338	85			338				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	131	33	426	0.308	132	0.7	0.5	12.295	B
A-BCD	18	4	953	0.018	18	0.0	0.0	3.855	A
A-B	85	21			85				
A-C	475	119			475				
D-ABC	12	3	344	0.034	12	0.0	0.0	10.826	B
C-ABD	144	36	815	0.177	145	0.6	0.4	5.396	A
C-D	2	0.48			2				
C-A	305	76			305				

Bradford Road - Balme Road - High Street - 2028 Base + Dev Kirklees Rates, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	Two-way		3.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2028 Base + Dev Kirklees Rates	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D3+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	494	100.000
B		ONE HOUR	✓	159	100.000
C		ONE HOUR	✓	689	100.000
D		ONE HOUR	✓	16	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A	B	C	D
	A	0	91	400	3
	B	82	0	73	5
	C	593	86	0	10
	D	4	5	6	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	D
A	0	2	8	33
B	5	0	1	0
C	5	1	0	10
D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.49	19.65	0.9	C	146	219
A-BCD	0.01	5.23	0.0	A	8	12
A-B					83	124
A-C					363	545
D-ABC	0.06	14.48	0.1	B	14	21
C-ABD	0.28	4.94	0.8	A	197	296
C-D					7	11
C-A					428	642

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	120	30	433	0.277	118	0.0	0.4	11.385	B
A-BCD	5	1	693	0.007	5	0.0	0.0	5.233	A
A-B	68	17			68				
A-C	299	75			299				
D-ABC	12	3	341	0.034	12	0.0	0.0	10.909	B
C-ABD	130	33	903	0.144	129	0.0	0.3	4.650	A
C-D	7	2			7				
C-A	382	96			382				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	402	0.356	143	0.4	0.5	13.834	B
A-BCD	7	2	732	0.010	7	0.0	0.0	4.998	A
A-B	81	20			81				
A-C	356	89			356				
D-ABC	14	3	310	0.045	14	0.0	0.0	12.156	B
C-ABD	182	46	947	0.192	181	0.3	0.5	4.703	A
C-D	8	2			8				
C-A	430	108			430				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	175	44	359	0.489	174	0.5	0.9	19.330	C
A-BCD	11	3	789	0.014	11	0.0	0.0	4.661	A
A-B	99	25			99				
A-C	434	109			434				
D-ABC	17	4	266	0.064	17	0.0	0.1	14.445	B
C-ABD	279	70	1011	0.276	277	0.5	0.8	4.915	A
C-D	8	2			8				
C-A	472	118			472				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	175	44	358	0.489	175	0.9	0.9	19.650	C
A-BCD	11	3	789	0.014	11	0.0	0.0	4.629	A
A-B	99	25			99				
A-C	434	109			434				
D-ABC	17	4	266	0.064	17	0.1	0.1	14.477	B
C-ABD	279	70	1011	0.276	279	0.8	0.8	4.941	A
C-D	8	2			8				
C-A	472	118			472				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	402	0.356	145	0.9	0.6	14.082	B
A-BCD	7	2	732	0.010	7	0.0	0.0	4.911	A
A-B	81	20			81				
A-C	356	89			356				
D-ABC	14	3	309	0.045	14	0.1	0.0	12.191	B
C-ABD	183	46	948	0.193	184	0.8	0.5	4.744	A
C-D	8	2			8				
C-A	429	107			429				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	120	30	432	0.277	121	0.6	0.4	11.578	B
A-BCD	5	1	693	0.007	5	0.0	0.0	5.186	A
A-B	68	17			68				
A-C	299	75			299				
D-ABC	12	3	341	0.034	12	0.0	0.0	10.939	B
C-ABD	131	33	904	0.145	132	0.5	0.3	4.684	A
C-D	7	2			7				
C-A	381	95			381				

Bradford Road - Balme Road - High Street - 2028 Base + Dev Kirklees Rates, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2028 Base + Dev Approved Rates, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bradford Road - Balme Road - High Street	Crossroads	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)	Run automatically	Relationship type	Relationship
D16	2028 Base + Dev Kirklees Rates	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D4+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	772	100.000
B		ONE HOUR	✓	173	100.000
C		ONE HOUR	✓	600	100.000
D		ONE HOUR	✓	16	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	119	643	9
	B	69	0	99	5
	C	494	103	0	3
	D	5	5	5	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	D
A	0	2	3	0
B	2	0	1	0
C	4	1	0	0
D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.57	25.04	1.3	D	159	238
A-BCD	0.04	3.85	0.1	A	29	43
A-B					106	159
A-C					573	860
D-ABC	0.07	14.61	0.1	B	14	21
C-ABD	0.34	6.20	1.0	A	214	321
C-D					2	3
C-A					334	501

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	130	33	427	0.306	129	0.0	0.4	12.013	B
A-BCD	18	4	955	0.018	18	0.0	0.0	3.837	A
A-B	88	22			88				
A-C	475	119			475				
D-ABC	12	3	345	0.034	12	0.0	0.0	10.796	B
C-ABD	143	36	814	0.176	142	0.0	0.4	5.356	A
C-D	2	0.48			2				
C-A	306	77			306				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	156	39	389	0.400	155	0.4	0.7	15.324	C
A-BCD	26	6	1016	0.025	26	0.0	0.0	3.631	A
A-B	104	26			104				
A-C	564	141			564				
D-ABC	14	3	312	0.045	14	0.0	0.0	12.096	B
C-ABD	198	49	841	0.235	197	0.4	0.5	5.594	A
C-D	2	0.53			2				
C-A	339	85			339				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	191	48	334	0.570	188	0.6	1.3	24.262	C
A-BCD	43	11	1105	0.039	43	0.0	0.1	3.385	A
A-B	126	31			126				
A-C	681	170			681				
D-ABC	17	4	264	0.065	17	0.0	0.1	14.563	B
C-ABD	299	75	884	0.339	298	0.5	1.0	6.157	A
C-D	2	0.57			2				
C-A	359	90			359				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	191	48	334	0.571	190	1.3	1.3	25.036	D
A-BCD	43	11	1105	0.039	43	0.1	0.1	3.392	A
A-B	126	31			126				
A-C	681	170			681				
D-ABC	17	4	264	0.065	17	0.1	0.1	14.607	B
C-ABD	300	75	884	0.340	300	1.0	1.0	6.200	A
C-D	2	0.56			2				
C-A	358	89			358				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	156	39	388	0.401	158	1.3	0.7	15.788	C
A-BCD	26	6	1016	0.026	26	0.1	0.0	3.645	A
A-B	104	26			104				
A-C	563	141			563				
D-ABC	14	3	311	0.045	14	0.1	0.0	12.139	B
C-ABD	199	50	842	0.236	201	1.0	0.6	5.651	A
C-D	2	0.53			2				
C-A	338	85			338				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	130	33	426	0.306	131	0.7	0.4	12.247	B
A-BCD	18	4	955	0.019	18	0.0	0.0	3.845	A
A-B	88	22			88				
A-C	475	119			475				
D-ABC	12	3	344	0.034	12	0.0	0.0	10.830	B
C-ABD	144	36	814	0.177	145	0.6	0.4	5.404	A
C-D	2	0.48			2				
C-A	305	76			305				



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