

LAND TO THE NORTH OF THE DROVE WAY - ISTEAD RISE, GRAVESHAM TRANSPORT ASSESSMENT

PROJECT NO. 25-305 DOC NO. D001

DATE: MAY 2026

VERSION: 1.3

CLIENT: PTARMIGAN LAND A LTD

Velocity Transport Planning Ltd

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DOCUMENT CONTROL SHEET

Document Reference

Project Title	Land to the North of The Drove Way - Istead Rise, Gravesham
Document Title	Transport Assessment
Project Number	25-305
Document Number	D001
Revision No.	1.3
Document Date	MAY 2026

Document Review

	Name	Date completed
Prepared By	GJ	21/05/2026
Reviewed By	PM	21/05/2026
Authorised By	CR	21/05/2026

Notes

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TABLE OF CONTENTS

1	INTRODUCTION	1
2	POLICY CONTEXT	3
3	BASELINE TRANSPORT CONDITIONS.....	10
4	PROPOSED DEVELOPMENT	20
5	TRIP GENERATION ASSESSMENT	22
6	TRAFFIC IMPACT ASSESSMENT	25
7	JUNCTION CAPACITY ASSESSMENTS.....	31
8	SUSTAINABLE TRANSPORT STRATEGY	35
9	SUMMARY AND CONCLUSIONS	37

FIGURES

FIGURE 1-1: SITE LOCATION.....	1
FIGURE 3-1: 20 MINUTE WALKING DISTANCE	10
FIGURE 3-2: 20 MINUTE CYCLE DISTANCE	11
FIGURE 3-3: LOCAL AMENITIES MAP	12
FIGURE 3-4: LOCAL HIGHWAY NETWORK	15
FIGURE 3-5: PRIMARY VEHICLE ROUTING OPTIONS TO/FROM THE SRN	16
FIGURE 3-6: PIC COLLISION MAP	18

TABLES

TABLE 2-1: CAR PARKING STANDARDS	7
TABLE 2-2: CYCLE PARKING STANDARDS	7
TABLE 3-1: LOCAL AMENITIES REVIEW	12
TABLE 3-2: BUS SERVICE FREQUENCY.....	13
TABLE 3-3: RAIL SERVICE FREQUENCY	14
TABLE 3-4: NUMBER OF CASUALTIES BY SEVERITY AND YEAR	18
TABLE 3-5: CASUALTIES BY ROAD USER.....	19
TABLE 5-1: PERSON TRIP GENERATION – DECIDE AND PROVIDE (100 UNITS)	22



TABLE 5-2: TRICS VEHICLE TRIP RATES (PER UNIT, LAND USE 03/A – HOUSES PRIVATELY OWNED)	23
TABLE 5-3: VEHICLE TRIP GENERATION – DECIDE AND PROVIDE (100 UNITS)	23
TABLE 5-4: MULTI-MODAL PERSON TRIP GENERATION BY MODE	24
TABLE 6-1: TRAFFIC DISTRIBUTION OVERVIEW	25
TABLE 6-2: DEVELOPMENT VEHICLE TRIP DISTRIBUTION BY ROUTE (UNADJUSTED)	27
TABLE 6-3: DEVELOPMENT VEHICLE TRIP DISTRIBUTION BY ROUTE (INCLUDING 10% VEHICLE TRIPS REDUCTION)	27
TABLE 6-4: PCU CONVERSION VALUES	28
TABLE 6-5: TEMPRO BACKGROUND TRAFFIC GROWTH FACTORS	29
TABLE 6-6: COMMITTED DEVELOPMENTS CONSIDERED	29
TABLE 6-7: PERCENTAGE IMPACT OF PROPOSED DEVELOPMENT AT ASSESSED JUNCTIONS IN 2031	29
TABLE 7-1: JUNCTION 1: ISTEAD RISE / A227 WROTHAM ROAD JUNCTION MODELLING RESULTS SUMMARY	32
TABLE 7-2: JUNCTION 2: THE DROVE WAY / ISTEAD RISE JUNCTION MODELLING RESULTS SUMMARY	33

APPENDICES

APPENDIX A SITE LOCATION PLAN
APPENDIX B PERSONAL INJURY COLLISION DATA
APPENDIX C PROPOSED SITE ACCESS DESIGN DRAWING
APPENDIX D TRICS OUTPUTS
APPENDIX E TRAFFIC FLOW DIAGRAMS
APPENDIX F TRAFFIC SURVEY DATA
APPENDIX G JUNCTION MODELLING MEASUREMENTS AND FULL RESULTS



1 INTRODUCTION

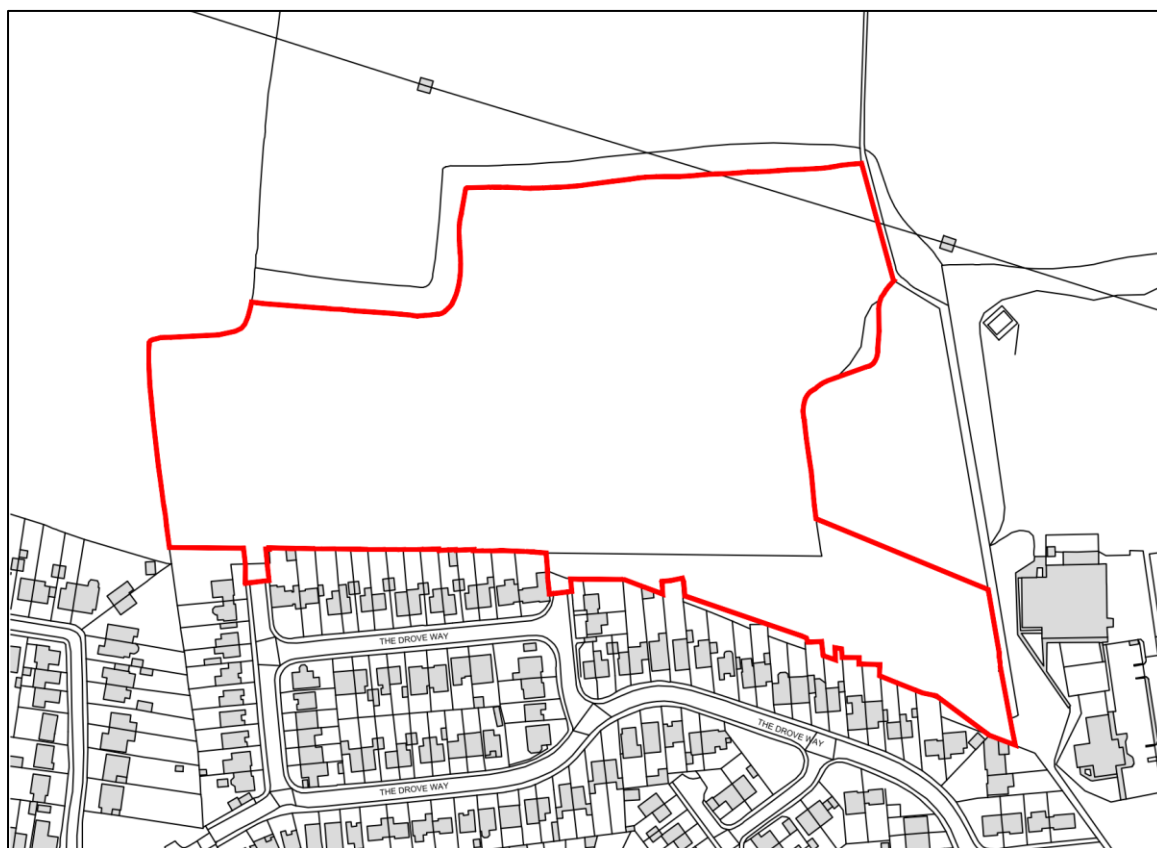
1.1 APPOINTMENT

- 1.1.1 Velocity Transport Planning Limited (VTP) has been appointed by Ptarmigan Land A Ltd (the 'Applicant') to prepare this Transport Assessment (TA) in support of a planning application for a new residential development comprising up to 100 dwellings (the 'Proposed Development') at Land to the North of The Drove Way, Istead Rise, Gravesham, Kent (the 'Site').
- 1.1.2 Gravesham Borough Council (GBC) acts as the Local Planning Authority (LPA) and Kent County Council (KCC) acts as the Local Highway Authority (LHA).
- 1.1.3 The TA assesses the transport and highways implications of the Proposed Development, including accessibility by sustainable modes, trip generation, traffic distribution, and junction capacity assessments.

1.2 SITE LOCATION

- 1.2.1 The Site is an undeveloped plot of land to the north of The Drove Way in Istead Rise village, within the administrative boundary of GBC. Istead Rise is a suburban settlement situated to the south of Gravesend, between the A2 trunk road to the north and Meopham village to the south.
- 1.2.2 The location of the site and the application boundary is presented in **Figure 1-1** and **APPENDIX A**.

Figure 1-1: Site Location



- 1.2.3 The Site extends to approximately 5.7 hectares. A 132kV overhead power cable is present in the north-eastern corner of the Site. This will be accommodated within the development layout and does not constrain the suitability of the remainder of the Site for residential use.

1.3 PROPOSED DEVELOPMENT

- 1.3.1 The Proposed Development would provide up to 100 residential dwellings (Use Class C3). The application is in outline form, with access applied for in detail and all other matters (layout, scale, appearance, and landscaping) reserved for future approval. The description of development is as follows:

“Development for up to 100 residential dwellings (Class C3), including the formation of new accesses from The Drove Way, the provision of new areas of public open space and all other associated infrastructure and ancillary works (all detailed matters reserved other than means of access).”

- 1.3.2 The final dwelling mix will be confirmed at the reserved matters stage. For the purposes of this Transport Assessment, the development is assessed on the basis of 100 houses being provided.
- 1.3.3 An Outline Residential Travel Plan (RTP) will be submitted as part of the planning application that should be read in conjunction with this TA, setting indicative objectives and measures to encourage sustainable travel by future residents and achieve targets in line with a vision-led approach to transport planning.

1.4 DOCUMENT STRUCTURE

- 1.4.1 Following this introduction, the remainder of this TA is structured as follows:
- **Section 2** – reviews relevant national, regional and local transport planning policy.
 - **Section 3** – summarises the baseline conditions of the site and local transport networks.
 - **Section 4** – describes the Proposed Development, including access, parking, servicing and delivery arrangements.
 - **Section 5** – provides a trip generation assessment of the Proposed Development.
 - **Section 6** – provides a traffic impact assessment based on a forecast distribution of trips on the local highway network.
 - **Section 7** – presents the results of junction capacity assessments comparing baseline, future year, and with-development scenarios.
 - **Section 8** – discusses the sustainable transport strategy for the Proposed Development; and
 - **Section 9** – summarises and concludes the report.



2 POLICY CONTEXT

2.1 INTRODUCTION

- 2.1.1 This section provides a summary of relevant transport-related policies and assesses the development's compliance. National, regional, and local policy places a focus on encouraging development that maximises the use of sustainable travel modes in areas with good public transport connectivity and which reduces the need to travel by car.

2.2 NATIONAL PLANNING POLICY FRAMEWORK (2024)

- 2.2.1 The National Planning Policy Framework (NPPF) was revised in December 2024. It sets out the Government's planning policies for England and how these are expected to be applied. At its heart, the NPPF sets out a presumption in favour of sustainable development (Paragraph 11). Whilst the Government has recently undertaken a consultation on proposed updates to the NPPF, these have not yet been adopted, and so the 2024 version remains as the relevant adopted planning framework.
- 2.2.2 The NPPF promotes sustainable transport and notes that transport issues should be considered at the earliest stages of development proposals.
- 2.2.3 Chapter 9 sets out the requirements for promoting sustainable transport, advising that significant development should be focused on locations that are or can be made sustainable through limiting the need to travel and offering a genuine choice of transport modes (paragraph 110). The NPPF advises that planning policies should support an appropriate mix of uses across an area, and within larger-scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities (paragraph 111a).
- 2.2.4 Paragraph 115 requires that, when assessing development proposals, sustainable transport modes are prioritised; safe and suitable access can be achieved for all users; street and parking design reflects current national guidance; and any significant transport impacts can be mitigated to an acceptable degree through a vision-led approach.
- 2.2.5 Paragraph 116 states that "*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios*".
- 2.2.6 Paragraph 117 states that applications for developments should:
- give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high-quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
 - address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
 - 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.

2.2.7 Paragraph 118 requires all developments that will generate significant amounts of movement to be supported by a vision-led Transport Statement or Transport Assessment so that the likely impacts of the proposal can be assessed and monitored.

2.2.8 In the context of the NPPF Grey Belt provisions, paragraph 155 requires development on grey belt land to be in a sustainable location, with particular reference to paragraphs 110 and 115. This Transport Assessment demonstrates that the Site is capable of supporting sustainable travel choices and that safe and suitable access can be achieved. The proposals are therefore considered to accord with the transport-related requirements of NPPF paragraphs 110 and 115.

2.2.9 Overall, the Proposed Development supports the NPPF through:

- Being located in an area which provides a variety of daily amenities within acceptable walking and cycling distances.
- Being accessible by non-car modes of travel, including public transport options;
- Providing compliant levels of car and cycle parking to help maximise the use of alternative travel modes and achieve wider transport objectives. The planning application is also supported by an Outline Travel Plan, which aims to increase active travel levels.
- Not having significant adverse impacts on the transport network or highway safety; and
- Enhancing walking and cycling connections to the surrounding area.

2.3 PLANNING PRACTICE GUIDANCE (2014)

2.3.1 In March 2014, the Department for Communities and Local Government (as it was then) launched the Planning Practice Guidance (PPG) to provide web-based guidance in support of the NPPF. The PPG details the overarching principles of Transport Assessments and Travel Plans.

2.3.2 Paragraph 15 (Ref. ID: 42-015-20140306) of the PPG notes that the scope and level of detail of a Transport Assessment will vary from site to site. It lists matters to be considered when setting the scope of a Transport Assessment, including:

- Information about the proposed development, site layout and access arrangements for all modes of transport.
- Information about the neighbouring uses, amenity and character, and the existing functional classification of the nearby road network.
- Data about existing public transport provision, including the provision and 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 development in the area (i.e., development for which there is a reasonable degree of certainty will proceed within the next three years).
- 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 road network.
- An analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent three-year period (or five-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 accessibility (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, and physical improvements to existing roads.

2.4 EMERGING NATIONAL PLANNING POLICY FRAMEWORK (NPPF)

- 2.4.1 At the time of preparing this TA, the Government had undertaken a consultation on proposed updates to the National Planning Policy Framework (NPPF), which closed on 10 March 2026. Whilst the revised NPPF has not yet been formally adopted and therefore carries limited weight in decision-making, it is a material consideration in the context of emerging national planning policy.
- 2.4.2 The proposed updates continue to reinforce the Government's overarching objective of delivering sustainable development, including a strong emphasis on locating development in areas that are well served by sustainable transport modes, promoting walking, cycling and public transport, and ensuring that development does not give rise to unacceptable impacts on highway safety or severe residual cumulative impacts on the transport network.
- 2.4.3 The Proposed Development is consistent with these emerging policy objectives. The scheme has been developed in accordance with a vision-led approach to transport planning, embedding sustainable travel principles from the outset. In line with the 'decide and provide' approach, the development has been planned based on the desired outcomes of reducing reliance on private car travel and encouraging walking, cycling and public transport use, rather than forecasting future traffic demand. The design of the site and the development's management strategies have therefore been designed to prioritise sustainable modes and promote healthier, lower-carbon travel patterns, ensuring that the development integrates appropriately with its surroundings and does not give rise to severe transport impacts.



2.5 KENT LOCAL TRANSPORT PLAN 5: STRIKING THE BALANCE (2024)

2.5.1 KCC adopted its fifth Local Transport Plan (LTP5), titled 'Striking the Balance', in December 2024. The plan covers the period 2024 to 2037 and replaces LTP4: Delivering Growth without Gridlock (2016–2031).

2.5.2 The LTP5 sets out KCC's ambition for transport across the county, establishing a series of policy outcomes and proposals for delivery via the plan period. The plan is supported by sub-strategies, including the Bus Service Improvement Plan (BSIP) and the Kent Cycling and Walking Infrastructure Plan (KCWIP). Key policy outcomes of direct relevance to this TA include:

- Policy Outcome 1: A safe road network in which injuries and fatalities on the Kent highway network are reduced year on year, working towards the KCC Vision Zero road safety strategy.
- Policy Outcome 2: A well-maintained and resilient highway network that enables all users to make effective journeys.
- Policy Outcome 5: New development is served by appropriate sustainable transport access; requirements for walking, cycling, and public transport connectivity are secured through the planning process in collaboration with developers and Local Planning Authorities.
- Policy Outcome 7: A reduction in carbon dioxide emissions from surface transport, targeting falls greater than the business-as-usual forecast of 9% by 2027, 19% by 2032, and 29% by 2037, with no area of Kent left behind in the transition to electric vehicles.
- Policy Outcome 8: A growing public transport system supported by dedicated infrastructure, with increased ridership enabling operators to invest in better services.

2.5.3 The LTP5 confirms KCC's role in working with developers and Local Planning Authorities to mitigate the impact of new development on the road network and to ensure that new residents have access to sustainable travel options. This TA has been prepared in a manner consistent with those objectives.

2.6 KENT DESIGN GUIDE – PARKING STANDARDS (JANUARY 2025)

2.6.1 The Kent Design Guide, Supplementary Guidance – Parking Standards (January 2025), guides how parking should be provided and designed in new developments when assessing planning applications in Kent.

2.6.2 The guidance provides vehicle and cycle parking standards applicable to all new developments in Kent. The 2025 version of the document removed maximum parking standards, noting that the standards are intended to be a starting point for discussion between developers, planning authorities and the highway authority. The numbers in the tables are therefore indicative benchmarks rather than strict limits.

2.6.3 Based on the Site's location within Istead Rise, the 'Suburban' standards are considered the most appropriate classification. The relevant car parking standards are summarised in **Table 2-1**.



Table 2-1: Car Parking Standards

DWELLING TYPE	CAR PARKING STANDARD – SUBURBAN
1 & 2 bed flats	1 space per unit
1 & 2 bed houses	1 space per unit
3-bed houses	2 spaces per unit
4+ bed houses	2 spaces per unit
Visitor parking	0.2 spaces per unit

2.6.4 Minimum cycle parking requirements under the Kent Design Guide are as summarised in **Table 2-2**.

Table 2-2: Cycle Parking Standards

USE CLASS	CYCLE PARKING LEVEL
Houses	1 space per bedroom
Flats and Maisonettes	1 space per bedroom

2.6.5 In terms of cycling, the document aligns with the NPPF and states that development layouts should prioritise pedestrian and cycle movements first, before considering private vehicle access. Cycle parking should be secure, accessible and well-located to help create developments where cycling is a practical travel option.

2.6.6 For C3 houses, flats and maisonettes, a minimum of one cycle parking space per bedroom is required.

2.6.7 The Kent Design Guide also provides the following guidance relating to cycle parking:

- Cycle parking provision should normally be provided within the curtilage of the residential dwelling. Where a garage is provided, it should be of a suitable size to accommodate the required cycle parking provision in addition to that of a car.
- Cycle Parking provision should be provided as a secure communal facility where a suitable alternative is not available.
- At least one signed bay for non-standard cycles should be allocated at the end of a row of standard cycle parking stands, with these bays a minimum of 1.5m wide in order to allow for dismounting.

2.7 GRAVESHAM BOROUGH COUNCIL LOCAL PLAN

2.7.1 The Development Plan for Gravesham Borough currently consists of:

- the Gravesham Local Plan Core Strategy (adopted September 2014, covering the period to 2028); and
- saved policies from the Gravesham Local Plan First Review (1994), retained following the Secretary of State's direction in 2007.

2.7.2 The Core Strategy (2014) is the primary development plan document. GBC is actively progressing a Partial Review of the Core Strategy alongside a Site Allocations and Development Management Policies Document.

2.7.3 The southern part of the application site was identified as a draft site allocation (GB62) within the Council's Site Allocations and Development Management Policies Document Regulation 18 Consultation in December 2020 (Stage 2). The site was identified as being a 'developable site' within the Strategic Land Availability Assessment (2020), which informed the draft allocation.



- 2.7.4 This draft allocation was also supported by the Stage 2 Green Belt Assessment (August 2020), which included this site (Ref IR4). There have been no updates to this evidence base, which has been published by GBC.
- 2.7.5 It had been anticipated that the draft allocation would be carried through to the Regulation 19 version of the draft local plan. The Draft Regulation 19 document, published on 17 April 2026, does not include the site as a site allocation. No justification has been given concerning the reason why the previous draft allocation (GB62) on the site has not been carried forward, despite the Green Belt evidence base remaining unchanged.
- 2.7.6 Policy CS10 relates to physical and social infrastructure and requires new development to provide or contribute towards infrastructure where necessary to meet needs arising from development.
- 2.7.7 Policy CS11 states that new developments should mitigate their impact on the highway and public transport networks as required. As appropriate, transport assessments and travel plans should be provided and implemented to ensure the delivery of travel choice and sustainable opportunities for travel. Transport assessment work is required to be undertaken in accordance with national and local policy guidance, and to identify detailed highway and public transport network requirements and management arising from the development.
- 2.7.8 The Core Strategy recognises the high levels of out-commuting from Gravesham to Dartford and Central London, and the significant car mode share in the borough. The policy approach accordingly seeks to encourage modal shift and reduce car dependency through sustainable development design and the provision of appropriate transport infrastructure.

2.8 EMERGING LOCAL PLAN

- 2.8.1 GBC is currently preparing a comprehensive Local Plan Review to address the borough's development and infrastructure needs.
- 2.8.2 As outlined in the latest Local Development Scheme (2025–2026), the emerging plan is actively progressing through its statutory consultation phases prior to submission to the Secretary of State for independent examination.
- 2.8.3 While the Gravesham Local Plan Core Strategy (2014) and the saved policies of the 1994 First Review currently remain the principal statutory Development Plan, the emerging Local Plan Review—alongside the latest National Planning Policy Framework (NPPF) – represents a material consideration in the assessment of future development and transport impacts within the borough.
- 2.8.4 During the Local Plan review, GBC updated the plan horizon to comply with national policy requiring at least a 15-year period from adoption. As a result, the emerging plan looks ahead to at least 2036, however more recent Council information indicates that the final adopted framework could extend to around 2042 once the review is completed.

2.9 POLICY COMPLIANCE SUMMARY

- 2.9.1 This TA demonstrates that the Proposed Development is consistent with the key requirements of national, county, and local transport planning policy. The Site is in an established residential settlement with access to a variety of everyday services on foot or by cycle, good bus connections, and rail access to London and key employment centres via Meopham Station.



- 2.9.2 A Residential Travel Plan will be provided for the development, consistent with NPPF Paragraph 110, GBC Policy CS12, and KCC LTP5 Policy Outcome 5. Parking provision will accord with the Kent Design Guide Parking Standards (January 2025), being secured by condition and provided in future as part of a reserved matters application.
- 2.9.3 The assessments contained within this TA also demonstrate that the residual transport impacts of the Proposed Development will not be severe, consistent with the test in NPPF Paragraph 116.



3 BASELINE TRANSPORT CONDITIONS

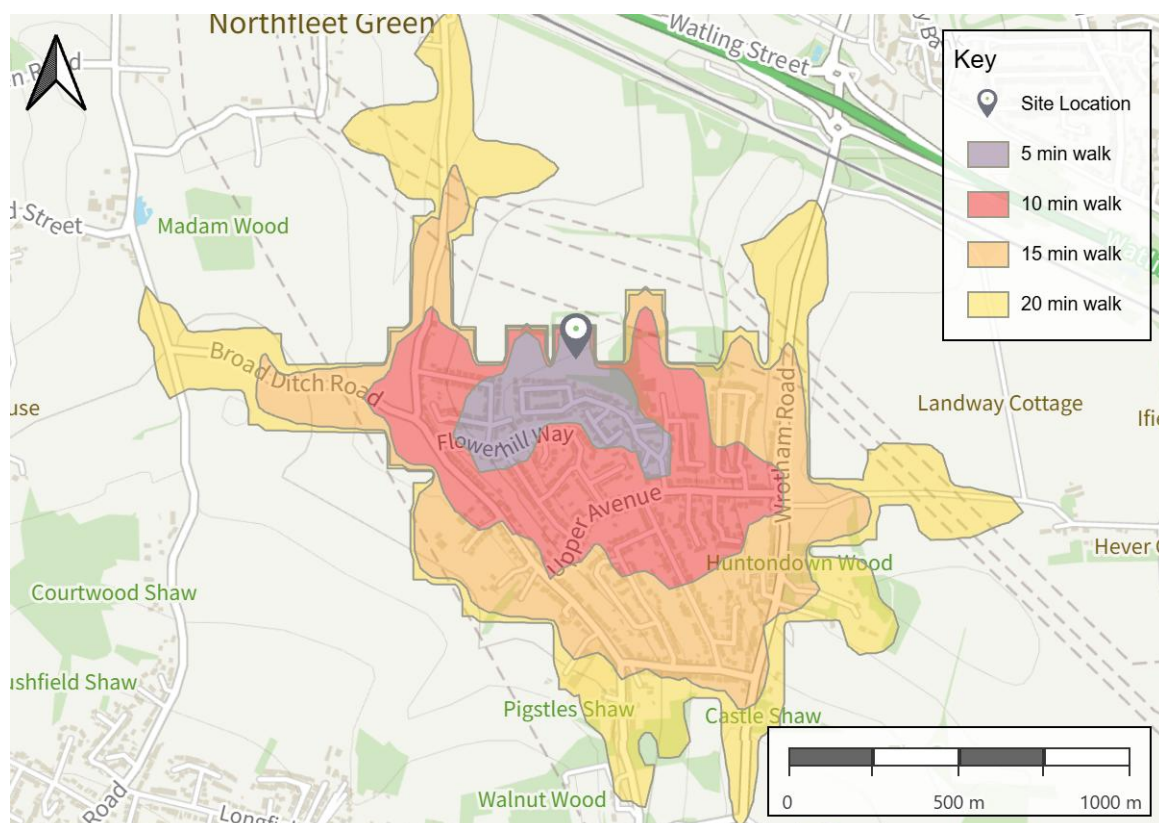
3.1 INTRODUCTION

- 3.1.1 This section describes the existing transport conditions in the vicinity of the Site, including accessibility by walking, cycling, and public transport, together with an overview of the local highway network and road safety record.

3.2 WALKING

- 3.2.1 The National Travel Survey notes that walking is the most frequent travel mode used for short-distance trips (within 1 mile/1.6km). Infrastructure that supports efficient travel on foot is therefore important to promote active travel and walking as a viable alternative to short car trips.
- 3.2.2 **Figure 3-1** illustrates the destinations that lie within a 20-minute walk of the site.

Figure 3-1: 20 Minute Walking Distance

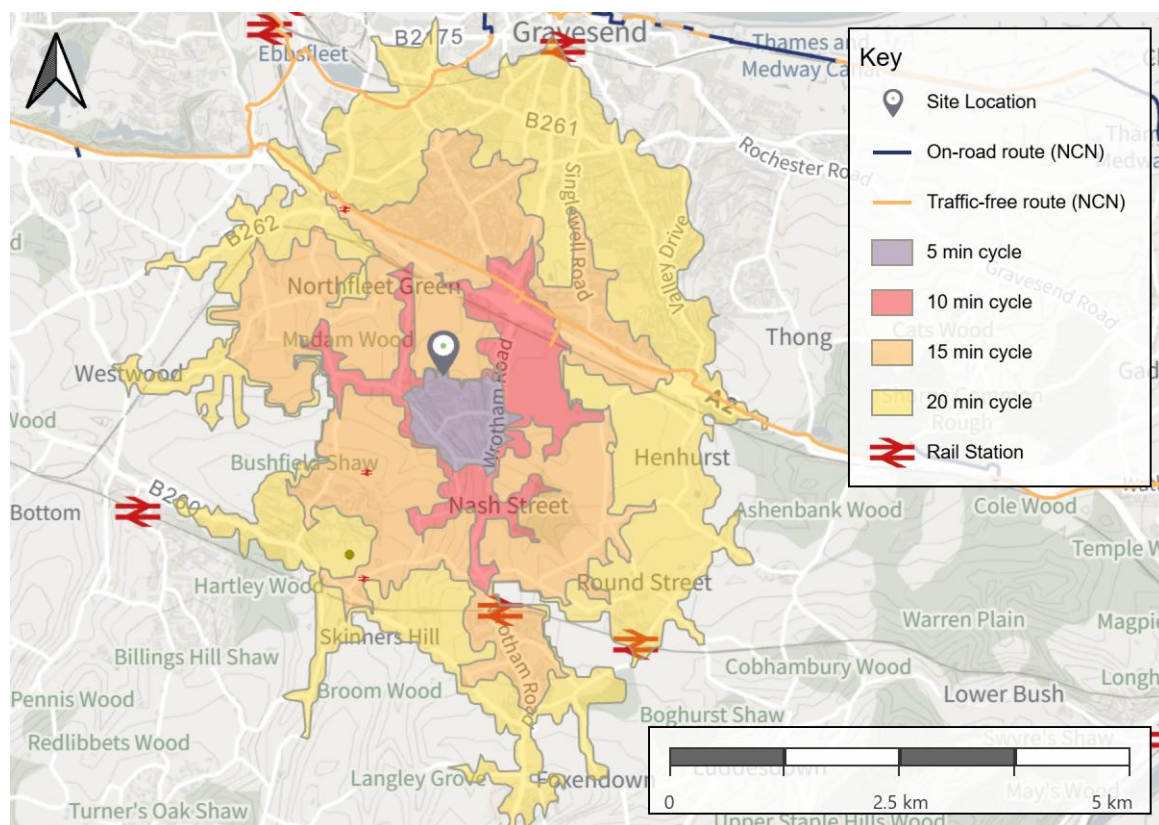


- 3.2.3 As shown within **Figure 3-1**, the Site is located at the northern edge of Istead Rise, a village with a variety of everyday amenities.
- 3.2.4 The pedestrian environment within Istead Rise is generally of good quality, with footways provided along The Drove Way and throughout the residential estate.
- 3.2.5 The proposed access designs incorporate 2m footways, providing a direct, footway-level connection between the development and the existing pedestrian network.

3.3 CYCLING

- 3.3.1 Cycling provides a viable alternative to the private car for short-to-medium length trips. Meopham Station (3.1km) is accessible by cycle in approximately 11 minutes via local roads, placing it comfortably within the commonly adopted 20-minute cycle threshold.
- 3.3.2 The local road network within Istead Rise comprises relatively low-traffic residential streets suitable for cycling. There are no dedicated cycle lanes in the immediate vicinity of the Site; however, quiet residential streets with low traffic volumes are generally accepted as suitable for cycling use.
- 3.3.3 **Figure 3-2** illustrates a 20-minute cycle catchment area from the site.

Figure 3-2: 20 Minute Cycle Distance



3.4 LOCAL AMENITIES

- 3.4.1 **Table 3-1** provides a summary of the key local services and facilities for residents, with the walking and cycling times shown, which demonstrates that the site is highly accessible and within walking and cycling distance to a variety of essential amenities that would support the proposed residential use.



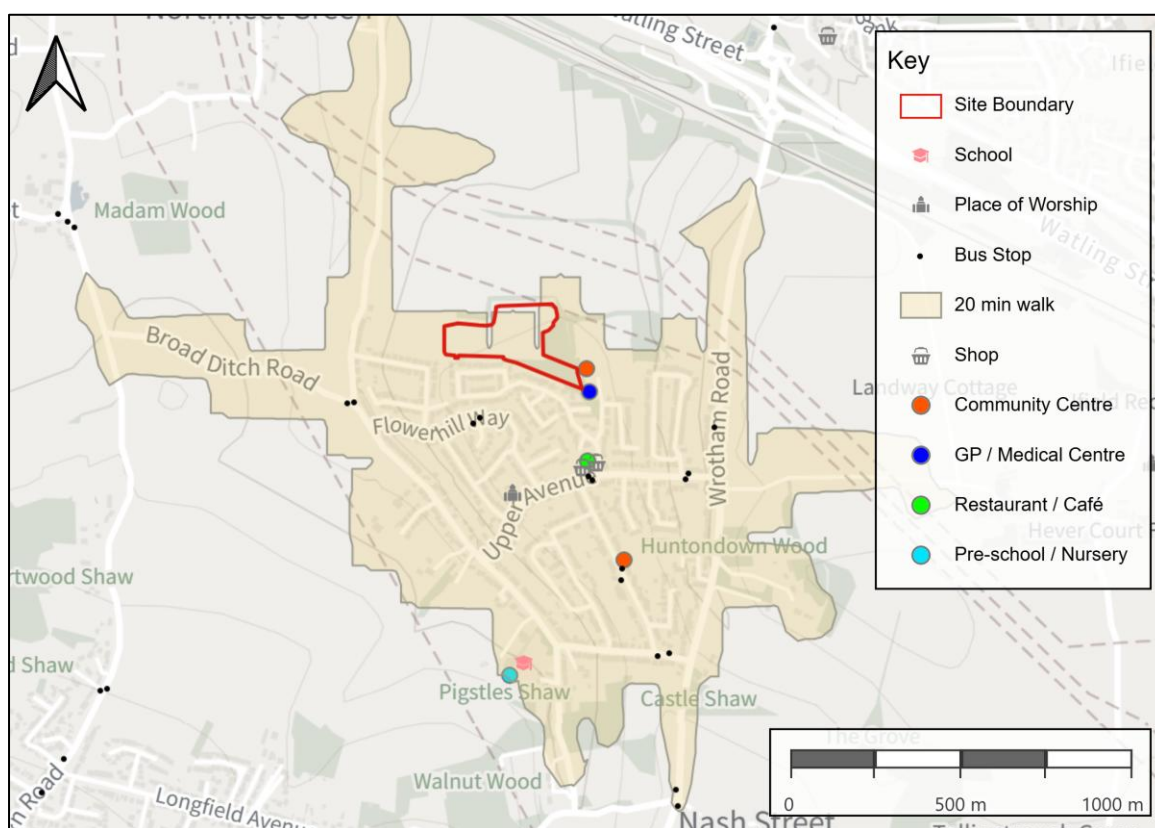
Table 3-1: Local Amenities Review

TYPE OF FACILITY	LOCATION	DISTANCE	Walking Time (Mins)	Cycling Time (Mins)
Cash Point	Co-Op Food - Gravesend - Istead Rise	600m	8	2
Groceries	Co-Op Food - Gravesend - Istead Rise	600m	8	2
Park/Green space	Istead Rise Recreation Ground	400m	5	2
Fitness Opportunity	Istead Rise Community Centre	400m	5	2
Postal Facility	Istead Rise Post Office (The Parade)	600m	8	2
Community Centre	Istead Rise Community Centre	400m	5	2
Pharmacy	Istead Rise Pharmacy	600m	8	2
Medical Centre	Downs Way Medical Practice	450m	6	2
Childcare	Kiddiecare Kindergarten	900m	11	3
Primary School	Istead Rise Primary School	900m	11	3

3.4.2

The type of amenities available within a 20-minute walk is also shown in **Figure 3-3**.

Figure 3-3: Local Amenities Map



3.4.3

As demonstrated above, there are various daily amenities available within walking distance of the site. These amenities are accessible via predominantly uncontrolled crossing points and footways.

3.4.4

The Site is therefore in an established, sustainable location in transport terms for the proposed land use.

3.5 BUS

3.5.1

The nearest bus stops are located on Flowerhill Way (Littlecroft), approximately 450m south-west of the Site, and at the Istead Rise shops, approximately 700m south of the Site.



3.5.2 Both stops are accessible within a comfortable 10-minute walk. The bus services currently operating from these stops are summarised in **Table 3-2**.

Table 3-2: Bus Service Frequency

BUS STOP	DISTANCE	SERVICE	OPERATOR	ROUTE	WEEKDAY		WEEKEND	
					Frequency	Hours of Operation	Frequency	Hours of Operation
Littlecroft, Flowerhill Way	450m	308	Redroute Buses	Sevenoaks - Gravesend	7 Per day	10:17, 11:42, 13:12, 14:42, 16:47, 17:45, 18:45	7 Per day	10:12, 11:42, 13:12, 15:12, 16:45, 18:45
		418R	1st Bus Stop Ltd	New Ash Green - Wrotham	1 per day	07:35	No service	No service
		695	1st Bus Stop Ltd	Istead Rise - Rochester	1 per day	07:01	No service	No service
Littlecroft, Flowerhill Way	450m	308	Redroute Buses	Gravesend - Sevenoaks	7 Per day	07:01, 09:29, 10:59, 12:29, 14:19, 17:00, 18:00	6 Per day	09:29, 10:59, 12:29, 14:29, 16:00, 18:00
		418R	1st Bus Stop Ltd	Wrotham - New Ash Green	1 per day	15:36	No service	No service
		695	1st Bus Stop Ltd	Rochester - Istead Rise	1 per day	16:28	No service	No service
Shops, Istead Rise	700m	418R	1st Bus Stop Ltd	New Ash Green - Wrotham	1 per day	07:36	No service	No service
		695	1st Bus Stop Ltd	Istead Rise - Rochester	1 per day	07:02	No service	No service
		Meopham1	1st Bus Stop Ltd	Meopham - Kings Farm	1 per day	15:30	No service	No service
Shops, Istead Rise	700m	418R	1st Bus Stop Ltd	Wrotham - New Ash Green	1 per day	15:36	No service	No service
		695	1st Bus Stop Ltd	Rochester - Istead Rise	1 per day	16:26	No service	No service
		Meopham1	1st Bus Stop Ltd	Kings Farm - Meopham	1 per day	07:53	No service	No service

3.5.3 Bus service 308 also connects with the nearest rail station, Meopham Station, as well as connections to Gravesend town centre (Southeastern rail services and Thames ferry).

3.6 NATIONAL RAIL

3.6.1 The nearest railway station is Meopham Station, situated approximately 3.1km to the south. Access to the station is possible by the following modes:

- Bus: approximately 15 minutes via Service 308
- Cycle: approximately 11 minutes
- On foot: approximately 39 minutes (accessible but beyond the standard walking threshold)



- Private car: approximately four minutes (2.1km via Wrotham Road)

3.6.2 Meopham is served by Southeastern train services on the Chatham Main Line. Rail services from Meopham Station are summarised in **Table 3-3**.

Table 3-3: Rail Service Frequency

DESTINATION	DAYS	FREQUENCY	JOURNEY TIME	HOURS OF OPERATION
London Victoria	Mon–Sun	2/hour	33 mins	05:20 – 23:40
Rochester	Mon–Sun	2/hour	9 mins	06:31 – 01:21
Bromley South	Mon–Sun	2/hour	17 mins	05:20 – 23:40
Chatham	Mon–Sun	2/hour	13 mins	06:31 – 01:21
Gillingham (Kent)	Mon–Sun	2/hour	18 mins	06:31 – 01:21
Longfield	Mon–Sun	2/hour	4 mins	05:20 – 23:40
Denmark Hill	Mon–Sun	1/hour	36 mins	05:20 – 22:35
St Mary Cray	Mon–Sun	1/hour	18 mins	05:20 – 23:40
Swanley	Mon–Sun	1/hour	14 mins	05:20 – 23:40
Sittingbourne	Mon–Sun	c.16/day	32 mins	06:31 – 00:13

3.6.3 Meopham Station provides a frequent, well-connected rail service operating throughout the day, seven days a week. Two trains per hour to London Victoria (33 minutes) make rail a realistic commuting option for future residents, supported by onward connections to Chatham, Rochester, Gillingham, and beyond.

3.7 LOCAL HIGHWAY NETWORK

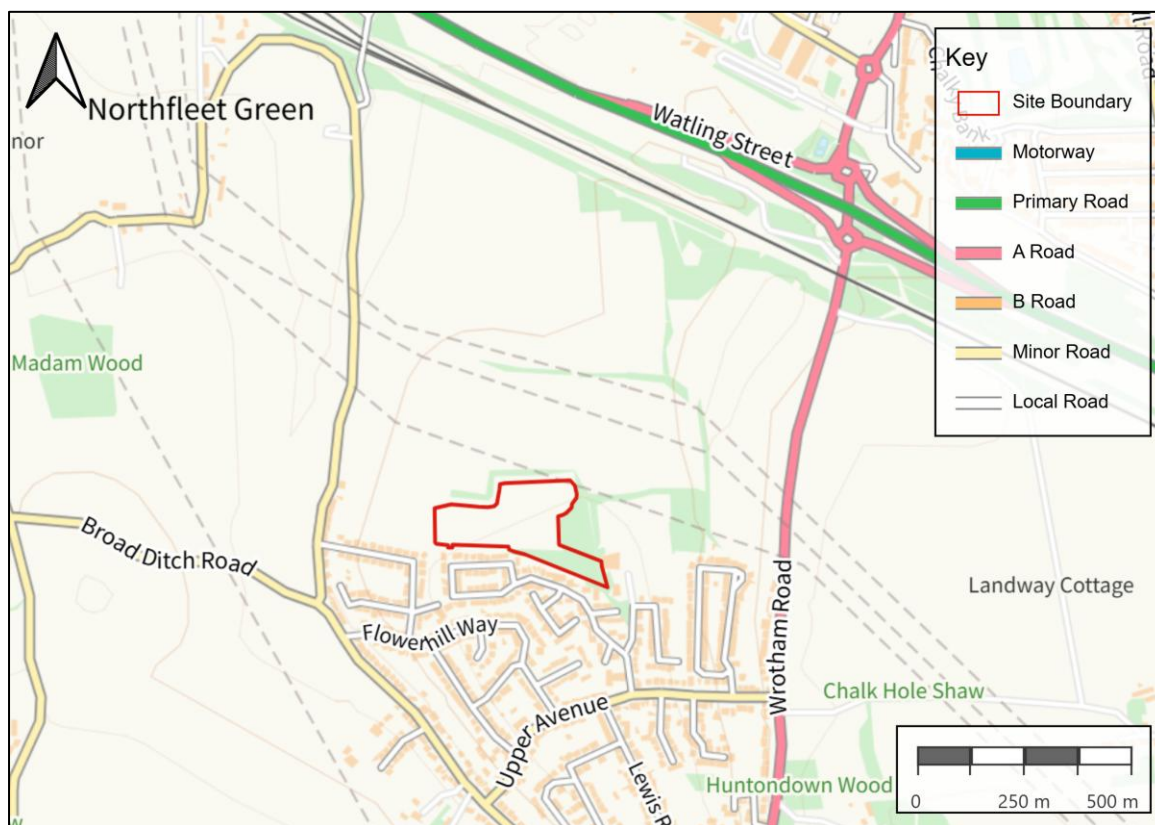
3.7.1 The Proposed Development would be accessed from The Drove Way, which runs east-west along the northern edge of Istead Rise.

3.7.2 The Drove Way is a residential estate road with no through-traffic function. A modal filter between The Drove Way and Hadlow Way prevents direct vehicular access to and from the south-west.

3.7.3 The local highway network is shown in **Figure 3-4** below.

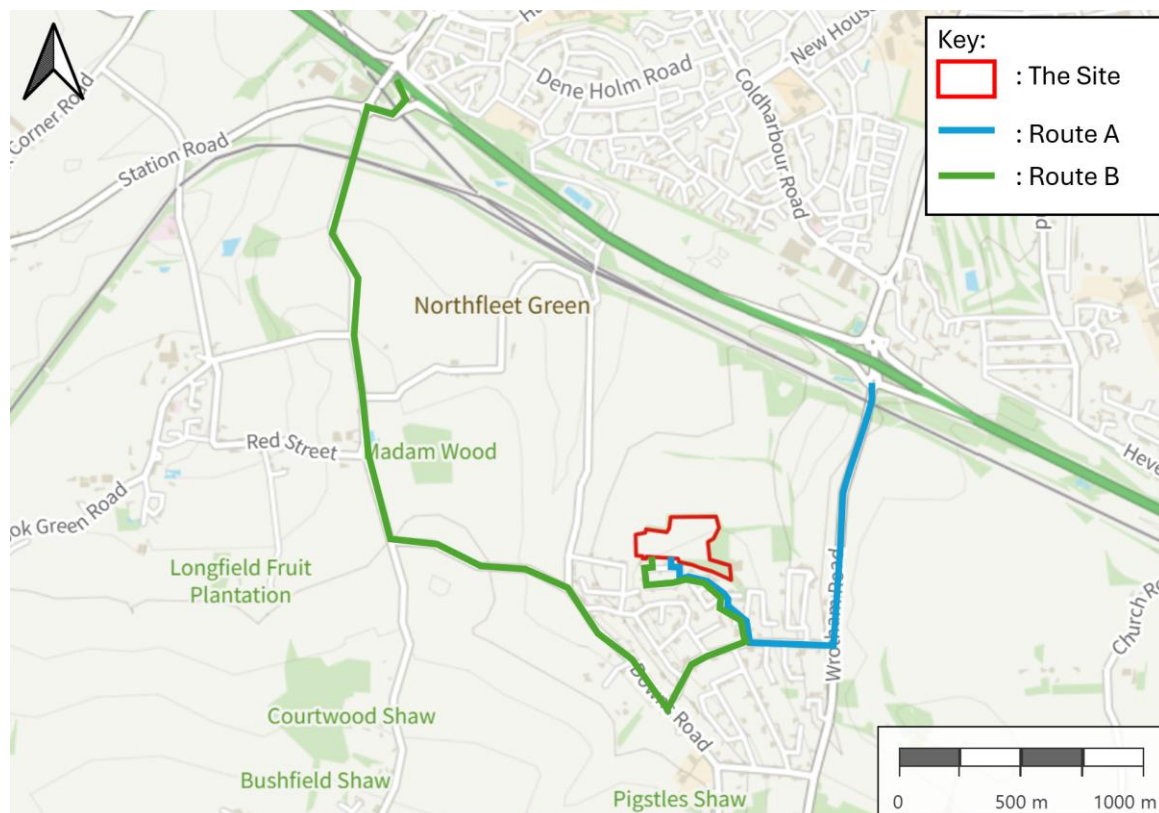


Figure 3-4: Local Highway Network



- 3.7.4 The A2 to the north of the Site forms part of the Strategic Road Network (part of the National Highways' network). It is understood that the slip roads are managed by National Highways, while the roundabouts at the junction are part of KCC's network.
- 3.7.5 There are two main vehicle routing options from the Site to the strategic highway network, both of which are assessed in this TA:
- Route A – North via Istead Rise / A227 Wrotham Road: The primary route for vehicles heading northwards towards Gravesend and the A2. From the Site, vehicles would travel south through the estate onto Istead Rise road, then north on A227 Wrotham Road towards the A2 (approximately 4 minutes (2.1km) from the Site).
 - Route B – North via Upper Avenue / Downs Road: An alternative northern routing for vehicles heading to Swanscombe, Ebbsfleet, Bluewater, and Dartford. From the Site, vehicles would travel south-east via Upper Avenue onto Downs Road (B2009), connecting to the A2 at Northfleet / Swanscombe (approximately 8 minutes (4.4km) from the Site).
- 3.7.6 These routes are shown in **Figure 3-5**.

Figure 3-5: Primary Vehicle Routing Options To/From the SRN



THE DROVE WAY

- 3.7.7 The Drove Way is a two-way single carriageway residential road located to the north of Istead Rise village, running broadly in an east-to-west direction.
- 3.7.8 The road provides a connection between Upper Avenue to the east, with several residential side roads branching off along its length, before terminating in a cul-de-sac to the west.
- 3.7.9 A modal filter prevents through-vehicular movement between The Drove Way and Hadlow Way to the south-west, restricting access for motor vehicles to and from that direction.
- 3.7.10 The Drove Way operates at a 30mph speed limit. There are no formal parking restrictions along the road. Footways are provided on both sides of the carriageway.

ISTEAD RISE

- 3.7.11 Istead Rise is a two-way single carriageway residential road that runs broadly in a north-to-south direction through the centre of Istead Rise village.
- 3.7.12 The road provides the primary vehicular spine of the settlement, connecting The Drove Way and Haven Close to the north with the A227 Wrotham Road to the south via a priority junction. A local parade of shops, community facilities, and the primary school are located along and adjacent to the road. Istead Rise operates at a 30mph speed limit throughout.
- 3.7.13 Parking is generally unrestricted along the residential sections of the road. Footways are provided on both sides of the carriageway.

DOWNNS ROAD (B2009)

- 3.7.14 Downs Road is a two-way single-carriageway road classified as the B2009. It runs broadly in a north-to-south direction, forming the eastern boundary of the Istead Rise residential estate. The road connects the residential streets of Istead Rise to the north, including its junction with Upper Avenue, with the wider highway network to the south, passing through open countryside before connecting with the A227 Wrotham Road and onward routes to the south and east.
- 3.7.15 Downs Road transitions from a built-up residential environment in its northern section, with a 30mph speed limit, to a rural single carriageway with the national speed limit (60mph) as it leaves the settlement boundary. Footways are provided on both sides of the carriageway within the built-up section, but are absent along the rural southern section.

A227 WROTHAM ROAD

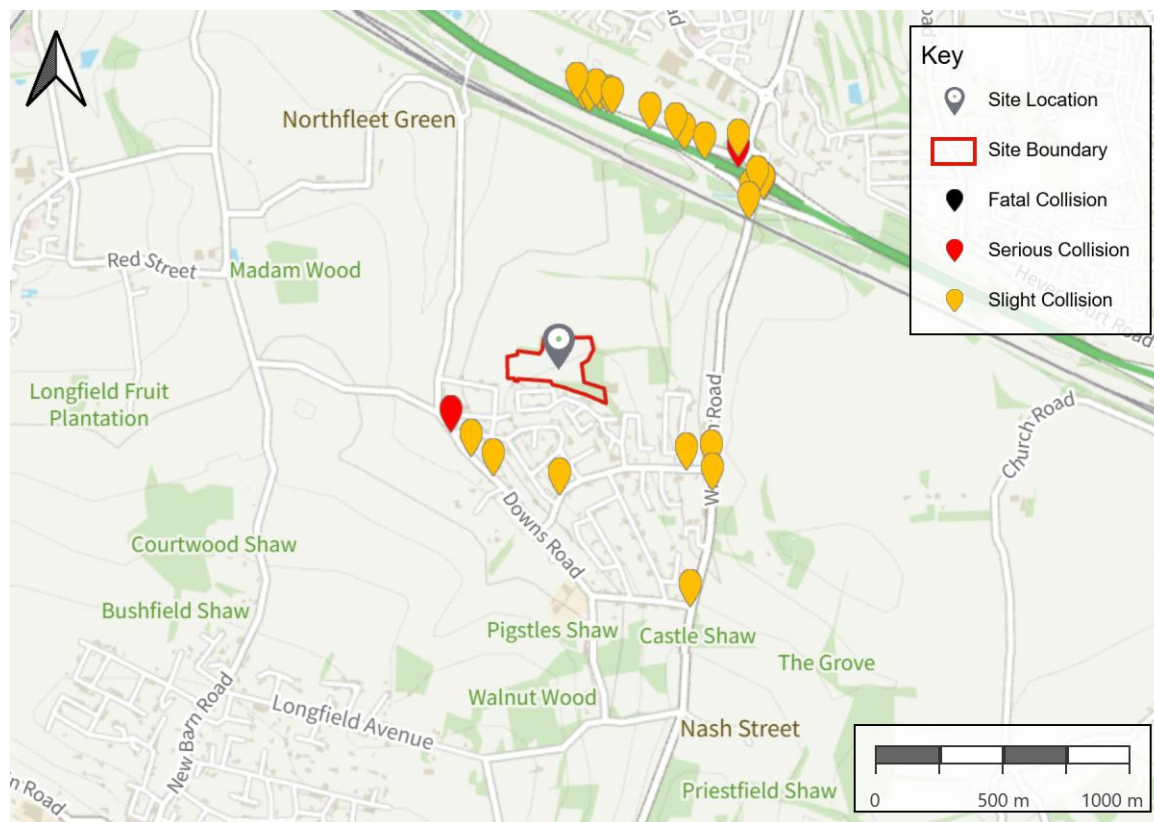
- 3.7.16 The A227 Wrotham Road is a two-way single-carriageway classified A-road running broadly in a north-to-south direction, providing a primary arterial route connecting Gravesend and the A2 motorway to the north with Wrotham and the A20 to the south. The road forms the key connection to the strategic road network for Istead Rise, with the residential estate accessed via a priority T-junction at the southern end of Istead Rise road.
- 3.7.17 In the vicinity of the junction with Istead Rise, the A227 operates at a 40mph speed limit. The road is characterised by a rural environment with limited pedestrian infrastructure in the immediate vicinity of the junction.

3.8 PERSONAL INJURY ANALYSIS

- 3.8.1 Personal Injury Collision (PIC) data has been reviewed for the most recent five-year period available (2020-2024) for the surrounding highway network. The study area included the proposed site accesses, key junctions and links surrounding the site, and any collisions around the southern roundabout of the A2 Watling Street / A227 Wrotham Road junction.
- 3.8.2 The study area and collision locations are presented in **Figure 3-6**, and the full data record is provided in **APPENDIX B**.



Figure 3-6: PIC Collision Map



3.8.3 The classification of casualties by year is summarised in **Table 3-4**.

Table 3-4: Number of Casualties by Severity and Year

SEVERITY	2020	2021	2022	2023	2024	TOTAL
Fatal	0	0	0	0	0	0
Serious	0	0	1	0	0	1
Slight	3	3	3	3	0	12
Total	3	3	4	3	0	13

3.8.4 **Table 3-4** shows that, within the study area during the assessment period, there were 12 collisions resulting in 'slight' injuries, one collision resulting in a 'serious' injury, and no 'fatal' collisions.

3.8.5 The type of road users involved in the collisions has been analysed and is summarised in **Table 3-5**.

Table 3-5: Casualties by Road User

ROAD USER	AGE	NUMBER OF CASUALTIES
Pedestrian	Child	0
	Adult	1
Pedal Cyclist	Child	0
	Adult	0
Motorcycle Driver	Adult	1
Car Driver	Adult	10
Car Passenger	Child	2
	Adult	4
Goods Vehicle Driver	Adult	1
Total		19

- 3.8.6 A review of the casualty data indicates that vulnerable road users account for a very small proportion of total casualties, with no pedal cyclist casualties and only one motorcyclist casualty (resulting in slight injuries) recorded over the study period.
- 3.8.7 A single 'serious' casualty was recorded during the assessment period. This incident occurred in January 2022 and involved an adult male pedestrian and a passenger car. The collision took place on an unclassified road near a T-junction under favourable environmental conditions, specifically daylight, fine weather, and a dry road surface.
- 3.8.8 As this represents an isolated serious incident over a three-and-a-half-year period, which occurred under good weather conditions, it is likely attributable to behavioural factors or human error rather than a systemic flaw in the highway layout. Consequently, there is no evidence of an underlying geometric or safety deficiency that poses an unacceptable ongoing risk to pedestrians or other road users in the vicinity of the Site.

3.9 SUMMARY

- 3.9.1 The Site benefits from a good level of accessibility by sustainable transport modes, consistent with its location within an established suburban residential settlement. Key accessibility characteristics are:
- Everyday amenities (primary school, shops, GP, community facilities) are accessible within a 20-minute walk.
 - Bus Service 308 stops approximately 450m from the Site, providing seven journeys per day to Gravesend and Sevenoaks.
 - Meopham Station (3.1km) offers two trains per hour to London Victoria (33 minutes), seven days a week, accessible by bus in approximately 15 minutes or by cycle in approximately 11 minutes.
 - The A2 Strategic Road Network is accessible within approximately 4 minutes by car via Wrotham Road.
- 3.9.2 Based on the information provided above, it is demonstrated that future residents and visitors will be able to travel to/from the Site by sustainable transport means in favour of the private car, and that facilities and amenities exist in the vicinity of the Site to enable many daily journeys to be undertaken using non-vehicle modes of travel, thereby reflecting key objectives of transport planning policies.



4 PROPOSED DEVELOPMENT

4.1 INTRODUCTION

- 4.1.1 This section sets out the details of the Proposed Development relevant to this TA, including access arrangements, parking and cycle parking provision, and servicing arrangements.

4.2 PROPOSAL OVERVIEW

- 4.2.1 The Proposed Development comprises up to 100 residential dwellings (Use Class C3). The application is submitted in Outline form, with detailed approval sought for access and all other matters reserved for subsequent approval. The Site extends to approximately 5.7 hectares. The built development area will be concentrated within the southern and central portions of the Site, accommodating the 132kV cable constraint in the north-east.

4.3 SITE ACCESS

- 4.3.1 Two new vehicular accesses are proposed, both connecting onto The Drove Way via existing highway spurs. The western access will be for general traffic movement and will comprise a 5.5m carriageway for two-way vehicle movement, 2m footway on the eastern side, and visibility splays in accordance with Manual for Streets (MfS) and KCC design standards. The eastern access will be an emergency and active travel route and will comprise a 4m carriageway and 2m footway on the eastern side. Lockable/retractable bollards will be provided to prevent general traffic movement while enabling cycle movement. The indicative access arrangements are presented on VTP Drawing Reference 25-305-T-002, included in **APPENDIX C**.
- 4.3.2 The access roads will connect directly with the existing network on The Drove Way.
- 4.3.3 It is expected that the access design will be secured as part of the future Section 278 agreement with KCC, with internal layout details subject to approval as part of future Reserved Matters applications.
- 4.3.4 The internal road network is designed to facilitate pedestrian and cycle permeability throughout the site, with footway connections linking the residential plots to the site boundary and the existing public footway network on The Drove Way.

4.4 CAR PARKING

- 4.4.1 Car parking for the Proposed Development will be provided in accordance with the Kent Design Guide, Supplementary Guidance – Parking Standards (January 2025) requirements for a Suburban location.
- 4.4.2 As set out in **Section 2** of this TA, the relevant benchmark parking standards are as follows:
- 1 to 2 bed flats – 1 space per unit;
 - 1 to 2 bed houses – 1 space per unit; and
 - 3-bed houses – 2 spaces per unit;
 - 4+ bed houses – 2 spaces per unit; and
 - Visitor parking – 0.2 spaces per unit.



4.4.3 Each dwelling will be provided with an active Electric Vehicle (EV) charging point in accordance with Part S of the Building Regulations.

4.4.4 Further details on car parking and the internal layout will be secured by way of condition and provided as part of the future Reserved Matters applications.

4.5 CYCLE PARKING

4.5.1 Cycle parking for the Proposed Development will also be provided in accordance with the Kent Design Guide, Supplementary Guidance – Parking Standards (January 2025) requirements. The standards are shown below:

- Houses – 1 space per bedroom; and
- Flats and maisonettes – 1 space per bedroom.

4.5.2 Details on cycle parking and the internal layout will be secured by way of condition and provided as part of the future Reserved Matters applications.

4.6 DELIVERIES AND SERVICING

4.6.1 Deliveries and servicing for the Proposed Development will be carried out on-street within the extents of the site boundary, with details on the internal layout provided at the Reserved Matters stage for KCC approval.

4.6.2 Demonstration of adequate road widths to accommodate fire tenders, ambulances and other emergency vehicles will be provided at the Reserved Matters stage.



5 TRIP GENERATION ASSESSMENT

5.1 OVERVIEW

- 5.1.1 This section presents the predicted vehicle and multi-modal person trip generation for the Proposed Development.

5.2 EXISTING USE TRIP GENERATION

- 5.2.1 The Site is currently undeveloped agricultural land and generates no notable level of vehicle movements. As such, the existing trip generation of the site is assumed to be zero, and no consideration of a net trip generation has been undertaken.

5.3 PROPOSED USE TRIP GENERATION

METHODOLOGY

- 5.3.1 Vehicle trip rates have been extracted from the TRICS database (version 8.25.12), Land Use Category 03/A – Houses Privately Owned. It should be noted that this land use category represents a robust and conservative choice for trip generation assessment, as privately owned houses typically generate higher trip rates than mixed-tenure or affordable housing developments, thereby not underestimating the potential traffic impact of the Proposed Development. The following site selection filters were applied:
- Development size: 0 to 150 dwellings
 - Location: Suburban Area, Edge of Town, and Neighbourhood Centre (Industrial Zones and High Streets excluded)
 - Survey date range: 01/01/2016 to 30/06/2025
 - Population within 1 mile: less than 10,000
 - COVID-19 restriction period surveys: excluded
 - Day type: weekdays only
 - Unit type: Houses (flats excluded to match Proposed Development type)
- 5.3.2 The TRICS outputs are included in **APPENDIX D**.

PERSON TRIP GENERATION

- 5.3.3 Total person trip rates were extracted from the TRICS database using the selection criteria shown above. The person trip rates and total person trip generation for 100 units are shown in **Table 5-1**.

Table 5-1: Person Trip Generation – Decide and Provide (100 Units)

	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)		
	ARRIVALS	DEPARTURES	2 - WAY	ARRIVALS	DEPARTURES	2 – WAY
Person Trip Rate (per unit)	0.229	0.790	1.019	0.543	0.296	0.839
Person Trips (100 units)	23	79	102	54	30	84



VEHICLE TRIP GENERATION

5.3.4 Vehicle trip rates were also extracted from the TRICS data, as shown in **Table 5-2**.

Table 5-2: TRICS Vehicle Trip Rates (per unit, Land Use 03/A – Houses Privately Owned)

	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)		
	ARRIVALS	DEPARTURES	2 - WAY	ARRIVALS	DEPARTURES	2 - WAY
Vehicle Trip Rates	0.156	0.39	0.546	0.337	0.18	0.517

5.3.5 Applying the trip rates above to the proposed quantum of 100 residential units provides the vehicle trip generation shown in **Table 5-3**.

5.3.6 An Outline Residential Travel Plan for the development has been prepared under a vision-led, 'Decide and Provide' approach, consistent with KCC and NPPF guidance. This targets a minimum 10% reduction in vehicle trips over the initial five years of occupation of the development.

5.3.7 This target is considered achievable given the level of sustainable transport accessibility from the Site, as described in **Section 3**, and the package of measures included within the RTP. The adjusted vehicle trip generation is provided in **Table 5-3**.

Table 5-3: Vehicle Trip Generation – Decide and Provide (100 Units)

	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)		
	ARRIVALS	DEPARTURES	2 - WAY	ARRIVALS	DEPARTURES	2 - WAY
Trip Generation associated with 100 units	16	39	55	34	18	52
Less 10% Travel Plan reduction	-2	-4	-6	-3	-2	-5
Assessed Trip Gen (Decide & Provide Approach)	14	35	49	30	16	47

MODE SHARE

5.3.8 To determine the predicted mode split, 2011 Census origin-destination data ('Method of Travel to Work', WU03EW) has been used for MSOA E02005066: Gravesham 012. The 2011 Census is preferred over 2021 data, as the latter was collected under Covid-19 restrictions and reflects atypical travel patterns skewed towards working from home.

5.3.9 The Census mode share has been adjusted pro rata to reflect the TRICS vehicle trip generation, with the 10% Travel Plan reduction applied to vehicle driver trips. The calculated vehicle driver mode share from TRICS (e.g. 48.2% in the AM peak) is lower than the Census car mode share (71%) because the Census captures commuting trips only – the most car-intensive trip purpose. TRICS captures all trip purposes, including local walking trips (to school, shops, and community facilities), resulting in a more representative multi-modal picture.

5.3.10 The resulting modal split is shown in **Table 5-4**.



Table 5-4: Multi-Modal Person Trip Generation by Mode

MODE	CENSUS	AM PEAK HOUR (08:00-09:00)				PM PEAK HOUR (17:00-18:00)			
		AM MODE %	ARRIVALS	DEPARTURES	2 - WAY	PM MODE %	ARRIVALS	DEPARTURES	2 - WAY
Walk	4%	6.9%	2	5	7	5.9%	3	2	5
Cycle	0%	0.9%	0	1	1	0.8%	0	0	1
Bus	4%	8.1%	2	6	8	7.0%	4	2	6
Rail	14%	26.0%	6	21	27	22.4%	12	7	19
Motorcycle	1%	2.3%	1	2	2	2.0%	1	1	2
Vehicle (driver)	71%	48.2%	14	35	49	55.5%	30	16	47
Vehicle (passenger)	4%	7.3%	2	6	7	6.3%	3	2	5
Other	0%	0.1%	0	0	0	0.1%	0	0	0
TOTAL	100%	100%	23	79	102	100%	54	30	84

**errors due to rounding*

- 5.3.11 The mode share data reflects the characteristics of the local catchment. Rail accounts for 26% of AM peak trips, consistent with the high levels of rail commuting evident in the Census data for this MSOA, driven by the proximity to Meopham Station and frequent services to London.

5.4 SUMMARY

- 5.4.1 The Proposed Development (100 units) is predicted to generate 49 two-way vehicle trips in the AM peak hour and 47 two-way vehicle trips in the PM peak hour, assuming a 10% reduction in vehicle trips achieved through the development's Travel Plan under the Decide and Provide approach.
- 5.4.2 Total person trip generation is 102 two-way person trips in the AM peak hour and 84 two-way person trips in the PM peak hour.



6 TRAFFIC IMPACT ASSESSMENT

6.1 OVERVIEW

- 6.1.1 This section sets out the methodology and findings of the traffic impact assessment, including vehicle trip distribution, background traffic growth, and the definition of assessment scenarios.

6.2 TRIP DISTRIBUTION

- 6.2.1 The distribution of future vehicle trips to and from the Site has been determined using 2011 Census origin-destination data ('Location of Usual Residence and Place of Work by Method of Travel to Work', WU03EW) for MSOA E02005066: Gravesham 012 – the MSOA containing the Site.
- 6.2.2 The 2021 Census has not been used as the data was collected under COVID-19 restrictions and reflects atypical travel patterns. Routing was determined using Google Maps and professional judgment based on local highway network knowledge.
- 6.2.3 The full MSOA-level destination dataset, which shows the number of work-related car driver trips made from MSOA E02005066 to all other MSOAs, was analysed to assign vehicle trips to the two distinct routing options identified in Section 3.5: Route A (Istead Rise onto A227 Wrotham Road, northbound and southbound) and Route B (Upper Avenue onto Downs Road, northbound).
- 6.2.4 The detailed destination and routing analysis is presented in **Table 6-1**.

Table 6-1: Traffic Distribution Overview

DESTINATION MSOA (CAR DRIVER TRIPS)	% OF TOTAL	ASSIGNED SITE EXIT ROUTE
Gravesham 002 (Northfleet South)	7.9%	Istead Rise onto Wrotham Road (North)
Dartford 006 (Swanscombe & Ebbsfleet)	7.3%	Upper Avenue onto Downs Road (North)
Gravesham 012 (Kings Farm & Singlewell)	6.9%	Istead Rise onto Wrotham Road (North)
Dartford 013 (Bluewater & Bean)	3.3%	Upper Avenue onto Downs Road (North)
Gravesham 006 (Westcourt)	3.2%	Istead Rise onto Wrotham Road (North)
Gravesham 003 (Perry Street)	2.9%	Istead Rise onto Wrotham Road (North)
Dartford 003 (Greenhithe)	2.7%	Upper Avenue onto Downs Road (North)
Dartford 008 (Stone & Crossways)	2.7%	Istead Rise onto Wrotham Road (North)
Gravesham 001 (Northfleet North)	1.8%	Istead Rise onto Wrotham Road (North)
Gravesham 005 (Riverview Park)	1.4%	Istead Rise onto Wrotham Road (North)
Sevenoaks 004 (Sevenoaks Northern Villages)	1.3%	Upper Avenue onto Downs Road (South)
Sevenoaks 007 (Swanley)	1.1%	Istead Rise onto Wrotham Road (North)
Medway 004 (Strood South)	1.0%	Istead Rise onto Wrotham Road (North)
Bexley 015 (Bexleyheath)	1.0%	Istead Rise onto Wrotham Road (North)
Dartford 001 (Dartford Town Centre)	1.0%	Istead Rise onto Wrotham Road (North)
Gravesham 009 (Gravesend Town)	1.0%	Istead Rise onto Wrotham Road (North)
Maidstone 004 (Maidstone Town Centre)	1.0%	Istead Rise onto Wrotham Road (South)



DESTINATION MSOA (CAR DRIVER TRIPS)	% OF TOTAL	ASSIGNED SITE EXIT ROUTE
Dartford 009 (Wilmington)	1.0%	Istead Rise onto Wrotham Road (North)
Gravesham 010 (Windmill Hill)	0.9%	Istead Rise onto Wrotham Road (North)
Medway 007 (Rochester West)	0.9%	Istead Rise onto Wrotham Road (North)
Thurrock 015 (Grays South)	0.8%	Istead Rise onto Wrotham Road (North)
Tonbridge & Malling 007 (West Malling & Leybourne)	0.8%	Istead Rise onto Wrotham Road (South)
Gravesham 013 (Istead Rise & Meopham)	0.8%	Upper Avenue onto Downs Road (South)
Gravesham 004 (Singlewell)	0.8%	Istead Rise onto Wrotham Road (North)
Tonbridge & Malling 005 (Borough Green & Ightham)	0.8%	Istead Rise onto Wrotham Road (South)
Sevenoaks 005 (Sevenoaks Weald)	0.8%	Istead Rise onto Wrotham Road (South)
Tonbridge & Malling 014 (Kings Hill)	0.8%	Istead Rise onto Wrotham Road (South)
Bexley 028 (Erith Marshes)	0.7%	Istead Rise onto Wrotham Road (North)
Medway 016 (Gillingham North)	0.7%	Istead Rise onto Wrotham Road (North)
Bexley 019 (Crayford)	0.7%	Istead Rise onto Wrotham Road (North)
Greenwich 002 (Woolwich Riverside)	0.7%	Istead Rise onto Wrotham Road (North)
Tower Hamlets 033 (Canary Wharf)	0.6%	Istead Rise onto Wrotham Road (North)
Sevenoaks 012 (Edenbridge)	0.6%	Istead Rise onto Wrotham Road (South)
City of London 001	0.6%	Istead Rise onto Wrotham Road (North)
Bromley 018 (Bromley Town)	0.4%	Istead Rise onto Wrotham Road (North)
Westminster 020 (Victoria)	0.3%	Istead Rise onto Wrotham Road (North)
Other Central London / Misc.	0.3%	Istead Rise onto Wrotham Road (North)
Other / Below 15 commuters (distributed proportionally)	38.4%	Distributed proportionally across routes
TOTAL	100%	

6.2.5 The 'Other / Below 15 commuters' category (790 trips, 38.4%) represents destinations not individually listed but captured in the Census dataset. These trips have been distributed across the four main exit routes in proportion to the split established by the named destinations (62% of total).

6.2.6 Applying the proportional distribution of the 'Other' category (790 trips) across these four routes, the final percentage split across **all trips** is as follows:

- Istead Rise onto Wrotham Road (North): 67%
- Upper Avenue onto Downs Road (North): 22%
- Istead Rise onto Wrotham Road (South): 8%
- Upper Avenue onto Downs Road (South): 3%

6.2.7 This distribution reflects the strong northward orientation of commuting travel from Istead Rise (approximately 89% of trips routing via northern exits to Gravesend, Dartford, London, and Swanscombe / Ebbsfleet), with a minority of trips routing southward towards Maidstone, Sevenoaks, and the Tonbridge and Malling area.



6.3 ASSESSED VEHICLE TRIP DISTRIBUTION

6.3.1 The proposed routing is applied to the original vehicle trip generation in **Table 6-2** and to the reduced vehicle trips targeted through the Decide and Provide approach to the scheme in **Table 6-3**.

Table 6-2: Development Vehicle Trip Distribution by Route (unadjusted)

ROUTING	%	AM PEAK			PM PEAK		
		ARRIVALS	DEPARTURES	2 - WAY	ARRIVALS	DEPARTURES	2 - WAY
Istead Rise onto Wrotham Road (North)	67%	11	26	37	23	12	35
Upper Avenue onto Downs Road (North)	22%	3	8	11	7	4	11
Istead Rise onto Wrotham Road (South)	8%	1	3	4	3	1	4
Upper Avenue onto Downs Road (South)	3%	1	1	2	1	1	2
TOTAL	100%	16	38	54	34	18	52

Table 6-3: Development Vehicle Trip Distribution by Route (including 10% vehicle trips reduction)

ROUTING	%	AM PEAK			PM PEAK		
		ARRIVALS	DEPARTURES	2 - WAY	ARRIVALS	DEPARTURES	2 - WAY
Istead Rise onto Wrotham Road (North)	67%	9	24	33	20	11	31
Upper Avenue onto Downs Road (North)	22%	3	8	11	7	3	10
Upper Avenue onto Downs Road (South)	3%	0	1	2	1	1	2
Istead Rise onto Wrotham Road (South)	8%	1	3	4	2	1	4
TOTAL	100%	14	35	49	30	16	47

6.3.2 The traffic impact assessment has been based on the reduced vehicle trips shown in **Table 6-3**.

6.3.3 Traffic flow diagrams for each assessment scenario are presented in **APPENDIX E**.

6.4 SCOPE OF ASSESSMENT

6.4.1 Based on the distribution analysis, the following junctions are most impacted by the development-related vehicle movements, and so have been subject to junction modelling as discussed in **Section 7**.

- **Junction 1: Istead Rise / A227 Wrotham Road (priority T-junction)** – approximately 75% of development trips route via this junction (37 AM 2-way, 35 PM 2-way trips).
- **Junction 2: The Drove Way / Istead Rise (priority T-junction)** – all 49 AM and 47 PM two-way development trips pass through this junction, as both access points connect onto The Drove Way.

ASSESSMENT SCENARIOS

6.4.2 The following assessment scenarios have been modelled:

- 2026 Base Year: Observed AM and PM peak hour flows from traffic surveys.
- 2031 Future Year (5 years post submission) – 2026 base year flows scaled up using TEMPRO growth factors from 2026–2031.
- 2031 Future Year + Committed Development.
- 2031 Future Year + Committed Development + Proposed Development.

6.4.3 The 2031 assessment year has been included to demonstrate junction performance at 5 years post submission of the planning application. Results are presented for all scenarios to enable a full understanding of cumulative growth and development impacts throughout the assessment period.



TRAFFIC SURVEYS

- 6.4.4 To assess the two junctions most impacted by the Proposed Development, Manual Classified Counts (MCC) and queue length surveys were undertaken at each location between 07:00 and 19:00 on Wednesday, 25th February 2026. The results are provided in **APPENDIX F**.
- 6.4.5 To ensure a robust assessment, the highest recorded vehicle movements in each peak hour have been utilised for the purpose of the assessment. Across both junctions, this occurred between 08:00 and 09:00 and 16:15 and 17:15.
- 6.4.6 The surveyed traffic movements were converted into Passenger Car Units (PCUs) based on the conversion factors in **Table 6-4** below to produce the baseline 2026 traffic flows.

Table 6-4: PCU Conversion Values

VEHICLE TYPE	PCU VALUES
Cars	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
PSV	2.0
M/B	0.4
Cyc	0.2

BACKGROUND TRAFFIC GROWTH

- 6.4.7 The 2026 baseline flows have been uplifted to the assessed future year (2031, representing five years post submission) using growth factors extracted from TEMPRO version 8.1, using the following parameters:
- Zone: MSOA E02005066: Gravesham 012
 - Mode: Car Driver
 - Journey type: Origin/Destination
 - Road type: All Roads
 - Dataset: NRTP 2022–Core (2015-2060)

Table 6-5: TEMPRO Background Traffic Growth Factors

TIME PERIOD	2026–2031 GROWTH FACTOR
Weekday AM Peak Hour (08:00–09:00)	1.0389
Weekday PM Peak Hour (17:00–18:00)	1.0422

- 6.4.8 The TEMPRO growth factors are modest (approximately 4% in both peak periods over the five-year assessment period), reflecting the relatively stable population and employment characteristics of the Gravesham 012 MSOA catchment.

COMMITTED DEVELOPMENTS

- 6.4.9 In addition to the TEMPRO growth, traffic associated with a number of committed developments has been added manually to the study network for each scenario. These include the following:

Table 6-6: Committed Developments Considered

REF	DEVELOPMENT	APPLICATION REFERENCE	PLANNING STATUS	LAND USES AND QUANTUM
1	Land At Rose Farm, Downs Road, Istead Rise, Gravesend, Kent	20251233	Pending Consideration	154 Dwellings
2	Land At Wrotham Road, Meopham, Gravesend, Kent	20250992	Pending Consideration	350 Dwells
3	Land West Of Norwood Lane, Meopham, Gravesend, Kent	20251116	Pending Consideration	150 Dwells

- 6.4.10 Whilst noted that these developments do not yet have planning permission, they are considered to represent the key major developments with the ability to come forward in the local area, which are understood not to be included within the TEMPRO dataset. This is considered a robust approach as it likely overestimates the traffic that would come forward in this time.

6.5 PERCENTAGE IMPACT ASSESSMENT

- 6.5.1 The change in overall vehicle movements in the future year at the junctions to be assessed is shown in **Table 6-7**. This is based on the total flows through the junctions.

Table 6-7: Percentage Impact of Proposed Development at Assessed Junctions in 2031

JUNCTION	PEAK HOUR	2031 BASE INC COMMITTED DEVELOPMENTS	PROPOSED DEVELOPMENT TRIPS (NET MOVEMENTS)	% IMPACT
J1: Istead Rise / A227 Wrotham Road	08:00-09:00	2032	37	+1.8%
	17:15-18:15	2128	35	+1.6%
J2: The Drove Way / Istead Rise	08:00-09:00	662	49	+7.4%
	17:15-18:15	707	47	+6.7%



- 6.5.2 As shown above, the forecast traffic levels associated with the Proposed Development represent around 2% and 7% increase compared to background traffic at the junctions assessed. In accordance with guidance from the Institute of Environmental Management and Assessment (IEMA), a change in traffic flows of less than 10% is broadly considered to represent the threshold below which impacts are unlikely to be perceptible to road users.
- 6.5.3 On this basis, the traffic impacts of the Proposed Development are considered negligible at the Istead Rise / A227 Wrotham Road junction and minor at The Drove Way / Istead Rise, and are not considered to result in a severe impact on the local highway network in accordance with the provisions of NPPF Paragraph 116.
- 6.5.4 The next section provides a full capacity assessment of each junction to understand the impact of the increased traffic volumes.



7 JUNCTION CAPACITY ASSESSMENTS

7.1 INTRODUCTION

- 7.1.1 This section presents the junction capacity assessment methodology and results for the two assessed junctions.

7.2 RESULT INTERPRETATION

- 7.2.1 The junction capacity modelling has been undertaken using the industry standard software, Junctions 11, with the PICADY module used for assessing both priority junctions.
- 7.2.2 Junctions 11 assesses the capacity of a junction through the Ratio of Flow to Capacity (RFC), with a junction being deemed to reach practical capacity when it records 0.85. However, in more congested scenarios, an RFC value of 1.0 is deemed to be the theoretical limit of acceptable operation. An RFC value below 0.85 generally means the junction will operate with additional capacity.
- 7.2.3 'Queue' refers to the number of Passenger Car Units (PCUs) that may be queueing at each arm, with one PCU generally equating to one car or an effective length of 5.75m per PCU.
- 7.2.4 'Delay' refers to the time delay in seconds that drivers will face at each arm, waiting to turn in/out.

CALIBRATION AND MODEL PARAMETERS

- 7.2.5 In accordance with best practice and the Junctions 11 User Guide, the model outputs have been calibrated against the observed flows, queues and delay, in order to ensure that the modelling undertaken appropriately reflects the true operation of the junctions assessed.
- 7.2.6 In this assessment, no calibration factors are required as the models are regarded as reflecting the current junction operations.
- 7.2.7 Geometric parameters for the base models have been calculated using AutoCAD measurements taken from an Ordnance Survey base, in accordance with the Junctions 11 User Guide.
- 7.2.8 The model measurements used and Junctions 11 output files are provided within **APPENDIX G**.

7.3 JUNCTION 1: ISTEAD RISE / A227 WROTHAM ROAD

- 7.3.1 The Istead Rise / A227 Wrotham Road junction is the primary junction on the principal route for development traffic heading northwards towards the A2, Gravesend, and Northfleet. Based on the trip distribution analysis presented in Section 6, approximately 75% of development vehicle trips (67% routing northbound and 8% routing southbound on the A227) are assigned to this junction.
- 7.3.2 Results of the modelling of this junction are presented in **Table 7-1** below, with full modelling outputs provided in **APPENDIX G**.



Table 7-1: Junction 1: Istead Rise / A227 Wrotham Road Junction Modelling Results Summary

	AM PEAK			PM PEAK		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2026 - Base						
Stream B-C (Left turn from Istead Rise onto Wrotham Rd)	1.4	19.17	0.57	0.7	13.84	0.41
Stream B-A (Right turn from Istead Rise onto Wrotham Rd)	0.1	24.25	0.1	0.1	28.97	0.09
Stream C-AB (WB and SB traffic from Wrotham Rd (N))	0.8	13.22	0.42	1.5	18.06	0.59
2031 - Base						
Stream B-C (Left turn from Istead Rise onto Wrotham Rd)	1.6	21.34	0.61	0.8	14.92	0.43
Stream B-A (Right turn from Istead Rise onto Wrotham Rd)	0.1	27.56	0.12	0.1	34.04	0.12
Stream C-AB (WB and SB traffic from Wrotham Rd (N))	0.8	14.03	0.45	1.8	19.88	0.63
2031 - Base + Committed Development						
Stream B-C (Left turn from Istead Rise onto Wrotham Rd)	2.6	33.83	0.73	1	17.95	0.49
Stream B-A (Right turn from Istead Rise onto Wrotham Rd)	0.3	51.89	0.21	0.3	66.91	0.22
Stream C-AB (WB and SB traffic from Wrotham Rd (N))	1.1	17.68	0.53	3.2	25.68	0.74
2031 - Base + Committed Development + Proposed Development						
Stream B-C (Left turn from Istead Rise onto Wrotham Rd)	3.7	45.47	0.8	1.1	19.81	0.53
Stream B-A (Right turn from Istead Rise onto Wrotham Rd)	0.4	72.57	0.29	0.4	82.53	0.27
Stream C-AB (WB and SB traffic from Wrotham Rd (N))	1.3	18.58	0.55	4.4	28.84	0.79

- 7.3.3 The results above indicate that the junction operates well within theoretical capacity in all scenarios assessed. In the 2026 base scenario, RFC values range between 0.09 and 0.59, with average delays generally below 30 seconds per vehicle and queues typically less than 1.5 PCU.
- 7.3.4 These results indicate good operational performance at the junction in the base year, with limited delay and minimal queueing on all modelled movements.
- 7.3.5 In the 2031 future year baseline scenario, modest increases in delay and queue lengths are observed as a result of background traffic growth. However, the junction continues to operate comfortably within capacity, with RFC values remaining below 0.63 and queue lengths remaining low (generally below 2 PCU).
- 7.3.6 The movements from Istead Rise onto Wrotham Road (Streams B-C and B-A) continue to experience relatively low demand, which results in slightly higher average delays for individual vehicles waiting to find gaps in the mainline traffic. This is typical of priority junctions where minor arm traffic must give way to flows on the main road.



- 7.3.7 The 2031 'Base + Committed Development + Proposed Development' scenario results in some further increases in delay on the minor arm movements from Istead Rise, particularly for the right-turn movement (Stream B-A). However, the overall operational performance of the junction remains acceptable.
- 7.3.8 RFC values remain below 0.80, indicating that all movements continue to operate within theoretical capacity, and queue lengths remain low (generally below 4–5 vehicles).
- 7.3.9 The increase in delay is primarily attributable to the need for minor arm traffic to find suitable gaps in the priority flows on Wrotham Road rather than any capacity constraint at the junction. Given the limited increase in queues and the fact that the junction continues to operate within capacity, the modelling demonstrates that the Proposed Development would not result in a severe or material impact on the operation of the junction.

7.4 JUNCTION 2: THE DROVE WAY / ISTEAD RISE

- 7.4.1 All development vehicle trips from both proposed site access points converge on The Drove Way before routing through this junction, meaning it receives 100% of the development-generated vehicle movements. Results are presented in **Table 7-2** below, with full modelling outputs provided in **APPENDIX G**.

Table 7-2: Junction 2: The Drove Way / Istead Rise Junction Modelling Results Summary

	AM PEAK			PM PEAK		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2026 - Base						
Stream B-AC (WB and EB traffic from The Drove Way)	0.4	9.11	0.27	0.6	10.1	0.36
Stream C-AB (NB and WB traffic from Istead Rise E)	0.2	6.68	0.15	0.3	6.97	0.23
2031 - Base						
Stream B-AC (WB and EB traffic from The Drove Way)	0.4	9.34	0.28	0.6	10.48	0.38
Stream C-AB (NB and WB traffic from Istead Rise E)	0.2	6.74	0.16	0.3	7.05	0.24
2031 - Base + Committed Development						
Stream B-AC (WB and EB traffic from The Drove Way)	0.4	9.52	0.29	0.6	10.69	0.38
Stream C-AB (NB and WB traffic from Istead Rise E)	0.2	6.78	0.16	0.3	6.99	0.24
2031 - Base + Committed Development + Proposed Development						
Stream B-AC (WB and EB traffic from The Drove Way)	0.6	10.32	0.35	0.7	11.36	0.41
Stream C-AB (NB and WB traffic from Istead Rise E)	0.2	6.91	0.18	0.4	7.29	0.28

- 7.4.2 The results above indicate that the junction operates very efficiently in all scenarios tested. In the 2026 base scenario, RFC values range between 0.15 and 0.36, with very low queue lengths (generally below 0.6 PCU) and minimal delays of around 7–10 seconds per vehicle. These results indicate that vehicles are able to enter the junction with little difficulty and that the junction operates with substantial spare capacity.



- 7.4.3 In the 2031 future year baseline scenario, modest increases in delay and RFC values are observed due to forecast background traffic growth.
- 7.4.4 However, these changes are minor, and the junction continues to operate well within theoretical capacity, with RFC values remaining below 0.38 and queue lengths remaining below 1 PCU. The modelling therefore indicates that the junction will continue to operate efficiently under future year baseline traffic conditions, with only negligible increases in delay compared to the 2026 base scenario.
- 7.4.5 When committed development and Proposed Development traffic are included within the 2031 'Base + Committed Development + Proposed Development' scenario, the results show only small increases in queue lengths, delays and RFC values.
- 7.4.6 In the worst-case scenario, RFC values increase to 0.41, with queues remaining below 1 PCU and average delays remaining low at approximately 7–11 seconds per vehicle.
- 7.4.7 These values demonstrate that the junction continues to operate well within capacity with minimal delay and queueing. The modelling therefore indicates that the Proposed Development would not materially affect the operational performance of the junction, and that it would continue to operate efficiently with substantial spare capacity available.

7.5 MODELLING SUMMARY

- 7.5.1 A summary of the maximum RFCs identified through the modelling of both junctions is provided in **Table 7-3**.

Table 7-3: Modelling Summary – Maximum RFC by Junction and Scenario

JUNCTION	SCENARIO	AM PEAK RFC	PM PEAK RFC	WITHIN PRACTICAL CAPACITY?
Istead Rise / A227 Wrotham Road	2031 – Base	0.61	0.63	Yes
	2031 – Base + CD	0.73	0.74	Yes
	2031 – Base + CD + PD	0.80	0.79	Yes
The Drove Way / Istead Rise	2031 – Base	0.28	0.38	Yes
	2031 – Base + CD	0.29	0.38	Yes
	2031 – Base + CD + PD	0.35	0.41	Yes

- 7.5.2 Practical capacity for PICADY priority junctions is typically considered to be indicated where RFCs of 0.85 are identified.
- 7.5.3 As demonstrated above, all modelled movements remain below this threshold, therefore both junctions operate within practical capacity in all future scenarios, including with the Proposed Development. The additional vehicle trips generated by the Proposed Development have a marginal effect on junction performance at both locations.
- 7.5.4 The modelling suggests the residual cumulative transport impacts of the Proposed Development will not be severe, and therefore the development should not be refused on highway grounds, in accordance with the test in NPPF Paragraph 116.



8 SUSTAINABLE TRANSPORT STRATEGY

8.1 OVERVIEW

- 8.1.1 This section of the TA sets out the measures proposed to promote sustainable transport for future residents of the Proposed Development. The sustainable transport strategy for the Proposed Development has been prepared having regard to NPPF paragraphs 110 and 115. The Site is located within an established residential settlement and benefits from access to local facilities, bus services and rail connections via Meopham Station. The design of the access arrangements prioritises safe and suitable movement for all users, including pedestrians and cyclists, and the future detailed layout will be expected to provide direct and permeable walking and cycling connections through the site.
- 8.1.2 The application is in outline, with access submitted in detail. Matters relating to the final internal street layout, parking and cycle parking arrangements will be secured at the Reserved Matters stage. However, the access strategy and supporting Travel Plan framework demonstrate that the development can be brought forward in a manner that supports a genuine choice of transport modes and encourages reduced reliance on private car travel.

8.2 RESIDENTIAL TRAVEL PLAN

- 8.2.1 An Outline Residential Travel Plan, including a suite of measures to encourage walking, cycling, public transport and travel by other non-car modes, will be submitted as part of the planning application.
- 8.2.2 The Travel Plan is initially provided as a Framework version and will be secured by way of a condition on any planning permission. The Travel Plan will be monitored at intervals agreed with KCC and include 10% target reductions in private car use as part of a vision-led approach to the development's transport impacts.
- 8.2.3 The document aims to reduce reliance on private car trips through both physical measures, such as cycle parking, improved pedestrian facilities, and management measures, such as promotion and incentivisation of the sustainable travel measures through the Travel Plan.

8.3 SITE DESIGN

- 8.3.1 The site layout has been designed to prioritise pedestrian and cycling access. Safe and direct footway connections will be provided throughout the development, linking to the existing footway network on The Drove Way. Secure cycle storage will be provided for all dwellings in accordance with KCC guidance, enabling future residents to travel by bicycle for local trips.
- 8.3.2 Electric Vehicle (EV) charging infrastructure will be incorporated in accordance with current planning policy requirements. The access roads within the site will be designed to a standard sufficient to accommodate refuse collection, emergency vehicles, and service vehicles, while discouraging high speeds through appropriate road layout and geometry.



8.4 OTHER MEASURES AND INITIATIVES

- 8.4.1 A welcome pack will be provided to all new residents upon first occupation, including information on local walking and cycling routes, public transport services (including Bus Service 308), and the location of nearby amenities accessible by sustainable modes. This will be supplemented by the measures set out in the Residential Travel Plan, which includes a programme of sustainable travel promotion to encourage modal shift away from private car use.
- 8.4.2 The Travel Plan will be monitored and reviewed on a regular basis in accordance with the monitoring schedule agreed with KCC. Should monitoring indicate that modal share targets are not being achieved, the Travel Plan coordinator will implement additional measures as appropriate, which may include promotional activities, incentive schemes, or enhancements to the on-site cycle and pedestrian infrastructure.



9 SUMMARY AND CONCLUSIONS

9.1 OVERVIEW

- 9.1.1 Velocity Transport Planning Limited (VTP) has been appointed by Ptarmigan Land A Ltd (the Applicant) to prepare this Transport Assessment (TA) in support of a planning application for a new residential development comprising up to 100 dwellings (the Proposed Development) at Land to the North of The Drove Way, Istead Rise, Gravesham, Kent (the Site).
- 9.1.2 Gravesham Borough Council (GBC) acts as the Local Planning Authority (LPA) and Kent County Council (KCC) acts as the Local Highway Authority (LHA).

9.2 ACCESSIBILITY

- 9.2.1 The Site benefits from a good level of accessibility by sustainable transport modes, consistent with its location within an established suburban residential settlement. It is demonstrated that future residents and visitors will be able to travel to/from the Site by sustainable transport means in favour of the private car, and that facilities and amenities exist in the vicinity of the Site to enable many daily journeys to be undertaken using non-vehicle modes of travel.
- 9.2.2 Analysis of collision records over a five-year study period indicates a low accident frequency on the roads around the development site. No significant accident trends or risks were identified, and there is no evidence of an underlying geometric or safety deficiency that poses an unacceptable ongoing risk to pedestrians or other road users in the vicinity of the Site.

9.3 POLICY REVIEW

- 9.3.1 The Proposed Development is consistent with the transport objectives of the Gravesham Local Plan Core Strategy and the transport-related requirements of NPPF paragraphs 110 and 115, including in the context of the Grey Belt and Golden Rules provisions. The Site is located within the established settlement of Istead Rise, where future residents will have access to local services and facilities by walking and cycling, with public transport options also available. The development will be supported by a Residential Travel Plan, and the access proposals have been designed to provide safe and suitable access for all users while encouraging sustainable travel choices.
- 9.3.2 The proposed access arrangements, trip generation assessment and junction capacity modelling demonstrate that the development can be accommodated on the local highway network without resulting in an unacceptable impact on highway safety or severe residual cumulative impacts. The proposals therefore accord with relevant national and local transport policy, including the NPPF and Gravesham Local Plan Core Strategy, and support the delivery of sustainable residential development in this location.

9.4 PROPOSED DEVELOPMENT

- 9.4.1 The Proposed Development would provide up to 100 residential dwellings (Use Class C3). The application is in outline form, with access applied for in detail and all other matters (layout, scale, appearance, and landscaping) reserved for future approval. The description of development is as follows:



“Development for up to 100 residential dwellings (Class C3), including the formation of new accesses from The Drove Way, the provision of new areas of public open space and all other associated infrastructure and ancillary works (all detailed matters reserved other than means of access).”

- 9.4.2 The final dwelling mix will be confirmed at the reserved matters stage. For the purposes of this Transport Assessment, the development is assessed on the basis of 100 houses being provided.
- 9.4.3 The Proposed Development will include two new priority vehicle accesses, both connecting onto The Drove Way via existing highway spurs. The western access will be for general traffic movement and will comprise a 5.5m carriageway for two-way vehicle movement, 2m footway on the eastern side, and visibility splays in accordance with Manual for Streets (MfS) and KCC design standards. The eastern access will be an emergency and active travel route and will comprise a 4m carriageway and 2m footway on the eastern side. Lockable/retractable bollards will be provided to prevent general traffic movement while enabling cycle movement.

9.5 PARKING AND INTERNAL LAYOUT

- 9.5.1 Cycle parking and car parking will be provided in accordance with the Kent Design Guide, Supplementary Guidance – Parking Standards (January 2025).
- 9.5.2 The application is in outline (excluding access), and therefore, further details on parking and layout will be secured by condition and provided at a later stage through the future Reserved Matter application(s).

9.6 TRIP GENERATION

- 9.6.1 Based on a trip generation assessment using the industry-standard TRICS database, the Proposed Development is expected to generate around 102 and 84 two-way person trips during the AM and PM peak hours, respectively.
- 9.6.2 In terms of vehicle trips, the Proposed Development is targeted to generate no more than 49 and 47 two-way vehicle movements during the AM and PM peak hours, respectively.
- 9.6.3 This is based on a targeted 10% reduction in peak hour vehicle trips as part of a vision-led, Decide and Provide approach, consistent with KCC and NPPF guidance. This target is considered achievable given the level of sustainable transport accessibility from the Site, and the package of measures included within the Residential Travel Plan.

9.7 TRAFFIC IMPACTS

- 9.7.1 The following key junctions were assessed to evaluate development impacts on local road network capacity:
- Junction 1 - Istead Rise / A227 Wrotham Road
 - Junction 2 - The Drove Way / Istead Rise
- 9.7.2 The junction capacity assessments demonstrate that both study junctions remain within practical capacity in the 2031 assessment year, with additional committed developments that may come forward, with the Proposed Development in place.
- 9.7.3 On that basis, it is considered that the traffic impact of the Proposed Development can be suitably accommodated on the local highway network with no severe highway impacts.



9.8 SUSTAINABLE TRANSPORT

- 9.8.1 A number of measures are proposed to be implemented at the site to influence the travel behaviour of future residents and promote sustainable transport in line with policy objectives.
- 9.8.2 Additionally, an Outline Residential Travel Plan will be submitted as part of this proposal, which will aim to promote the use of non-car modes and sustainable travel behaviours for residents.

9.9 OVERALL CONCLUSIONS

- 9.9.1 In conclusion, it has been demonstrated that the Proposed Development will not result in an unacceptable impact on highway safety and that the residual cumulative impacts on the road network will not be severe.
- 9.9.2 As such, in line with the NPPF, the Proposed Development should not be prevented or refused on highway grounds.

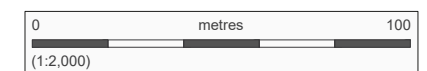
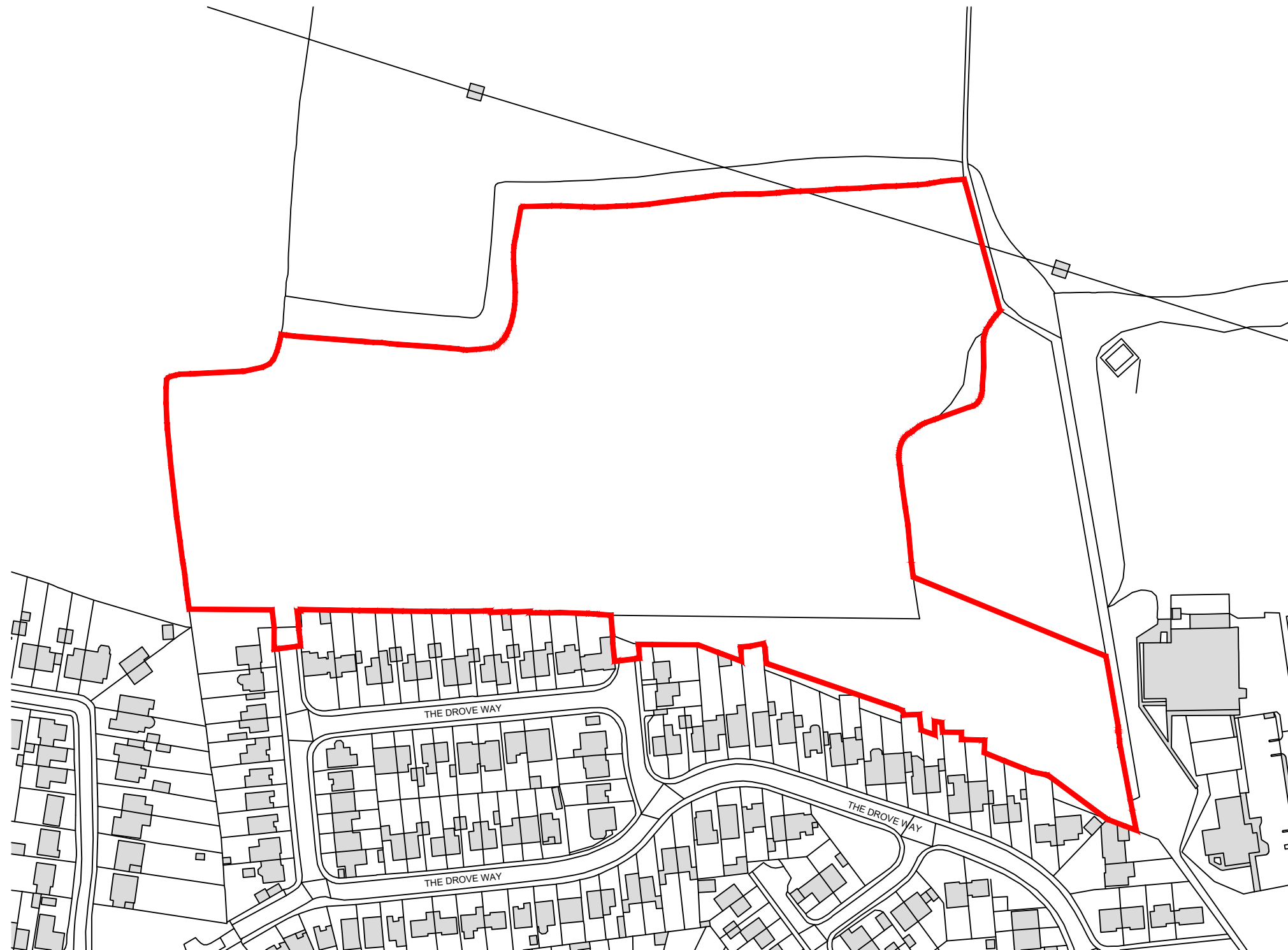


APPENDIX A

SITE LOCATION PLAN



 Site boundary



Project
Land to the North of The Drove Way,
Istead Rise, Gravesham
Drawing Title
Site Location Plan

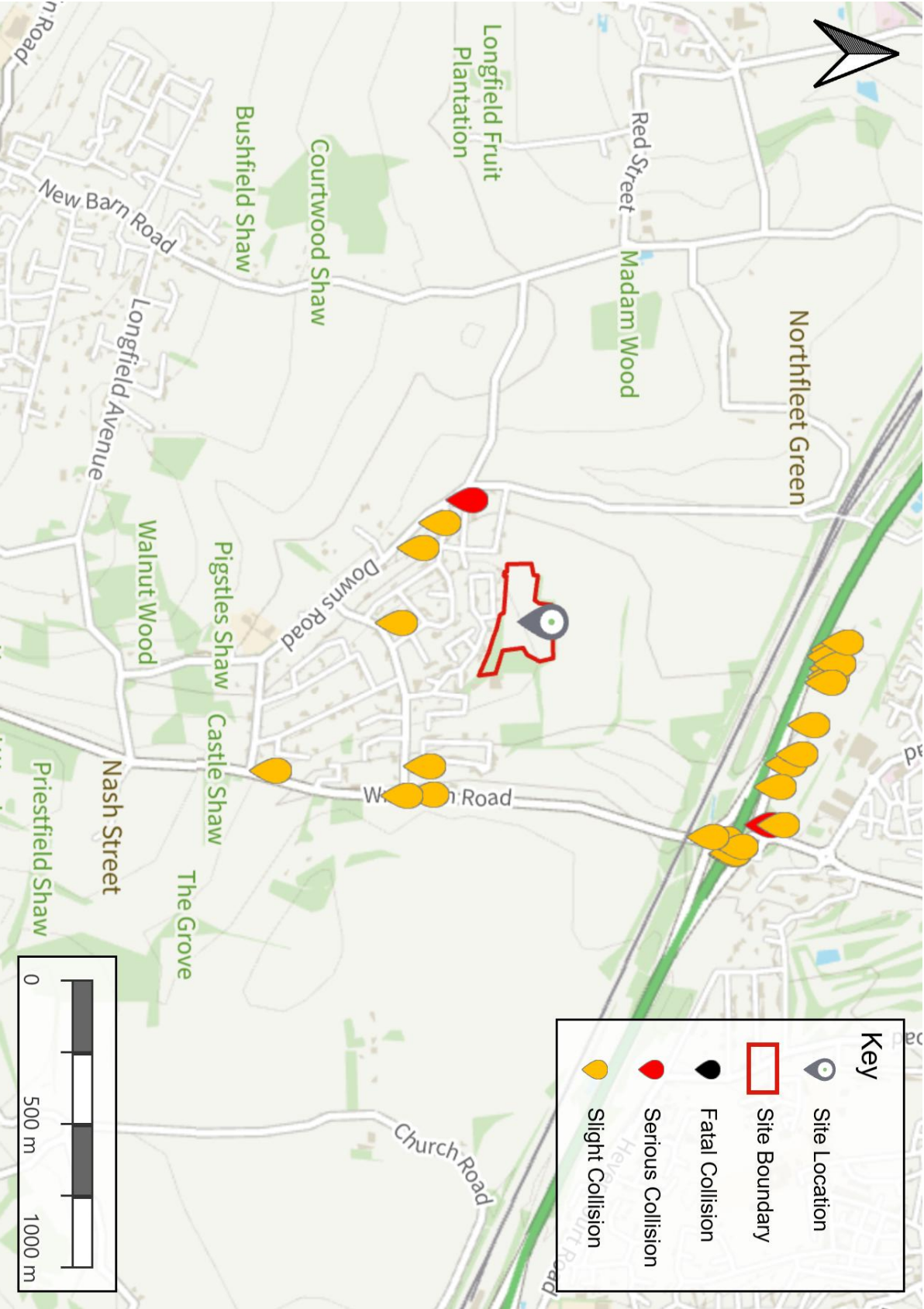
Date 08/05/2026	Scale 1:2,000 at A3	Drawn by JL	Check by SR
Project No 1509	Drawing No 001	Revision B	

APPENDIX B

PERSONAL INJURY COLLISION DATA



PIC Collision Map



Number of Casualties by Severity and Year

Severity	2020	2021	2022	2023	2024	Total
Fatal	0	0	0	0	0	0
Serious	0	0	1	0	0	1
Slight	3	3	3	3	0	12
Total	3	3	4	3	0	13

Casualties by Road User

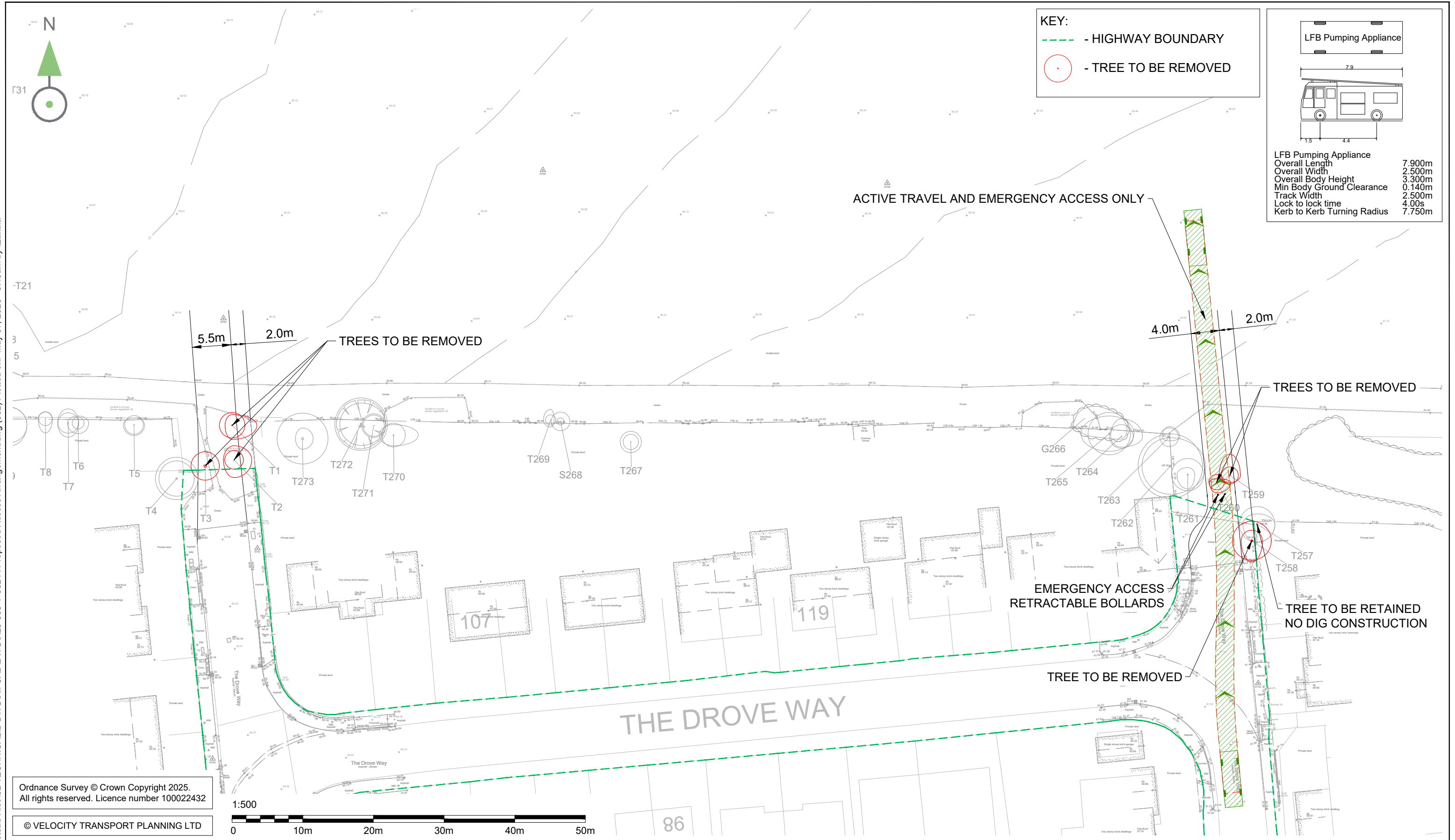
Road User	Age	Number of casualties
Pedestrian	Child	0
	Adult	1
Pedal Cyclist	Child	0
	Adult	0
Motorcycle Driver	Adult	1
Car Driver	Adult	10
Car Passenger	Child	2
	Adult	4
Goods Vehicle Driver	Adult	1
Total		19

APPENDIX C

PROPOSED SITE ACCESS DESIGN DRAWING



P:\0-25\25-305 Land North of Drove Way - Istead Rise\02 TECHNICAL\B DWGS\1. CAD\DWGS\25-305-T-002-A-Proposed Access Arrangement.dwg (002) Plotted on: May 07, 2026 - 9:40am by Izakula



						<u>General Notes:</u> 1. DO NOT SCALE FROM THIS DRAWING. 2. ALL DIMENSIONS AND LEVELS ARE IN METRES UNLESS OTHERWISE STATED. 3. THIS DRAWING IS TO BE PRINTED IN COLOUR. 4. THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.			Drawing Status S2 - FOR INFORMATION	Project Title LAND NORTH OF DROVE WAY-ISTEAD RISE						
A	07/05/26	FIRST ISSUE			IZ	PM	CR		Client	Drawing Title PROPOSED ACCESS ARRANGEMENT						
Rev	Date	Description			Dnn	Chk	App		Architect	Project Ref 25-305	Scale @ A3 1:500	Date 07/05/26	Designed/Drawn IZ	Checked PM	Approved CR	Rev A

APPENDIX D

TRICS OUTPUTS



Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

Filtering Summary:

Land Use: 03/A RESIDENTIAL/HOUSES PRIVATELY OWNED

Selected Trip Rate Calculation Parameter Range: 0 - 150 DWELLS

Actual Trip Rate Calculation Parameter Range: 6 - 149 DWELLS

Date Range: Minimum: 01/01/2016 Maximum: 30/06/2025

Parking Spaces Range: All Surveys Selected

Parking Spaces Per Dwelling Range: All Surveys Selected

Bedrooms Per Dwelling Range: All Surveys Selected

Percentage of Dwellings Privately Owned: All Surveys Selected

Population Within 500m Range: 72 3091

Days of the week selected:

Friday	6
Monday	5
Thursday	18
Tuesday	15
Wednesday	10

Main Location Types selected:

Edge of Town	26
Neighbourhood Centre	23
Suburban Area	5

Inclusion of Servicing Vehicles Counts:

Servicing Vehicle Excluded	40
Servicing Vehicles Included	14

Population <1 Mile ranges selected:

1,000 or Less	3
1,001 to 5,000	25
5,001 to 10,000	26

Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

Population <5 Mile ranges selected:

100,001 to 125,000	4
125,001 to 250,000	3
25,001 to 50,000	17
250,001 to 500,000	2
5,000 or Less	4
5,001 to 25,000	15
50,001 to 75,000	5
75,001 to 100,000	4

Car Ownership <5 Mile ranges selected:

0.6 to 1.0	9
1.1 to 1.5	32
1.6 to 2.0	13

PTAL Rating:

No PTAL Present	54
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Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: A - HOUSES PRIVATELY OWNED

Selected Vehicle Type: Total People

Selected regions and areas:

01	GREATER LONDON	
	EN	ENFIELD
		1 day
02	SOUTH EAST	
	CT	CENTRAL BEDFORDSHIRE
		1 day
	ES	EAST SUSSEX
		5 days
	HC	HAMPSHIRE
		3 days
	KC	KENT
		1 day
	MW	MEDWAY
		1 day
	SC	SURREY
		1 day
	WS	WEST SUSSEX
		4 days
03	SOUTH WEST	
	DC	DORSET
		3 days
	SM	SOMERSET
		2 days
04	EAST ANGLIA	
	CA	CAMBRIDGESHIRE
		2 days
	NF	NORFOLK
		7 days
	SF	SUFFOLK
		1 day
05	EAST MIDLANDS	
	LE	LEICESTERSHIRE
		1 day
06	WEST MIDLANDS	
	WK	WARWICKSHIRE
		1 day
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY	NORTH YORKSHIRE
		1 day
08	NORTH WEST	
	AC	CHESHIRE WEST & CHESTER
		2 days
09	NORTH	
	DH	DURHAM
		2 days
	IM	ISLE OF MAN
		5 days
11	SCOTLAND	
	AS	ABERDEENSHIRE
		1 day
	HI	HIGHLAND
		1 day
12	CONNAUGHT	
	CS	SLIGO
		2 days
14	LEINSTER	
	WC	WICKLOW
		1 day
16	ULSTER (REPUBLIC OF IRELAND)	
	CV	CAVAN
		2 days
	DN	DONEGAL
		1 day
17	ULSTER (NORTHERN IRELAND)	
	AN	ANTRIM
		1 day
	DE	DERRY
		1 day

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

Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

Primary Filtering Selection:

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

Parameter:	DWELLS
Actual Range:	6 to 149 (units:DWELLS)
Range Selected by User:	0 to 150 (units:DWELLS)
Parking Spaces Range:	6 - 2824

Public Transport Provision:	
Selection by:	All Surveys Included
Date Range:	01/01/16 to 30/06/25

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

Selected survey days:	
Friday	6 days
Monday	5 days
Thursday	18 days
Tuesday	15 days
Wednesday	10 days

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

Selected survey types:	
Manual count	54
Direction ATC Count	0

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

Selected Locations:	
Edge of Town	26 days
Neighbourhood Centre	23 days
Suburban Area	5 days

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

Selected Location Sub Categories:	
No Sub Category	5 days
Out of Town	1 days
Residential Zone	26 days
Village	22 days

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

Inclusion of Servicing Vehicle Counts:	
Servicing vehicles Excluded	3 days
Servicing vehicles Included	14 days
Servicing vehicles Unknown	37 days

Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

Secondary Filtering Selection:

Use Class:

C3	54 surveys
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This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

72 - 6103

Population within 1 mile:

1,000 or Less	3 surveys
1,001 to 5,000	25 surveys
5,001 to 10,000	26 surveys

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

Population within 5 miles:

100,001 to 125,000	4 surveys
125,001 to 250,000	3 surveys
25,001 to 50,000	17 surveys
250,001 to 500,000	2 surveys
5,000 or Less	4 surveys
5,001 to 25,000	15 surveys
50,001 to 75,000	5 surveys
75,001 to 100,000	4 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	9 surveys
1.1 to 1.5	32 surveys
1.6 to 2.0	13 surveys

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

Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	30 surveys
Yes	24 surveys

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

PTAL Rating:

1a (Low) - Very poor	1 surveys
No PTAL Present	53 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

No

Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

1	AC-03-A-04	TOWN HOUSES	CHESHIRE WEST & CHESTER
LONDON ROAD NORTHWICH LEFTWICH Suburban Area Residential Zone Site area: 0.5 hect Survey date: Thursday 06/06/2019			
			Survey Type: Manual
2	AC-03-A-06	DETACHED HOUSES	CHESHIRE WEST & CHESTER
COMMON LANE NEAR CHESTER WAVERTON Neighbourhood Centre Village Site area: 6.800000190734863 hect Survey date: Friday 29/04/2022			
			Survey Type: Manual
3	AN-03-A-10	DETACHED & SEMI-DETACHED	ANTRIM
FERRARD GRANGE ANTRIM Suburban Area Residential Zone Site area: 3.5 hect Survey date: Friday 07/06/2024			
			Survey Type: Manual
4	AS-03-A-02	MIXED HOUSES	ABERDEENSHIRE
FARROCHIE ROAD STONEHAVEN Edge of Town Residential Zone Site area: 5.300000190734863 hect Survey date: Wednesday 20/04/2022			
			Survey Type: Manual
5	CA-03-A-08	DETACHED & SEMI-DETACHED	CAMBRIDGESHIRE
GIDDING ROAD SAWTRY Neighbourhood Centre Village Site area: 2.680000066757202 hect Survey date: Thursday 13/10/2022			
			Survey Type: Manual
6	CA-03-A-10	MIXED HOUSES & FLATS	CAMBRIDGESHIRE
FIELD END NEAR ELY WITCHFORD Neighbourhood Centre Village Site area: 5.75 hect Survey date: Thursday 15/05/2025			
			Survey Type: Manual
7	CS-03-A-03	MIXED HOUSES	SLIGO
TOP ROAD STRANDHILL STRANDHILL Neighbourhood Centre Village Site area: 1.2000000476837158 hect Survey date: Thursday 27/10/2016			
			Survey Type: Manual
8	CS-03-A-04	DETACHED & SEMI-DETACHED	SLIGO
R292 STRANDHILL			

Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

Neighbourhood Centre
Village

Site area: 1.6799999475479126 hect

Survey date: Thursday 27/10/2016

Survey Type: Manual

9 ARLESEY ROAD STOTFOLD Edge of Town Residential Zone Site area: 1.7799999713897705 hect Survey date: Wednesday 22/06/2022	CT-03-A-01	MIXED HOUSES	CENTRAL BEDFORDSHIRE	Survey Type: Manual
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10 R212 DUBLIN ROAD CAVAN KILLYNEBBER Edge of Town No Sub Category Site area: 47 hect Survey date:	CV-03-A-02	DETACHED & SEMI DETACHED	CAVAN	Survey Type: Manual
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11 R212 DUBLIN ROAD CAVAN PULLAMORE NEAR Edge of Town No Sub Category Site area: 2.5999999046325684 hect Survey date:	CV-03-A-03	DETACHED HOUSES	CAVAN	Survey Type: Manual
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12 ADDISON CLOSE GILLINGHAM Edge of Town Residential Zone Site area: 1.399999976158142 hect Survey date: Wednesday 09/11/2022	DC-03-A-10	MIXED HOUSES	DORSET	Survey Type: Manual
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13 A350 SHAFTESBURY Edge of Town No Sub Category Site area: 6.630000114440918 hect Survey date: Tuesday 31/10/2023	DC-03-A-11	MIXED HOUSES	DORSET	Survey Type: Manual
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14 ADDISON CLOSE GILLINGHAM Edge of Town Residential Zone Site area: 4 hect Survey date: Tuesday 10/06/2025	DC-03-A-13	MIXED HOUSES	DORSET	Survey Type: Manual
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15 GREENHALL HIGHWAY COLERAINE Edge of Town Residential Zone Site area: 1.600000023841858 hect Survey date: Thursday 19/05/2022	DE-03-A-04	SEMI-DETACHED & TERRACED	DERRY	Survey Type: Manual
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Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

16 GREENFIELDS ROAD BISHOP AUCKLAND Suburban Area Residential Zone Site area: 0.8999999761581421 hect Survey date: Tuesday 28/03/2017	DH-03-A-01	SEMI DETACHED	DURHAM	Survey Type: Manual
17 LEAZES LANE BISHOP AUCKLAND ST HELEN AUCKLAND Neighbourhood Centre Residential Zone Site area: 4.03000020980835 hect Survey date:	DH-03-A-02	MIXED HOUSES	DURHAM	Survey Type: Manual
18 GLENFIN ROAD BALLYBOFEY Edge of Town Residential Zone Site area: 1.0199999809265137 hect Survey date: Wednesday 10/10/2018	DN-03-A-06	DETACHED HOUSING	DONEGAL	Survey Type: Manual
19 DUCHY ROAD HADLEY WOOD Edge of Town Residential Zone Site area: 0.6700000166893005 hect Survey date: Wednesday 14/09/2022	EN-03-A-02	DETACHED HOUSES	ENFIELD	Survey Type: Manual
20 NEW ROAD HAILSHAM HELLINGLY Edge of Town Residential Zone Site area: 3.490000009536743 hect Survey date: Thursday 07/11/2019	ES-03-A-07	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: Manual
21 BISHOPS LANE RINGMER Neighbourhood Centre Village Site area: 4.340000152587891 hect Survey date: Thursday 28/09/2023	ES-03-A-11	MIXED HOUSES	EAST SUSSEX	Survey Type: Manual
22 HOREBEECH LANE HORAM Neighbourhood Centre Village Site area: 8.109999656677246 hect Survey date: Tuesday 03/10/2023	ES-03-A-12	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: Manual
23 A265 HEATHFIELD Edge of Town Residential Zone	ES-03-A-13	DETACHED HOUSES	EAST SUSSEX	

Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

Site area: 1.7000000476837158 hect
Survey date:

Survey Type: Manual

24 NEW ROAD HAILSHAM HELLINGLY Edge of Town Residential Zone Site area: 0.51 hect Survey date: Wednesday 06/11/2024	ES-03-A-20	DETACHED & SEMI-DETACHED	EAST SUSSEX	Survey Type: Manual
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25 CANADA WAY LIPHOOK Suburban Area Residential Zone Site area: 1.399999976158142 hect Survey date: Tuesday 19/11/2019	HC-03-A-23	HOUSES & FLATS	HAMPSHIRE	Survey Type: Manual
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26 KILN ROAD LIPHOOK Edge of Town Residential Zone Site area: 2.1700000762939453 hect Survey date: Friday 07/10/2022	HC-03-A-31	MIXED HOUSES & FLATS	HAMPSHIRE	Survey Type: Manual
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27 REDFIELDS LANE FLEET CHURCH CROOKHAM Edge of Town Residential Zone Site area: 3.46 hect Survey date: Wednesday 27/03/2024	HC-03-A-37	MIXED HOUSES	HAMPSHIRE	Survey Type: Manual
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28 RIVERSIDE GROVE NEAR FORT WILLIAM LOCHYSIDE Neighbourhood Centre Village Site area: 1.32 hect Survey date: Thursday 10/10/2024	HI-03-A-16	PRIVATLEY OWNED HOUSES	HIGHLAND	Survey Type: Manual
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29 BALLAKILLOWEY ROAD COLBY BALLAKILLOWEY Neighbourhood Centre Village Site area: 2.119999885559082 hect Survey date: Tuesday 21/05/2024	IM-03-A-01	MIXED HOUSES	ISLE OF MAN	Survey Type: Manual
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30 SHORE ROAD KIRK MICHAEL Neighbourhood Centre Village Site area: 1.6100000143051147 hect Survey date: Thursday 23/05/2024	IM-03-A-02	MIXED HOUSES	ISLE OF MAN	Survey Type: Manual
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Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

31 MAIN ROAD COLBY Neighbourhood Centre Village Site area: 6.989999771118164 hect Survey date: Tuesday 21/05/2024	IM-03-A-03	MIXED HOUSES	ISLE OF MAN	Survey Type: Manual
32 SCARLETT ROAD CASTLETOWN Edge of Town Residential Zone Site area: 2.190000057220459 hect Survey date: Tuesday 21/05/2024	IM-03-A-05	MIXED HOUSES	ISLE OF MAN	Survey Type: Manual
33 MOORAGH PROMENADE RAMSEY Edge of Town Residential Zone Site area: 6.900000095367432 hect Survey date: Thursday 23/05/2024	IM-03-A-06	MIXED HOUSES	ISLE OF MAN	Survey Type: Manual
34 HEADCORN ROAD STAPLEHURST Edge of Town Residential Zone Site area: 3.9100000858306885 hect Survey date: Tuesday 09/05/2023	KC-03-A-10	MIXED HOUSES	KENT	Survey Type: Manual
35 MELBOURNE ROAD IBSTOCK Neighbourhood Centre Village Site area: 3.296999931335449 hect Survey date: Thursday 28/06/2018	LE-03-A-02	DETACHED & OTHERS	LEICESTERSHIRE	Survey Type: Manual
36 ROCHESTER ROAD NEAR CHATHAM BURHAM Neighbourhood Centre Village Site area: 0.20000000298023224 hect Survey date: Friday 22/09/2017	MW-03-A-01	DETACHED & SEMI-DETACHED	MEDWAY	Survey Type: Manual
37 HEATH DRIVE HOLT Edge of Town Residential Zone Site area: 1.5700000524520874 hect Survey date: Thursday 19/09/2019	NF-03-A-05	MIXED HOUSES	NORFOLK	Survey Type: Manual
38 YARMOUTH ROAD NEAR NORWICH BLOFIELD Neighbourhood Centre Village	NF-03-A-27	MIXED HOUSES & FLATS	NORFOLK	

Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

Site area: 3.690000057220459 hect
Survey date: Thursday 16/09/2021

Survey Type: Manual

39 LONDON ROAD ATTLEBOROUGH Edge of Town Residential Zone Site area: 4.78000020980835 hect Survey date: Thursday 29/09/2022	NF-03-A-33	MIXED HOUSES	NORFOLK	Survey Type: Manual
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40 NORWICH ROAD SWAFFHAM Edge of Town Out of Town Site area: 3.1500000953674316 hect Survey date: Tuesday 27/09/2022	NF-03-A-34	MIXED HOUSES	NORFOLK	Survey Type: Manual
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41 LONDON ROAD WYMONDHAM Edge of Town No Sub Category Site area: 3.200000047683716 hect Survey date: Thursday 29/09/2022	NF-03-A-36	MIXED HOUSES	NORFOLK	Survey Type: Manual
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42 MILL LANE NEAR NORWICH HORSFORD Neighbourhood Centre Village Site area: 5.400000095367432 hect Survey date: Wednesday 15/09/2021	NF-03-A-43	MIXED HOUSES	NORFOLK	Survey Type: Manual
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43 CITY ROAD NORWICH LAKENHAM Suburban Area Residential Zone Site area: 1.0299999713897705 hect Survey date: Tuesday 13/09/2022	NF-03-A-51	SEMI-DETACHED	NORFOLK	Survey Type: Manual
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44 MILBY ROAD BOROUGHBRIDGE MILBY Edge of Town Residential Zone Site area: 6.8 hect Survey date: Thursday 19/09/2024	NY-03-A-15	DETACHED & SEMI-DETACHED	NORTH YORKSHIRE	Survey Type: Manual
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45 AMLETS LANE CRANLEIGH Neighbourhood Centre Village Site area: 13.479999542236328 hect Survey date: Tuesday 24/05/2022	SC-03-A-09	MIXED HOUSES & FLATS	SURREY	Survey Type: Manual
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46	SF-03-A-06	DETACHED & SEMI-DETACHED	SUFFOLK	
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Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

BURY ROAD KENTFORD Neighbourhood Centre Village Site area: 2.680000066757202 hect Survey date: Friday 22/09/2017				Survey Type: Manual
47	SM-03-A-02	MIXED HOUSES	SOMERSET	
HYDE LANE NEAR TAUNTON CREECH SAINT MICHAEL Neighbourhood Centre Village Site area: 2.869999885559082 hect Survey date: Tuesday 25/09/2018				Survey Type: Manual
48	SM-03-A-03	MIXED HOUSES	SOMERSET	
HYDE LANE NEAR TAUNTON CREECH ST MICHAEL Neighbourhood Centre Village Site area: 2.6500000953674316 hect Survey date: Tuesday 25/09/2018				Survey Type: Manual
49	WC-03-A-01	DETACHED HOUSES	WICKLOW	
STATION ROAD WICKLOW CORPORATION MURRAGH Edge of Town No Sub Category Site area: 2.443000078201294 hect Survey date:				Survey Type: Manual
50	WK-03-A-04	DETACHED HOUSES	WARWICKSHIRE	
DALEHOUSE LANE KENILWORTH Edge of Town Residential Zone Site area: 2.424999952316284 hect Survey date: Friday 27/09/2019				Survey Type: Manual
51	WS-03-A-07	BUNGALOWS	WEST SUSSEX	
EMMS LANE NEAR HORSHAM BROOKS GREEN Neighbourhood Centre Village Site area: 3.25 hect Survey date: Thursday 19/10/2017				Survey Type: Manual
52	WS-03-A-16	DETACHED & SEMI-DETACHED	WEST SUSSEX	
BRACKLESHAM LANE BRACKLESHAM BAY Neighbourhood Centre Village Site area: 1.899999976158142 hect Survey date: Wednesday 09/11/2022				Survey Type: Manual
53	WS-03-A-22	MIXED HOUSES & FLATS	WEST SUSSEX	
SHOPWHYKE ROAD CHICHESTER Edge of Town				

Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

Residential Zone

Site area: 3.799999952316284 hect

Survey date: Tuesday 19/03/2024

Survey Type: Manual

54

WS-03-A-25

PRIVATE HOUSES & FLATS

WEST SUSSEX

LIDSEY ROAD

WOODGATE

Neighbourhood Centre

Village

Site area: 2.4000000953674316 hect

Survey date: Wednesday 18/09/2024

Survey Type: Manual

DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
AC-03-A-05	30-04-2021	Covid
CA-03-A-07	27-05-2021	Covid
LU-03-A-01	21-09-2021	Covid
MG-03-A-01	12-10-2021	Covid
TI-03-A-01	17-06-2021	Covid

Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

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

Total Vehicles

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00					
06:00-07:00					
07:00-08:00	54	70	0.074	0.269	0.343
08:00-09:00	54	70	0.156	0.390	0.546
09:00-10:00	54	70	0.155	0.184	0.339
10:00-11:00	54	70	0.126	0.164	0.290
11:00-12:00	54	70	0.143	0.151	0.294
12:00-13:00	54	70	0.173	0.161	0.334
13:00-14:00	54	70	0.180	0.168	0.348
14:00-15:00	54	70	0.172	0.176	0.348
15:00-16:00	54	70	0.272	0.195	0.467
16:00-17:00	54	70	0.280	0.174	0.454
17:00-18:00	54	70	0.337	0.180	0.517
18:00-19:00	54	70	0.247	0.150	0.397
19:00-20:00	1	9	0.111	0.111	0.222
20:00-21:00	1	9	0.111	0.000	0.111
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			2.537	2.473	5.010

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

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

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Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

Parameter Summary:

Trip rate parameter range selected:	0 - 150 (units: DWELLS)
Survey date date range:	27/10/2016 - 10/06/2025
Number of weekdays (Monday-Friday):	54
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	13
Surveys manually removed from selection:	0

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

Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

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

Total People

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00					
06:00-07:00					
07:00-08:00	54	70	0.105	0.427	0.532
08:00-09:00	54	70	0.229	0.790	1.019
09:00-10:00	54	70	0.232	0.293	0.525
10:00-11:00	54	70	0.187	0.252	0.439
11:00-12:00	54	70	0.223	0.238	0.461
12:00-13:00	54	70	0.264	0.242	0.506
13:00-14:00	54	70	0.277	0.249	0.526
14:00-15:00	54	70	0.280	0.267	0.547
15:00-16:00	54	70	0.585	0.320	0.905
16:00-17:00	54	70	0.494	0.282	0.776
17:00-18:00	54	70	0.543	0.296	0.839
18:00-19:00	54	70	0.397	0.244	0.641
19:00-20:00	1	9	0.222	0.222	0.444
20:00-21:00	1	9	0.111	0.000	0.111
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			4.149	4.122	8.271

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

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

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Audit Code: e9a55909-17ed-443b-a63e-0ab3953a9443

Parameter Summary:

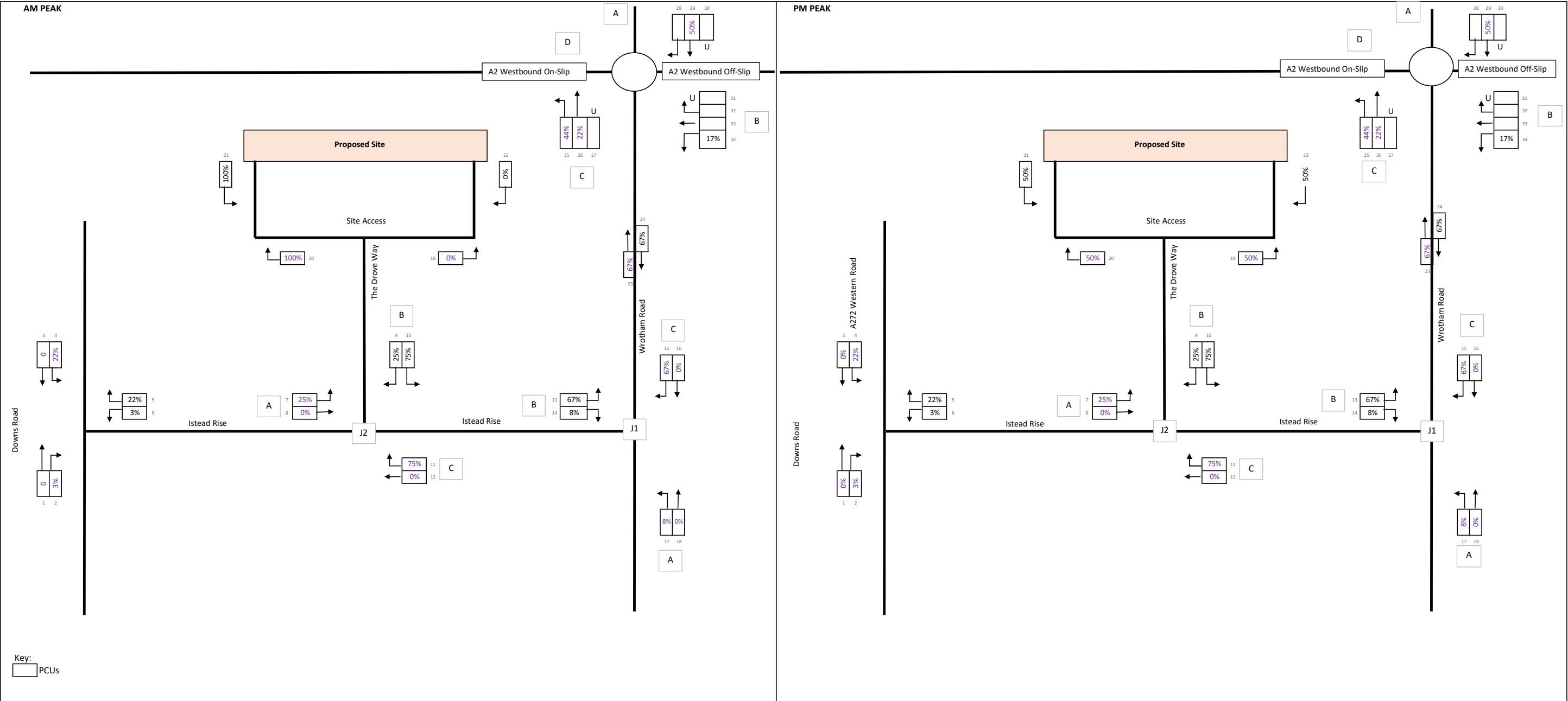
Trip rate parameter range selected:	0 - 150 (units: DWELLS)
Survey date date range:	27/10/2016 - 10/06/2025
Number of weekdays (Monday-Friday):	54
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	13
Surveys manually removed from selection:	0

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

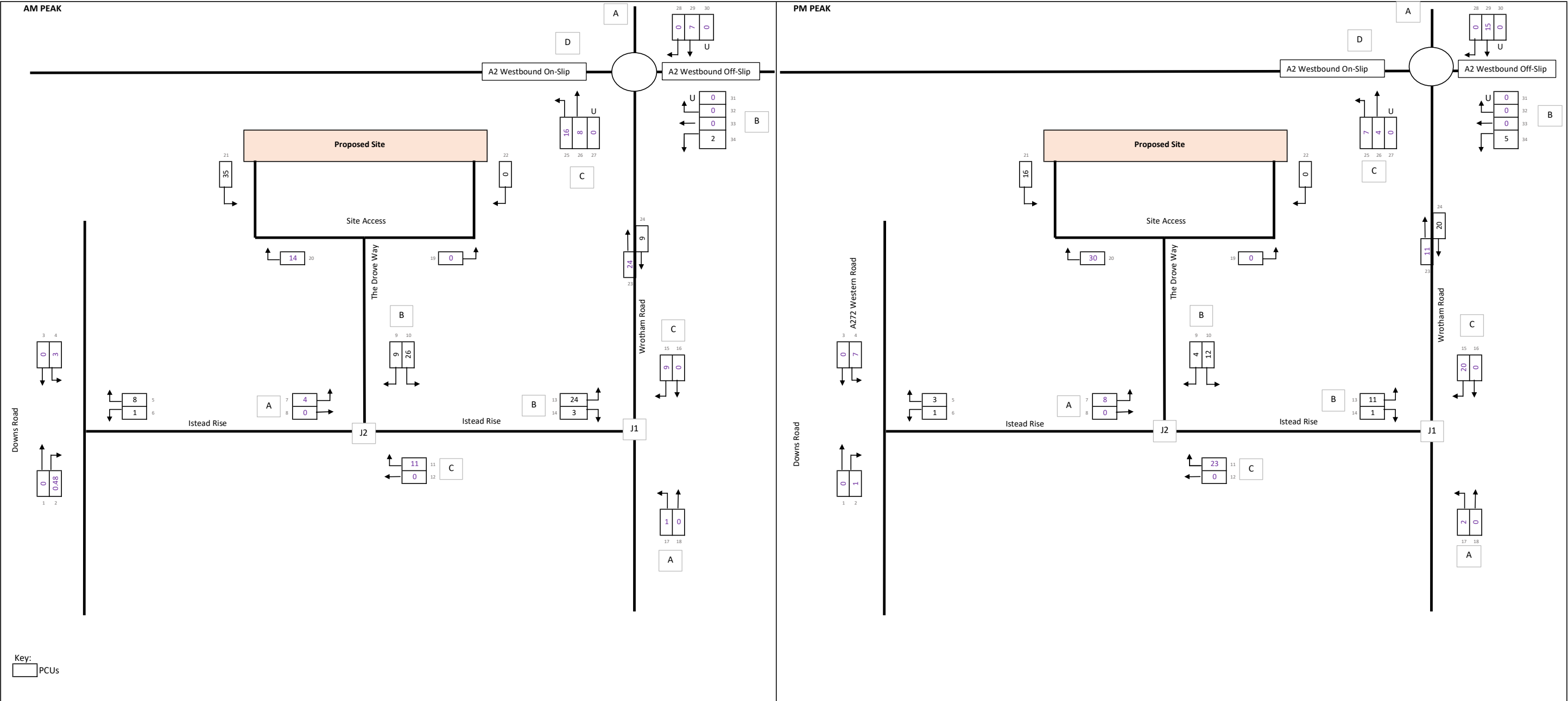
APPENDIX E

TRAFFIC FLOW DIAGRAMS

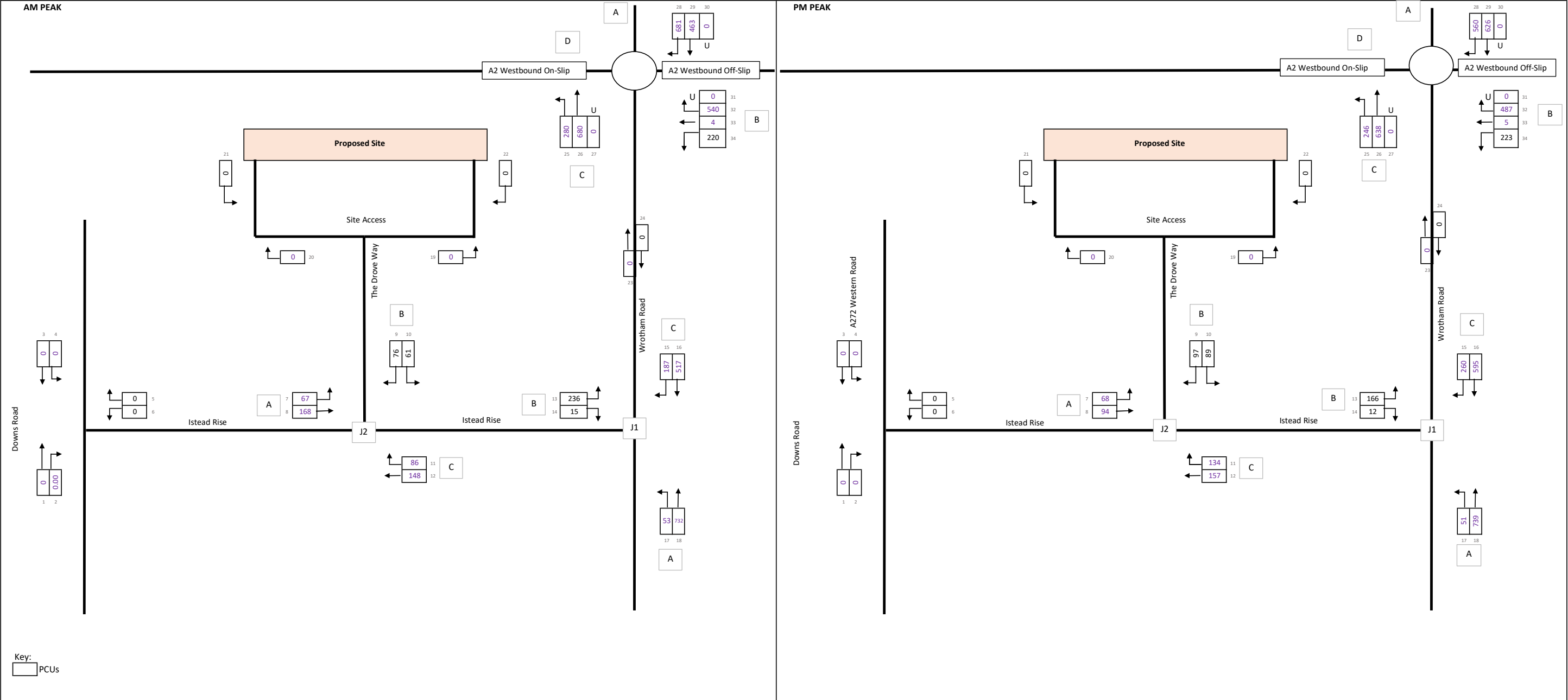


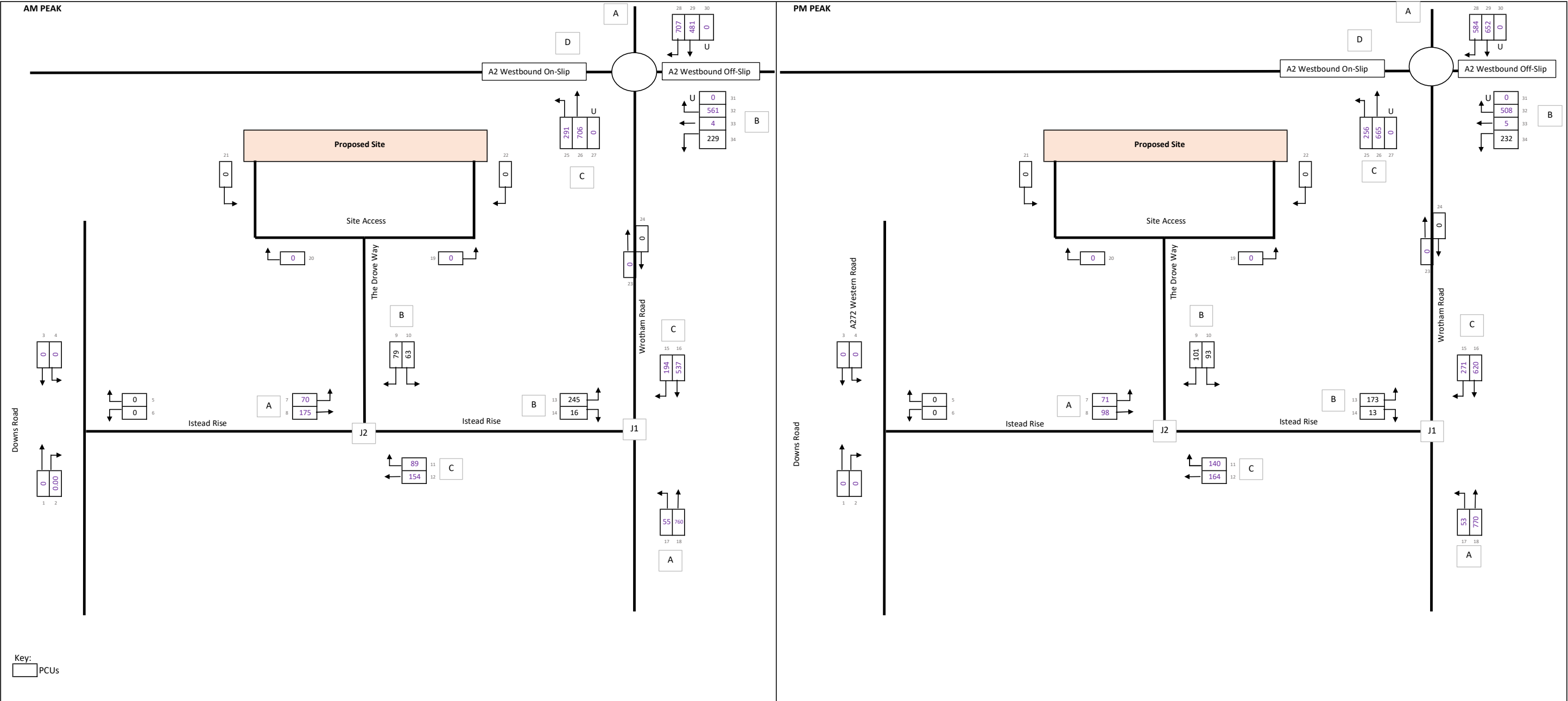


Project: Land North of The Drove Way, Istead Rise	Client: Ptarmigan Land Ltd	Title: Proposed Development Traffic Distribution AM Peak Hour & PM Peak Hour	Date: May-26 Diagram: 1
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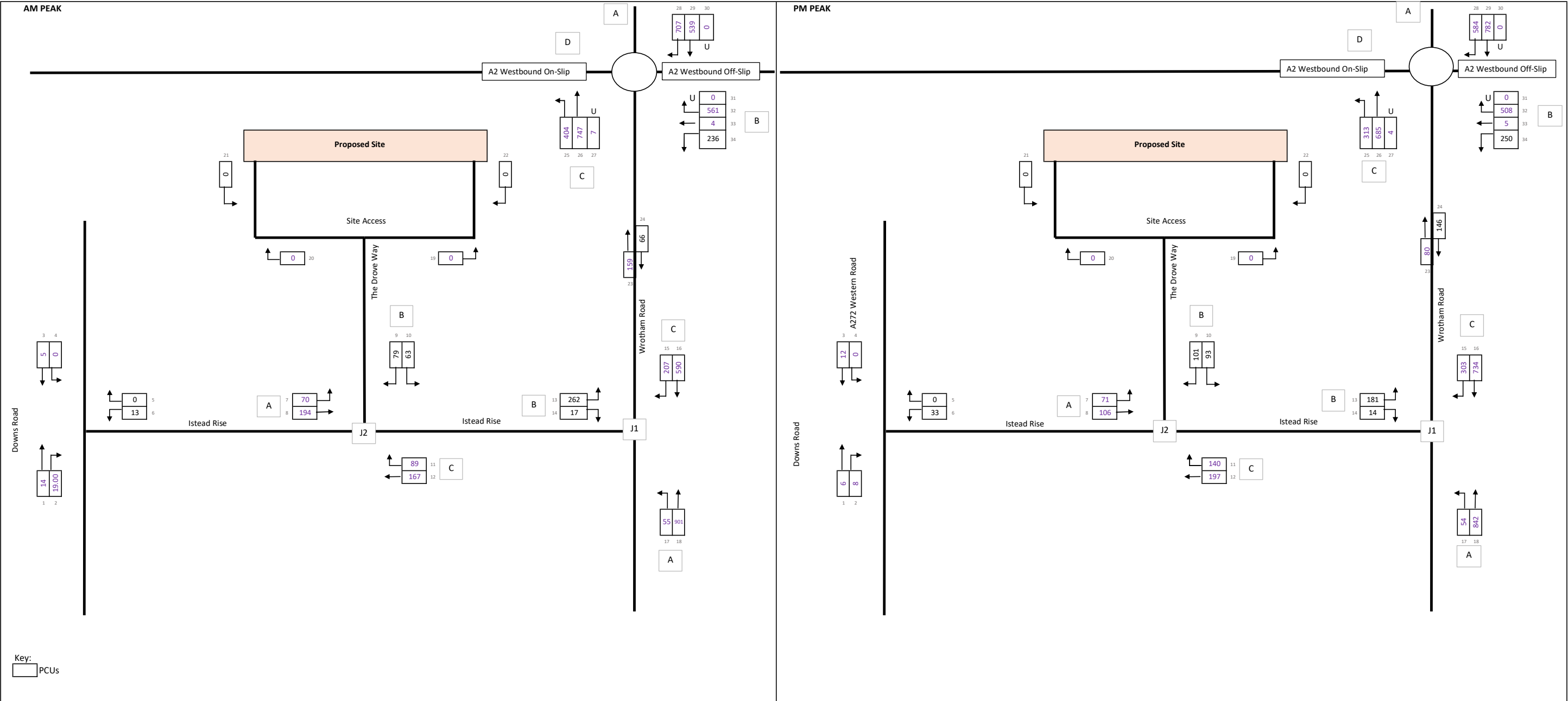


Project: Land North of The Drove Way, Istead Rise	Client: Ptarmigan Land Ltd	Title: Proposed Development Traffic Flows AM Peak Hour & PM Peak Hour	Date: May-26 Diagram: 2
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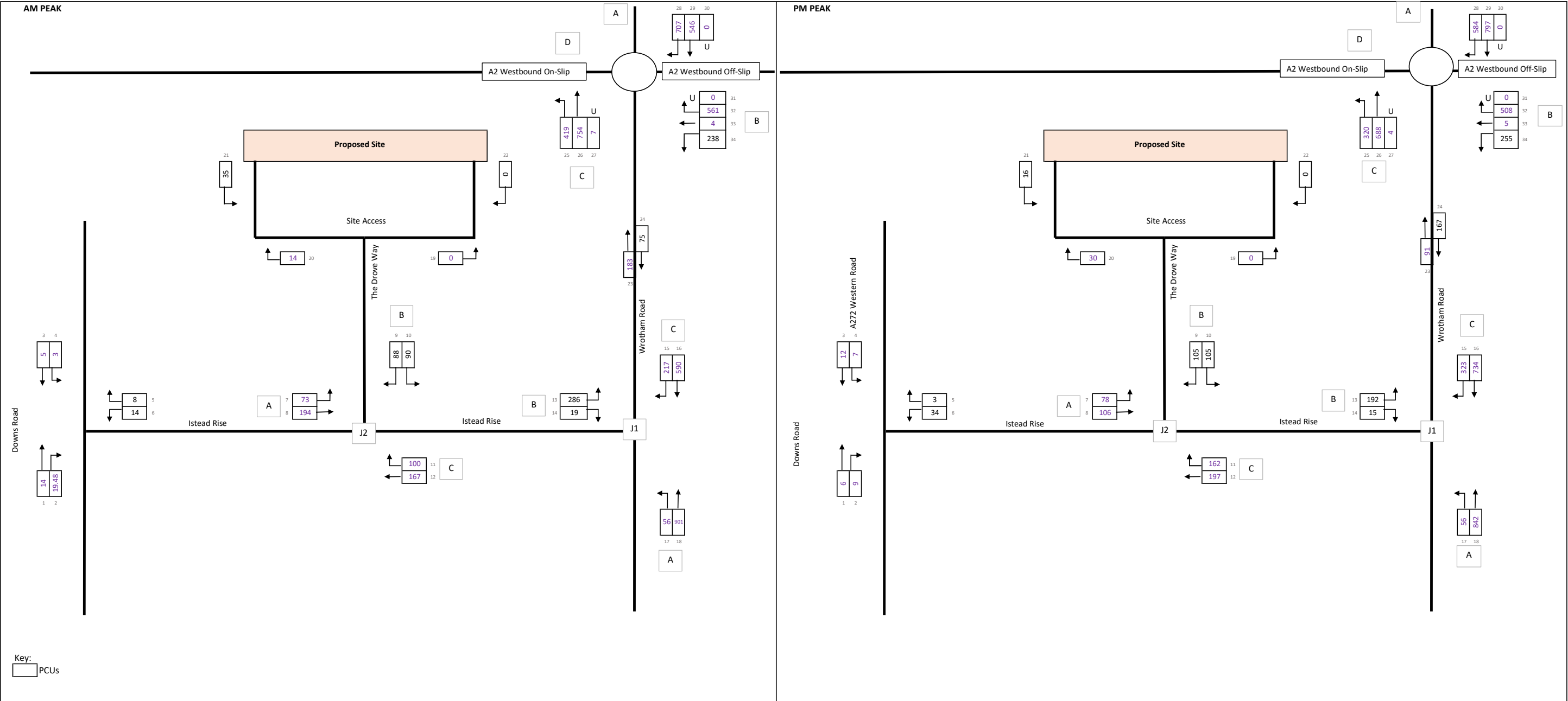




Project:	Client:	Title:	Date:
Land North of The Drove Way, Istead Rise	Ptarmigan Land Ltd	2031 Baseline	May-26
		AM Peak Hour & PM Peak Hour	Diagram:
			4
			www.velocity-tp.com



Project: Land North of The Drove Way, Istead Rise	Client: Ptarmigan Land Ltd	Title: 2031 Base + Committed Development AM Peak Hour & PM Peak Hour	Date: May-26 Diagram: 5
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Project: Land North of The Drove Way, Istead Rise	Client: Ptarmigan Land Ltd	Title: 2031 Base + Committed Development + Proposed Development AM Peak Hour & PM Peak Hour	Date: May-26 Diagram: 6
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APPENDIX F

TRAFFIC SURVEY DATA





Job Number & Name: 46457 Istead Rise, Gravesend

Site Number/Name: Site 1 - Istead Rise/The Drove Way

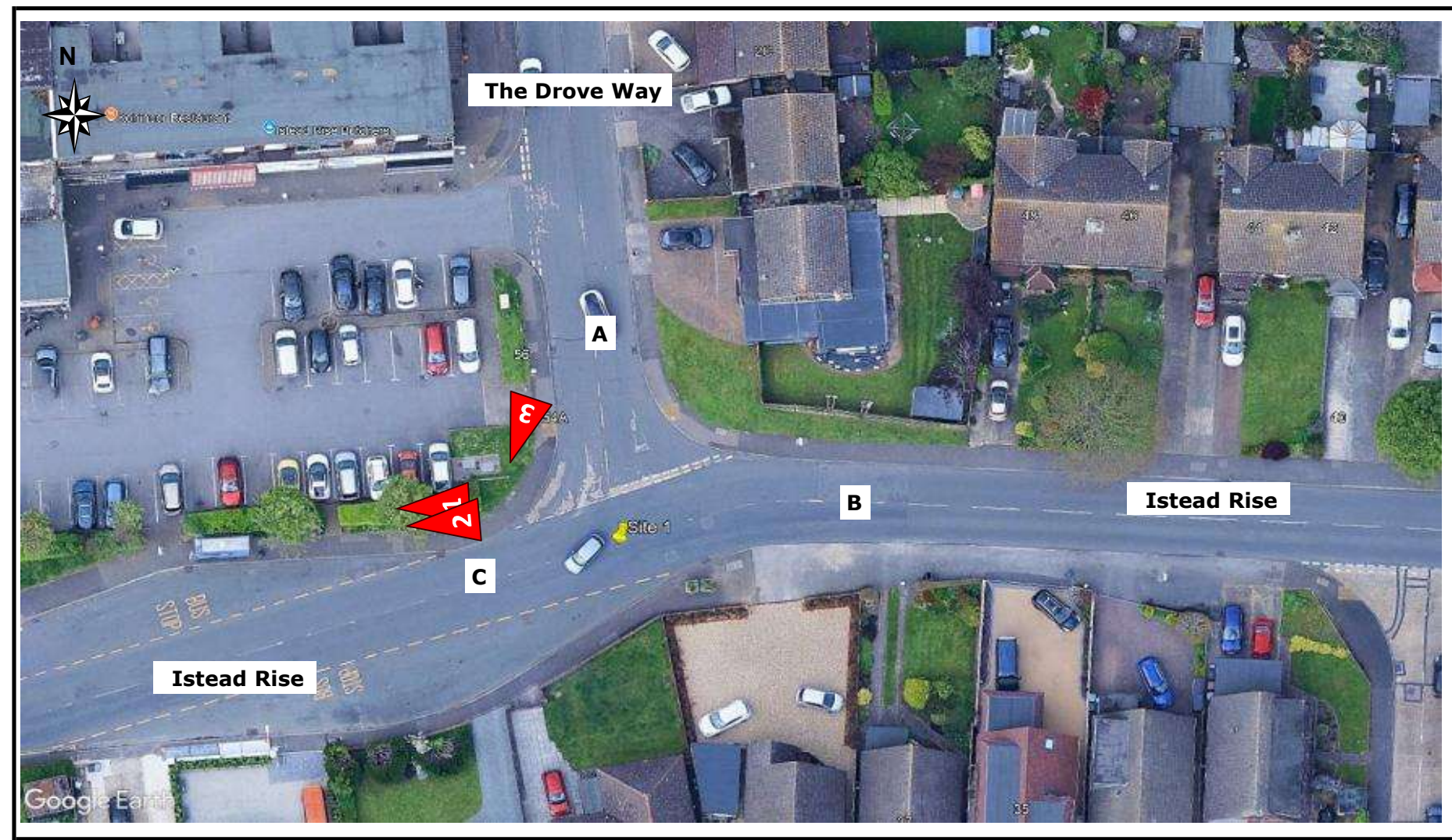
Client: Velocity

Date: 25/02/2026

Weather: Dry & Bright

Advanced Transport Research	Job Number & Name: 46457 Istead Rise, Gravesend
Site 1 - Istead Rise/The Drove Way	Date: Wednesday 25 Feb 2026

Job Type:	Junction Count		
Co-ordinates:	51.405747°N, 0.351754°E	Postcode:	DA19 9JF Times: 0700-1900



AM Total	0	0	0	0	0	0	0	0	0	151	28	1	1	0	0	0	0	0	176	22	1	0	0	1	0	0	176	36	1	1	0	1	0	0	0	0	0	0	0	0	0	280	45	5	1	5	1	0	0	145	16	2	0	0	0	1	0	301	40	4	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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Job Number & Name: 46457 Istead Rise, Gravesend

Site Number/Name: Site 2 - Istead Rise/Wrotham Road

Client: Velocity

Date: 25/02/2026

Weather: Dry & Bright



[illegible][illegible][illegible]

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Job Number & Name: 46457 Istead Rise, Gravesend

Site Number/Name: Site 1 - Istead Rise/The Drove Way

Client: Velocity

Date: 25/02/2026

Weather: Dry & Bright





Job Number & Name: 46457 Istead Rise, Gravesend

Site Number/Name: Site 2 - Istead Rise/Wrotham Road

Client: Velocity

Date: 25/02/2026

Weather: Dry & Bright

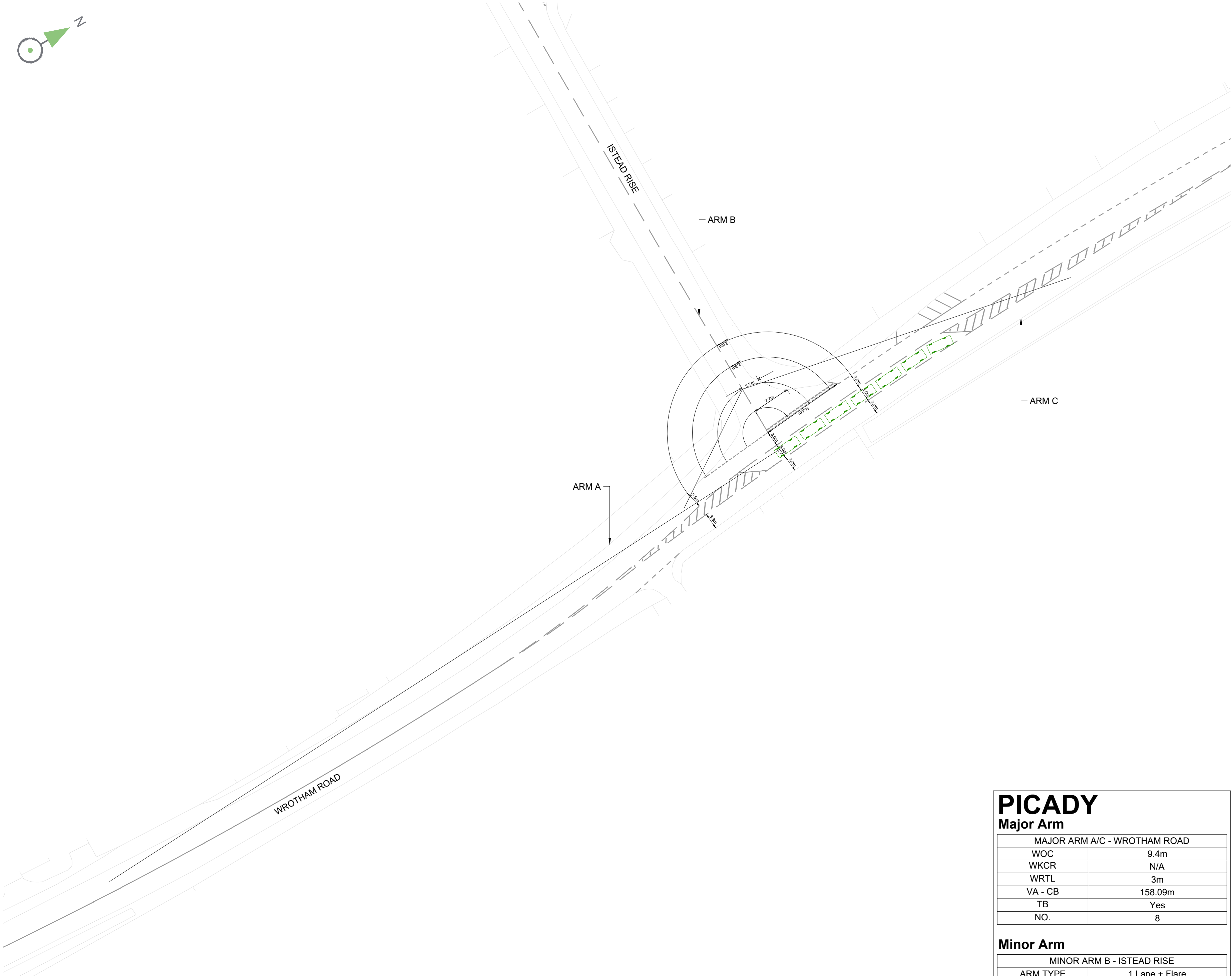
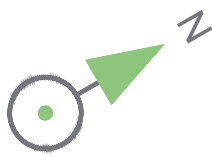


Maximum												Average												
Count in Vehicles						Count in PCUs						Count in Vehicles						Count in PCUs						
Times		Istead Rise		Wrotham Road Right-Turn		Istead Rise		Wrotham Road Right-Turn		Istead Rise		Wrotham Road Right-Turn		Istead Rise		Wrotham Road Right-Turn								
		Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2							
07:00 - 07:05	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1		
07:05 - 07:10	2	2	0	1	2	2	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	0	1	
07:10 - 07:15	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
07:15 - 07:20	1	0	0	1	1.5	0	0	1	1	0	0	1	1	0	0	1	1.5	0	0	1	1	0	0	1
07:20 - 07:25	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2
07:25 - 07:30	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1
07:30 - 07:35	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
07:35 - 07:40	2	3	0	2	2	4	0	2	1	2	0	1	1	2	0	1	1	2	0	1	1	2	0	1
07:40 - 07:45	1	2	0	4	2	3	0	4	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2
07:45 - 07:50	2	2	0	3	2	2	0	3	1	2	0	2	1.5	2	0	2	1.5	2	0	2	1	2	0	2
07:50 - 07:55	2	2	0	1	2	2	0	1.5	1	2	0	1	1	2	0	1	1	2	0	1	1	2	0	1
07:55 - 08:00	2	1	0	2	2	1	0	2	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
08:00 - 08:05	2	1	0	3	2	1	0	3	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
08:05 - 08:10	2	4	0	2	2	4	0	2	1	2	0	1	1	2	0	1	1	2	0	1	1	2	0	1
08:10 - 08:15	2	4	0	4	2	4	0	4	1	2	0	2	1	2	0	2	1	2	0	2	1	2	0	2
08:15 - 08:20	2	1	0	3	2	1	0	3	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2
08:20 - 08:25	2	3	0	2	2	3	0	2	1	2	0	1	1	2	0	1	1	2	0	1	1	2	0	1
08:25 - 08:30	2	2	0	2	2	2	0	2	1	2	0	1	1	2	0	1	1	2	0	1	1	2	0	1
08:30 - 08:35	2	1	0	1	2	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
08:35 - 08:40	2	3	0	1	2	3	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
08:40 - 08:45	2	2	0	4	2	3	0	4	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2
08:45 - 08:50	2	4	0	2	2	4	0	2	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
08:50 - 08:55	2	0	0	3	2	0	0	3	1	0	0	2	1	0	0	2	1	0	0	2	1	0	0	2
08:55 - 09:00	1	1	0	4	1	1	0	4	1	1	0	3	1	1	0	3	1	1	0	3	1	1	0	3
09:00 - 09:05	2	2	0	1	2	2	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
09:05 - 09:10	2	1	0	0	2	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0
09:10 - 09:15	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
09:15 - 09:20	2	1	0	1	2	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
09:20 - 09:25	1	4	0	2	1	4	0	2	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
09:25 - 09:30	2	1	0	1	2	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
09:30 - 09:35	2	1	0	3	2	1.5	0	4	1	1	0	3	1	1	0	3	1	1	0	3	1	1	0	3
09:35 - 09:40	2	1	0	0	2	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0
09:40 - 09:45	2	3	0	0	2	3	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0
09:45 - 09:50	2	1	0	1	2	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
09:50 - 09:55	2	1	0	1	2	1	0	1	1	1	0	1	1.5	1	0	1	1	1	0	1	1.5	1	0	1
09:55 - 10:00	2	3	0	1	2	3	0	1	1	3	0	1	1	3	0	1	1	3	0	1	1	3	0	1
10:00 - 10:05	2	1	0	1	2	1	0	1	2	1	0	1	2	1	0	1	2	1	0	1	2	1	0	1
10:05 - 10:10	2	1	0	1	2	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
10:10 - 10:15	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2
10:15 - 10:20	2	3	0	2	2	3	0	2	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
10:20 - 10:25	2	2	0	6	2	2	0	6	1	1	0	4	1	1	0	4	1	1	0	4	1	1	0	4
10:25 - 10:30	2	2	0	0	2	2	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0
10:30 - 10:35	2	4	0	2	2	4	0	2	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
10:35 - 10:40	2	2	0	1	2	2	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
10:40 - 10:45	2	2	0	0	2	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0
10:45 - 10:50	2	1	0	0	2	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0
10:50 - 10:55	2	1	0	3	2	1	0	3	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
10:55 - 11:00	2	3	0	2	2	3	0	2	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2
11:00 - 11:05	2	1	0	1	2	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
11:05 - 11:10	2	2	0	5	2	2	0	5	1	2	0	2	1	2	0	2	1	2	0	2	1	2	0	2
11:10 - 11:15	2	1	0	2	2	1	0	2.5	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2
11:15 - 11:20	2	1	0	0	2	1	0	0	1	1	0	0	1.5	1	0	0	1	1	0	0	1.5	1	0	0
11:20 - 11:25	1	1	0	2	1	1	0	2	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
11:25 - 11:30	2	1	0	1	2	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
11:30 - 11:35	1	1	0	2	1	1	0	2	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
11:35 - 11:40	2	0	0	2	2	0	0	2	1	0	0	2	1	0	0	2	1	0	0	2	1	0	0	2
11:40 - 11:45	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
11:45 - 11:50	2	1	0	2	2	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2
11:50 - 11:55	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1
11:55 - 12:00	2	2	0	1	2	2	0	1	2	2	0	1	2	2	0	1	2	2	0	1	2	2	0	1
12:00 - 12:05	1	2	0	1	1.5	2	0	1	1	2	0	1	1	2	0	1	1	2	0	1	1	2	0	1
12:05 - 12:10	2	3	0	2	2	3	0	2	1	2	0	1	1	2	0	1	1	2	0	1	1	2	0	1
12:10 - 12:15	2	1	0	3	2	1	0	3	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
12:15 - 12:20	2	1	0	0	2	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0
12:20 - 12:25	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
12:25 - 12:30	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
12:30 - 12:35	1	2	0	0	1	2	0	0	1	1	0	0	1	1	0	0	1							

APPENDIX G

JUNCTION MODELLING MEASUREMENTS AND FULL RESULTS





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PICADY

Major Arm

MAJOR ARM A/C - WROTHAM ROAD	
WOC	9.4m
WKCR	N/A
WRTL	3m
VA - CB	158.09m
TB	Yes
NO.	8

Minor Arm

MINOR ARM B - ISTEAD RISE	
ARM TYPE	1 Lane + Flare
LW	As Shown In 5m Increments
V TO L	68.733m
V TO R	26.302m

General Notes:

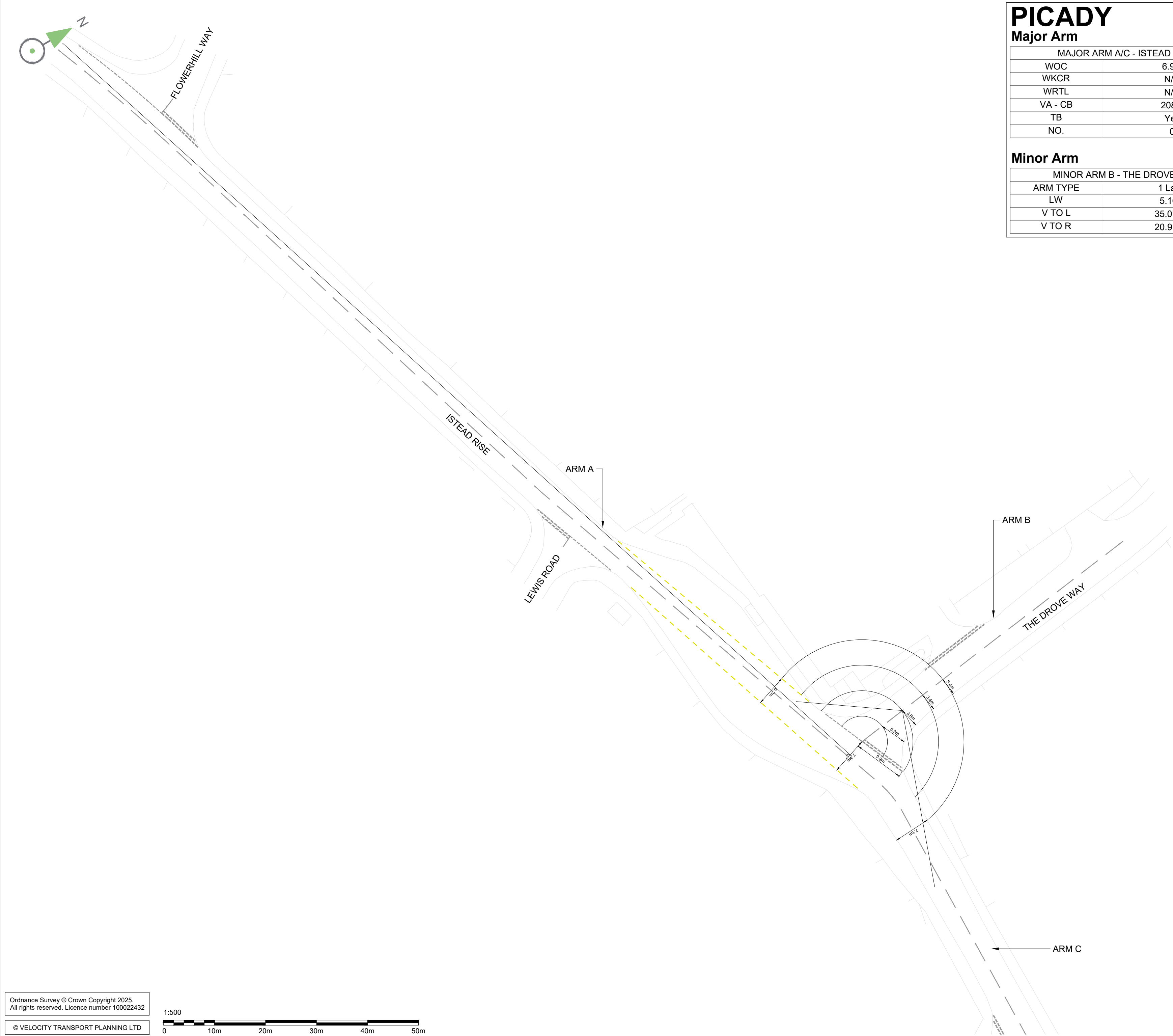
- DO NOT SCALE FROM THIS DRAWING.
- ALL DIMENSIONS AND LEVELS ARE IN METRES UNLESS OTHERWISE STATED. THIS DRAWING IS TO BE PRINTED IN COLOUR.
- THIS DRAWING IS BASED ON OS MAPPING DATA PURCHASED FROM PROMAPS V2. VELOCITY TRANSPORT PLANNING SHALL NOT BE LIABLE FOR ANY INACCURACIES OR DEFICIENCIES.
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A	04/03/26	FIRST ISSUE	AMP	GJ	CR
Rev	Date	Description	Dm	Chk	App



Drawing Status		S2 - FOR INFORMATION			
Client		PTARMIGAN LAND			
Architect					
Project Title		LAND NORTH OF DROVE WAY - ISTEAD RISE			
Drawing Title		JUNCTION GEOMETRIES - PICADY (WROTHAM ROAD / ISTEAD RISE)			
Scale @ A2	Date	Designed/Drawn	Checked	Approved	
1:500	04/03/26	AMP	GJ	CR	
Project Ref	Drawing Number			Rev	
25-305	25-305-T-001			A	

P:\0-25-305-305 Land North of Drove Way - Istead Rise\02 TECHNICAL\B DWGSHI CAD\DWGS\25-305-T-001 - Junction Geometries.dwg (002) Plotted on: Mar 04, 2026 - 6:53pm by A Pearce



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PICADY	
Major Arm	
MAJOR ARM A/C - ISTEAD RISE	
WOC	6.9m
WKCR	N/A
WRTL	N/A
VA - CB	208m
TB	Yes
NO.	0
Minor Arm	
MINOR ARM B - THE DROVE WAY	
ARM TYPE	1 Lane
LW	5.16m
V TO L	35.078m
V TO R	20.919m

- General Notes:
- DO NOT SCALE FROM THIS DRAWING.
 - ALL DIMENSIONS AND LEVELS ARE IN METRES UNLESS OTHERWISE STATED. THIS DRAWING IS TO BE PRINTED IN COLOUR.
 - THIS DRAWING IS BASED ON OS MAPPING DATA PURCHASED FROM PROMAPS V2. VELOCITY TRANSPORT PLANNING SHALL NOT BE LIABLE FOR ANY INACCURACIES OR DEFICIENCIES.
 - THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.

A	04/03/26	FIRST ISSUE	AMP	GJ	CR
Rev	Date	Description	Dm	Chk	App
VELOCITY					
Drawing Status		S2 - FOR INFORMATION			
Client		PTARMIGAN LAND			
Architect					
Project Title		LAND NORTH OF DROVE WAY - ISTEAD RISE			
Drawing Title		JUNCTION GEOMETRIES - PICADY (ISTEAD RISE / THE DROVE WAY)			
Scale @ A2	Date	Designed/Drawn	Checked	Approved	
1:500	04/03/26	AMP	GJ	CR	
Project Ref	Drawing Number		Rev		
25-305	25-305-T-002		A		

Junctions 11													
PICADY 11 - Priority Intersection Module													
Version: 11.0.0.2177													
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Filename: Junction 1 - Istead Rise - Wrotham Road v0.2.j11

Path: \\vtp-cloud\Projects\0-25\25-305 Land North of Drove Way - Istead Rise\02 TECHNICAL\A ANALYSIS\D. MODELLING

Report generation date: 07/05/2026 16:19:16

»ISTEAD RISE / WROTHAM ROAD - 2026 | Base | AM
 »ISTEAD RISE / WROTHAM ROAD - 2026 | Base | PM
 »ISTEAD RISE / WROTHAM ROAD - 2031 | Base | AM
 »ISTEAD RISE / WROTHAM ROAD - 2031 | Base | PM
 »ISTEAD RISE / WROTHAM ROAD - 2031 | Base + CD | AM
 »ISTEAD RISE / WROTHAM ROAD - 2031 | Base + CD | PM
 »ISTEAD RISE / WROTHAM ROAD - 2031 | Base + CD + PD | AM
 »ISTEAD RISE / WROTHAM ROAD - 2031 | Base + CD + PD | PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	ISTEAD RISE / WROTHAM ROAD - 2026 - Base													
Stream B-C	D1	1.4	5.2	19.17	0.57	C	4.23	D2	0.7	3.2	13.84	0.41	B	4.07
Stream B-A		0.1	0.5	24.25	0.10	C			0.1	0.5	28.97	0.09	D	
Stream C-AB		0.8	3.4	13.22	0.42	B			1.5	5.8	18.06	0.59	C	
	ISTEAD RISE / WROTHAM ROAD - 2031 - Base													
Stream B-C	D3	1.6	6.2	21.34	0.61	C	4.65	D4	0.8	3.6	14.92	0.43	B	4.50
Stream B-A		0.1	0.7	27.56	0.12	D			0.1	0.7	34.04	0.12	D	
Stream C-AB		0.8	3.6	14.03	0.45	B			1.8	7.7	19.88	0.63	C	
	ISTEAD RISE / WROTHAM ROAD - 2031 - Base + CD													
Stream B-C	D5	2.6	13.0	33.83	0.73	D	6.61	D6	1.0	4.3	17.95	0.49	C	5.98
Stream B-A		0.3	1.3	51.89	0.21	F			0.3	1.4	66.91	0.22	F	
Stream C-AB		1.1	4.8	17.68	0.53	C			3.2	16.9	25.68	0.74	D	
	ISTEAD RISE / WROTHAM ROAD - 2031 - Base + CD + PD													
Stream B-C	D7	3.7	20.2	45.47	0.80	E	8.92	D8	1.1	5.0	19.81	0.53	C	7.30
Stream B-A		0.4	1.4	72.57	0.29	F			0.4	1.4	82.53	0.27	F	
Stream C-AB		1.3	5.3	18.58	0.55	C			4.4	24.1	28.84	0.79	D	

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. Junction LOS and Junction Delay are demand-weighted averages.

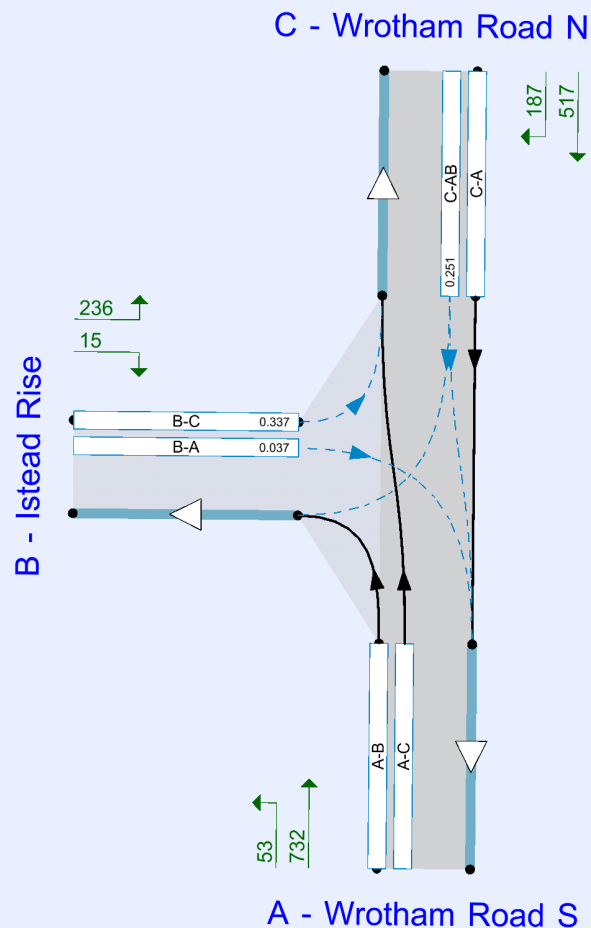
File summary

File Description

Title	Wrotham Road / Istead Rise Junction
Location	
Site number	1
Date	16/03/2026
Version	1.0
Status	(new file)
Identifier	PM
Client	Ptarmigam
Jobnumber	25/305
Enumerator	VP\GJosy
Description	

Units

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



Flows show original traffic demand (PCU/hr)
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026	Base	AM	ONE HOUR	08:00	09:30	15	✓
D2	2026	Base	PM	ONE HOUR	17:00	18:30	15	✓
D3	2031	Base	AM	ONE HOUR	08:00	09:30	15	✓
D4	2031	Base	PM	ONE HOUR	17:00	18:30	15	✓
D5	2031	Base + CD	AM	ONE HOUR	08:00	09:30	15	✓
D6	2031	Base + CD	PM	ONE HOUR	17:00	18:30	15	✓
D7	2031	Base + CD + PD	AM	ONE HOUR	08:00	09:30	15	✓
D8	2031	Base + CD + PD	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	ISTEAD RISE / WROTHAM ROAD	✓	100.000	100.000

ISTEAD RISE / WROTHAM ROAD - 2026 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Istead Rise - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	ISTEAD RISE / WROTHAM ROAD	T-Junction	Two-way	Two-way	Two-way		4.23	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.23	A

Arms

Arms

Arm	Name	Description	Arm type
A	Wrotham Road S		Major
B	Istead Rise		Minor
C	Wrotham Road N		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Wrotham Road N	6.40		✓	3.00	158.0	✓	7.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Istead Rise	One lane plus flare	10.00	7.70	3.70	2.30	2.30		2.00	69	26

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	556	0.098	0.247	0.156	0.353
B-C	683	0.105	0.264	-	-
C-B	723	0.275	0.275	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026	Base	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wrotham Road S		ONE HOUR	✓	785	100.000
B - Istead Rise		ONE HOUR	✓	251	100.000
C - Wrotham Road N		ONE HOUR	✓	704	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	From			
	A - Wrotham Road S	0	53	732
	B - Istead Rise	15	0	236
	C - Wrotham Road N	517	187	0

Proportions

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	From			
	A - Wrotham Road S	0.00	0.07	0.93
	B - Istead Rise	0.06	0.00	0.94
	C - Wrotham Road N	0.73	0.27	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	From			
	A - Wrotham Road S	3	3	3
	B - Istead Rise	3	3	3
	C - Wrotham Road N	3	3	3

Average PCU Per Veh

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	From			
	A - Wrotham Road S	1.030	1.030	1.030
	B - Istead Rise	1.030	1.030	1.030
	C - Wrotham Road N	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Wrotham Road S	591	591
	B - Istead Rise	189	189
	C - Wrotham Road N	530	530
08:15-08:30	A - Wrotham Road S	706	706
	B - Istead Rise	226	226
	C - Wrotham Road N	633	633
08:30-08:45	A - Wrotham Road S	864	864
	B - Istead Rise	276	276
	C - Wrotham Road N	775	775
08:45-09:00	A - Wrotham Road S	864	864
	B - Istead Rise	276	276
	C - Wrotham Road N	775	775
09:00-09:15	A - Wrotham Road S	706	706
	B - Istead Rise	226	226
	C - Wrotham Road N	633	633
09:15-09:30	A - Wrotham Road S	591	591
	B - Istead Rise	189	189
	C - Wrotham Road N	530	530

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.57	19.17	1.4	5.2	C	217	325
B-A	0.10	24.25	0.1	0.5	C	14	21
C-AB	0.42	13.22	0.8	3.4	B	172	258
C-A						474	711
A-B						49	73
A-C						672	1008

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	178	44	0.00	528	0.337	176	0.0	0.5	10.471	B
B-A	11	3	0.00	302	0.037	11	0.0	0.0	12.733	B
C-AB	141	35	0.00	561	0.251	139	0.0	0.3	8.775	A
C-A	389	97	0.00			389				
A-B	40	10	0.00			40				
A-C	551	138	0.00			551				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	212	53	0.00	497	0.427	211	0.5	0.7	12.936	B
B-A	13	3	0.00	249	0.054	13	0.0	0.1	15.759	C
C-AB	168	42	0.00	529	0.318	168	0.3	0.5	10.238	B
C-A	465	116	0.00			465				
A-B	48	12	0.00			48				
A-C	658	165	0.00			658				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	260	65	0.00	453	0.574	258	0.7	1.3	18.752	C
B-A	17	4	0.00	170	0.097	16	0.1	0.1	24.025	C
C-AB	207	52	0.00	487	0.424	206	0.5	0.7	13.120	B
C-A	569	142	0.00			569				
A-B	58	15	0.00			58				
A-C	806	201	0.00			806				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	260	65	0.00	453	0.574	260	1.3	1.4	19.172	C
B-A	17	4	0.00	169	0.097	17	0.1	0.1	24.245	C
C-AB	207	52	0.00	487	0.424	207	0.7	0.8	13.216	B
C-A	569	142	0.00			569				
A-B	58	15	0.00			58				
A-C	806	201	0.00			806				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	212	53	0.00	497	0.427	214	1.4	0.8	13.240	B
B-A	13	3	0.00	248	0.054	14	0.1	0.1	15.869	C
C-AB	168	42	0.00	529	0.318	169	0.8	0.5	10.329	B
C-A	465	116	0.00			465				
A-B	48	12	0.00			48				
A-C	658	165	0.00			658				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	178	44	0.00	528	0.337	179	0.8	0.5	10.658	B
B-A	11	3	0.00	301	0.037	11	0.1	0.0	12.796	B
C-AB	141	35	0.00	561	0.251	141	0.5	0.3	8.855	A
C-A	389	97	0.00			389				
A-B	40	10	0.00			40				
A-C	551	138	0.00			551				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.51	0.00	0.00	0.51	0.51			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.75	0.17	0.94	1.43	1.49			N/A	N/A
B-A	0.06	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.47	0.00	0.00	0.47	0.47			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.32	0.03	0.29	1.32	4.12			N/A	N/A
B-A	0.11	0.03	0.27	0.49	0.53			N/A	N/A
C-AB	0.74	0.03	0.27	0.74	0.74			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.35	0.03	0.29	1.35	5.22			N/A	N/A
B-A	0.11	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.75	0.03	0.30	1.31	3.37			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.79	0.06	0.69	1.21	1.74			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.49	0.04	0.42	1.28	1.41			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.53	0.04	0.41	1.20	1.20			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.35	0.03	0.28	0.50	0.91			N/A	N/A

ISTEAD RISE / WROTHAM ROAD - 2026 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Istead Rise - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	ISTEAD RISE / WROTHAM ROAD	T-Junction	Two-way	Two-way	Two-way		4.07	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.07	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026	Base	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wrotham Road S		ONE HOUR	✓	790	100.000
B - Istead Rise		ONE HOUR	✓	178	100.000
C - Wrotham Road N		ONE HOUR	✓	855	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0	51	739
	B - Istead Rise	12	0	166
	C - Wrotham Road N	595	260	0

Proportions

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0.00	0.06	0.94
	B - Istead Rise	0.07	0.00	0.93
	C - Wrotham Road N	0.70	0.30	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	A - Wrotham Road S	3	3	3
	B - Istead Rise	3	3	3
	C - Wrotham Road N	3	3	3

Average PCU Per Veh

From	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	A - Wrotham Road S	1.030	1.030	1.030
	B - Istead Rise	1.030	1.030	1.030
	C - Wrotham Road N	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Wrotham Road S	595	595
	B - Istead Rise	134	134
	C - Wrotham Road N	644	644
17:15-17:30	A - Wrotham Road S	710	710
	B - Istead Rise	160	160
	C - Wrotham Road N	769	769
17:30-17:45	A - Wrotham Road S	870	870
	B - Istead Rise	196	196
	C - Wrotham Road N	941	941
17:45-18:00	A - Wrotham Road S	870	870
	B - Istead Rise	196	196
	C - Wrotham Road N	941	941
18:00-18:15	A - Wrotham Road S	710	710
	B - Istead Rise	160	160
	C - Wrotham Road N	769	769
18:15-18:30	A - Wrotham Road S	595	595
	B - Istead Rise	134	134
	C - Wrotham Road N	644	644

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.41	13.84	0.7	3.2	B	152	228
B-A	0.09	28.97	0.1	0.5	D	11	17
C-AB	0.59	18.06	1.5	5.8	C	243	364
C-A						542	813
A-B						47	70
A-C						678	1017

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	125	31	0.00	527	0.237	124	0.0	0.3	9.164	A
B-A	9	2	0.00	275	0.033	9	0.0	0.0	13.905	B
C-AB	196	49	0.00	560	0.350	194	0.0	0.5	10.066	B
C-A	448	112	0.00			448				
A-B	38	10	0.00			38				
A-C	556	139	0.00			556				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	149	37	0.00	496	0.301	149	0.3	0.4	10.666	B
B-A	11	3	0.00	219	0.049	11	0.0	0.1	17.761	C
C-AB	235	59	0.00	530	0.443	234	0.5	0.8	12.472	B
C-A	534	133	0.00			534				
A-B	46	11	0.00			46				
A-C	664	166	0.00			664				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	183	46	0.00	451	0.405	182	0.4	0.7	13.732	B
B-A	13	3	0.00	142	0.093	13	0.1	0.1	28.676	D
C-AB	297	74	0.00	502	0.592	295	0.8	1.5	17.642	C
C-A	644	161	0.00			644				
A-B	56	14	0.00			56				
A-C	814	203	0.00			814				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	183	46	0.00	451	0.406	183	0.7	0.7	13.841	B
B-A	13	3	0.00	141	0.094	13	0.1	0.1	28.972	D
C-AB	297	74	0.00	502	0.592	297	1.5	1.5	18.060	C
C-A	644	161	0.00			644				
A-B	56	14	0.00			56				
A-C	814	203	0.00			814				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	149	37	0.00	496	0.301	150	0.7	0.5	10.764	B
B-A	11	3	0.00	218	0.049	11	0.1	0.1	17.924	C
C-AB	235	59	0.00	530	0.443	237	1.5	0.8	12.787	B
C-A	534	133	0.00			534				
A-B	46	11	0.00			46				
A-C	664	166	0.00			664				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	125	31	0.00	527	0.237	125	0.5	0.3	9.246	A
B-A	9	2	0.00	274	0.033	9	0.1	0.0	13.994	B
C-AB	196	49	0.00	560	0.350	197	0.8	0.6	10.246	B
C-A	448	112	0.00			448				
A-B	38	10	0.00			38				
A-C	556	139	0.00			556				

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.54	0.54	1.03	1.44	1.49			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B-A	0.05	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.80	0.16	0.94	1.44	1.51			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.69	0.03	0.27	0.69	0.69			N/A	N/A
B-A	0.10	0.03	0.27	0.49	0.54			N/A	N/A
C-AB	1.47	0.03	0.29	1.47	5.14			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.69	0.03	0.30	1.40	3.22			N/A	N/A
B-A	0.10	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	1.51	0.03	0.29	1.51	5.81			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.45	0.03	0.35	1.14	1.34			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.84	0.06	0.72	1.45	1.90			N/A	N/A

18:15 - 18:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.32	0.03	0.27	0.48	0.51			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.56	0.04	0.42	1.46	1.47			N/A	N/A

ISTEAD RISE / WROTHAM ROAD - 2031 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Istead Rise - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	ISTEAD RISE / WROTHAM ROAD	T-Junction	Two-way	Two-way	Two-way		4.65	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.65	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2031	Base	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wrotham Road S		ONE HOUR	✓	815	100.000
B - Istead Rise		ONE HOUR	✓	261	100.000
C - Wrotham Road N		ONE HOUR	✓	731	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0	55	760
	B - Istead Rise	16	0	245
	C - Wrotham Road N	537	194	0

Proportions

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0.00	0.07	0.93
	B - Istead Rise	0.06	0.00	0.94
	C - Wrotham Road N	0.73	0.27	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	A - Wrotham Road S	3	3	3
	B - Istead Rise	3	3	3
	C - Wrotham Road N	3	3	3

Average PCU Per Veh

From	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	A - Wrotham Road S	1.030	1.030	1.030
	B - Istead Rise	1.030	1.030	1.030
	C - Wrotham Road N	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Wrotham Road S	614	614
	B - Istead Rise	196	196
	C - Wrotham Road N	550	550
08:15-08:30	A - Wrotham Road S	733	733
	B - Istead Rise	235	235
	C - Wrotham Road N	657	657
08:30-08:45	A - Wrotham Road S	897	897
	B - Istead Rise	287	287
	C - Wrotham Road N	805	805
08:45-09:00	A - Wrotham Road S	897	897
	B - Istead Rise	287	287
	C - Wrotham Road N	805	805
09:00-09:15	A - Wrotham Road S	733	733
	B - Istead Rise	235	235
	C - Wrotham Road N	657	657
09:15-09:30	A - Wrotham Road S	614	614
	B - Istead Rise	196	196
	C - Wrotham Road N	550	550

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.61	21.34	1.6	6.2	C	225	337
B-A	0.12	27.56	0.1	0.7	D	15	22
C-AB	0.45	14.03	0.8	3.6	B	178	268
C-A						492	739
A-B						50	76
A-C						697	1046

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	184	46	0.00	522	0.354	182	0.0	0.6	10.858	B
B-A	12	3	0.00	292	0.041	12	0.0	0.0	13.228	B
C-AB	146	37	0.00	554	0.263	145	0.0	0.4	9.016	A
C-A	404	101	0.00			404				
A-B	41	10	0.00			41				
A-C	572	143	0.00			572				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	220	55	0.00	489	0.450	219	0.6	0.8	13.669	B
B-A	14	4	0.00	236	0.061	14	0.0	0.1	16.734	C
C-AB	174	44	0.00	522	0.334	174	0.4	0.5	10.637	B
C-A	483	121	0.00			483				
A-B	49	12	0.00			49				
A-C	683	171	0.00			683				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	270	67	0.00	443	0.609	267	0.8	1.5	20.655	C
B-A	18	4	0.00	153	0.115	17	0.1	0.1	27.203	D
C-AB	215	54	0.00	479	0.448	213	0.5	0.8	13.911	B
C-A	590	148	0.00			590				
A-B	61	15	0.00			61				
A-C	837	209	0.00			837				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	270	67	0.00	443	0.609	270	1.5	1.6	21.340	C
B-A	18	4	0.00	152	0.116	18	0.1	0.1	27.560	D
C-AB	215	54	0.00	479	0.448	215	0.8	0.8	14.035	B
C-A	590	148	0.00			590				
A-B	61	15	0.00			61				
A-C	837	209	0.00			837				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	220	55	0.00	489	0.450	223	1.6	0.9	14.073	B
B-A	14	4	0.00	234	0.061	15	0.1	0.1	16.889	C
C-AB	174	44	0.00	522	0.334	176	0.8	0.5	10.747	B
C-A	483	121	0.00			483				
A-B	49	12	0.00			49				
A-C	683	171	0.00			683				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	184	46	0.00	521	0.354	186	0.9	0.6	11.078	B
B-A	12	3	0.00	291	0.041	12	0.1	0.0	13.303	B
C-AB	146	37	0.00	554	0.263	147	0.5	0.4	9.106	A
C-A	404	101	0.00			404				
A-B	41	10	0.00			41				
A-C	572	143	0.00			572				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.55	0.55	1.03	1.44	1.49			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.36	0.00	0.00	0.36	0.36			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.82	0.15	0.94	1.45	1.52			N/A	N/A
B-A	0.07	0.03	0.27	0.48	0.51			N/A	N/A
C-AB	0.51	0.00	0.00	0.51	0.51			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.52	0.03	0.30	1.52	6.11			N/A	N/A
B-A	0.13	0.03	0.27	0.49	0.68			N/A	N/A
C-AB	0.82	0.03	0.27	0.82	0.82			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.56	0.03	0.30	1.56	6.20			N/A	N/A
B-A	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.83	0.03	0.30	1.27	3.62			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.87	0.06	0.66	1.63	2.08			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.53	0.05	0.50	1.33	1.44			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.57	0.04	0.40	1.51	1.68			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.37	0.03	0.31	0.92	1.23			N/A	N/A

ISTEAD RISE / WROTHAM ROAD - 2031 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Istead Rise - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	ISTEAD RISE / WROTHAM ROAD	T-Junction	Two-way	Two-way	Two-way		4.50	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.50	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2031	Base	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wrotham Road S		ONE HOUR	✓	823	100.000
B - Istead Rise		ONE HOUR	✓	186	100.000
C - Wrotham Road N		ONE HOUR	✓	891	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0	53	770
	B - Istead Rise	13	0	173
	C - Wrotham Road N	620	271	0

Proportions

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0.00	0.06	0.94
	B - Istead Rise	0.07	0.00	0.93
	C - Wrotham Road N	0.70	0.30	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	From			
	A - Wrotham Road S	3	3	3
	B - Istead Rise	3	3	3
	C - Wrotham Road N	3	3	3

Average PCU Per Veh

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	From			
	A - Wrotham Road S	1.030	1.030	1.030
	B - Istead Rise	1.030	1.030	1.030
	C - Wrotham Road N	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Wrotham Road S	620	620
	B - Istead Rise	140	140
	C - Wrotham Road N	671	671
17:15-17:30	A - Wrotham Road S	740	740
	B - Istead Rise	167	167
	C - Wrotham Road N	801	801
17:30-17:45	A - Wrotham Road S	906	906
	B - Istead Rise	205	205
	C - Wrotham Road N	981	981
17:45-18:00	A - Wrotham Road S	906	906
	B - Istead Rise	205	205
	C - Wrotham Road N	981	981
18:00-18:15	A - Wrotham Road S	740	740
	B - Istead Rise	167	167
	C - Wrotham Road N	801	801
18:15-18:30	A - Wrotham Road S	620	620
	B - Istead Rise	140	140
	C - Wrotham Road N	671	671

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.43	14.92	0.8	3.6	B	159	238
B-A	0.12	34.04	0.1	0.7	D	12	18
C-AB	0.63	19.88	1.8	7.7	C	255	383
C-A						562	843
A-B						49	73
A-C						707	1060

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	130	33	0.00	520	0.250	129	0.0	0.3	9.443	A
B-A	10	2	0.00	264	0.037	10	0.0	0.0	14.596	B
C-AB	204	51	0.00	553	0.369	202	0.0	0.6	10.482	B
C-A	467	117	0.00			467				
A-B	40	10	0.00			40				
A-C	580	145	0.00			580				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	156	39	0.00	487	0.319	155	0.3	0.5	11.133	B
B-A	12	3	0.00	205	0.057	12	0.0	0.1	19.163	C
C-AB	245	61	0.00	523	0.469	244	0.6	0.9	13.237	B
C-A	556	139	0.00			556				
A-B	48	12	0.00			48				
A-C	692	173	0.00			692				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	48	0.00	439	0.434	189	0.5	0.8	14.767	B
B-A	14	4	0.00	124	0.115	14	0.1	0.1	33.531	D
C-AB	317	79	0.00	503	0.630	314	0.9	1.7	19.257	C
C-A	664	166	0.00			664				
A-B	58	15	0.00			58				
A-C	848	212	0.00			848				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	48	0.00	439	0.434	190	0.8	0.8	14.920	B
B-A	14	4	0.00	123	0.116	14	0.1	0.1	34.040	D
C-AB	317	79	0.00	503	0.630	317	1.7	1.8	19.883	C
C-A	664	166	0.00			664				
A-B	58	15	0.00			58				
A-C	848	212	0.00			848				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	156	39	0.00	487	0.319	157	0.8	0.5	11.259	B
B-A	12	3	0.00	203	0.057	12	0.1	0.1	19.402	C
C-AB	245	61	0.00	523	0.469	249	1.8	0.9	13.682	B
C-A	556	139	0.00			556				
A-B	48	12	0.00			48				
A-C	692	173	0.00			692				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	130	33	0.00	520	0.250	131	0.5	0.3	9.540	A
B-A	10	2	0.00	262	0.037	10	0.1	0.0	14.707	B
C-AB	204	51	0.00	553	0.369	206	0.9	0.6	10.703	B
C-A	467	117	0.00			467				
A-B	40	10	0.00			40				
A-C	580	145	0.00			580				

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.59	0.57	1.03	1.44	1.49			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.47	0.00	0.00	0.47	0.47			N/A	N/A
B-A	0.06	0.03	0.27	0.48	0.50			N/A	N/A
C-AB	0.89	0.14	0.95	1.40	1.40			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.77	0.03	0.27	0.77	0.77			N/A	N/A
B-A	0.13	0.03	0.27	0.49	0.74			N/A	N/A
C-AB	1.74	0.03	0.30	1.74	7.67			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.78	0.03	0.30	1.37	3.55			N/A	N/A
B-A	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	1.79	0.03	0.30	1.79	7.35			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.49	0.04	0.43	1.29	1.42			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.94	0.06	0.68	1.82	2.54			N/A	N/A

18:15 - 18:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.03	0.29	0.61	1.08			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.61	0.04	0.41	1.17	1.88			N/A	N/A

ISTEAD RISE / WROTHAM ROAD - 2031 | Base + CD | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Istead Rise - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	ISTEAD RISE / WROTHAM ROAD	T-Junction	Two-way	Two-way	Two-way		6.61	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.61	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2031	Base + CD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wrotham Road S		ONE HOUR	✓	956	100.000
B - Istead Rise		ONE HOUR	✓	279	100.000
C - Wrotham Road N		ONE HOUR	✓	797	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0	55	901
	B - Istead Rise	17	0	262
	C - Wrotham Road N	590	207	0

Proportions

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0.00	0.06	0.94
	B - Istead Rise	0.06	0.00	0.94
	C - Wrotham Road N	0.74	0.26	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	From			
	A - Wrotham Road S	3	3	3
	B - Istead Rise	3	3	3
	C - Wrotham Road N	3	3	3

Average PCU Per Veh

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	From			
	A - Wrotham Road S	1.030	1.030	1.030
	B - Istead Rise	1.030	1.030	1.030
	C - Wrotham Road N	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Wrotham Road S	720	720
	B - Istead Rise	210	210
	C - Wrotham Road N	600	600
08:15-08:30	A - Wrotham Road S	859	859
	B - Istead Rise	251	251
	C - Wrotham Road N	716	716
08:30-08:45	A - Wrotham Road S	1053	1053
	B - Istead Rise	307	307
	C - Wrotham Road N	878	878
08:45-09:00	A - Wrotham Road S	1053	1053
	B - Istead Rise	307	307
	C - Wrotham Road N	878	878
09:00-09:15	A - Wrotham Road S	859	859
	B - Istead Rise	251	251
	C - Wrotham Road N	716	716
09:15-09:30	A - Wrotham Road S	720	720
	B - Istead Rise	210	210
	C - Wrotham Road N	600	600

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.73	33.83	2.6	13.0	D	240	361
B-A	0.21	51.89	0.3	1.3	F	16	23
C-AB	0.53	17.68	1.1	4.8	C	191	287
C-A						540	810
A-B						50	76
A-C						827	1240

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	197	49	0.00	493	0.400	195	0.0	0.7	12.330	B
B-A	13	3	0.00	254	0.050	13	0.0	0.1	15.332	C
C-AB	156	39	0.00	525	0.297	154	0.0	0.4	9.946	A
C-A	444	111	0.00			444				
A-B	41	10	0.00			41				
A-C	678	170	0.00			678				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	236	59	0.00	454	0.519	234	0.7	1.1	16.706	C
B-A	15	4	0.00	189	0.081	15	0.1	0.1	21.345	C
C-AB	186	47	0.00	487	0.382	186	0.4	0.6	12.249	B
C-A	530	133	0.00			530				
A-B	49	12	0.00			49				
A-C	810	202	0.00			810				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	288	72	0.00	397	0.727	283	1.1	2.4	31.150	D
B-A	19	5	0.00	93	0.202	18	0.1	0.2	49.222	E
C-AB	232	58	0.00	442	0.526	230	0.6	1.1	17.382	C
C-A	645	161	0.00			645				
A-B	61	15	0.00			61				
A-C	992	248	0.00			992				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	288	72	0.00	396	0.728	288	2.4	2.6	33.830	D
B-A	19	5	0.00	90	0.208	19	0.2	0.3	51.894	F
C-AB	232	58	0.00	442	0.526	232	1.1	1.1	17.683	C
C-A	645	161	0.00			645				
A-B	61	15	0.00			61				
A-C	992	248	0.00			992				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	236	59	0.00	454	0.519	241	2.6	1.2	17.890	C
B-A	15	4	0.00	186	0.082	16	0.3	0.1	21.886	C
C-AB	186	47	0.00	487	0.382	188	1.1	0.7	12.475	B
C-A	530	133	0.00			530				
A-B	49	12	0.00			49				
A-C	810	202	0.00			810				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	197	49	0.00	493	0.400	199	1.2	0.7	12.712	B
B-A	13	3	0.00	253	0.051	13	0.1	0.1	15.472	C
C-AB	156	39	0.00	525	0.297	157	0.7	0.4	10.082	B
C-A	444	111	0.00			444				
A-B	41	10	0.00			41				
A-C	678	170	0.00			678				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.67	0.57	1.03	1.44	1.49			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.43	0.00	0.00	0.43	0.43			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.07	0.10	1.00	1.73	2.04			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.63	0.14	0.91	1.42	1.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.44	0.04	0.35	5.59	12.98			N/A	N/A
B-A	0.24	0.03	0.28	0.50	1.26			N/A	N/A
C-AB	1.12	0.03	0.28	1.12	2.10			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.59	0.03	0.32	3.81	12.94			N/A	N/A
B-A	0.26	0.03	0.29	0.65	1.10			N/A	N/A
C-AB	1.14	0.03	0.30	1.37	4.81			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.15	0.05	0.46	2.82	4.41			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.65	0.06	0.65	1.41	1.51			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.70	0.04	0.35	1.63	3.02			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.44	0.04	0.38	1.25	1.42			N/A	N/A

ISTEAD RISE / WROTHAM ROAD - 2031 | Base + CD | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Istead Rise - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	ISTEAD RISE / WROTHAM ROAD	T-Junction	Two-way	Two-way	Two-way		5.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.98	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2031	Base + CD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wrotham Road S		ONE HOUR	✓	896	100.000
B - Istead Rise		ONE HOUR	✓	195	100.000
C - Wrotham Road N		ONE HOUR	✓	1037	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	A - Wrotham Road S	0	54	842
	B - Istead Rise	14	0	181
	C - Wrotham Road N	734	303	0

Proportions

	To			
From		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	A - Wrotham Road S	0.00	0.06	0.94
	B - Istead Rise	0.07	0.00	0.93
	C - Wrotham Road N	0.71	0.29	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	A - Wrotham Road S	3	3	3
	B - Istead Rise	3	3	3
	C - Wrotham Road N	3	3	3

Average PCU Per Veh

From	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	A - Wrotham Road S	1.030	1.030	1.030
	B - Istead Rise	1.030	1.030	1.030
	C - Wrotham Road N	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Wrotham Road S	675	675
	B - Istead Rise	147	147
	C - Wrotham Road N	781	781
17:15-17:30	A - Wrotham Road S	805	805
	B - Istead Rise	175	175
	C - Wrotham Road N	932	932
17:30-17:45	A - Wrotham Road S	987	987
	B - Istead Rise	215	215
	C - Wrotham Road N	1142	1142
17:45-18:00	A - Wrotham Road S	987	987
	B - Istead Rise	215	215
	C - Wrotham Road N	1142	1142
18:00-18:15	A - Wrotham Road S	805	805
	B - Istead Rise	175	175
	C - Wrotham Road N	932	932
18:15-18:30	A - Wrotham Road S	675	675
	B - Istead Rise	147	147
	C - Wrotham Road N	781	781

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.49	17.95	1.0	4.3	C	166	249
B-A	0.22	66.91	0.3	1.4	F	13	19
C-AB	0.74	25.68	3.2	16.9	D	306	458
C-A						646	969
A-B						50	74
A-C						773	1159

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	136	34	0.00	505	0.270	135	0.0	0.4	9.981	A
B-A	11	3	0.00	228	0.046	10	0.0	0.0	17.016	C
C-AB	229	57	0.00	539	0.424	226	0.0	0.7	11.722	B
C-A	552	138	0.00			552				
A-B	41	10	0.00			41				
A-C	634	158	0.00			634				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	163	41	0.00	468	0.348	162	0.4	0.5	12.093	B
B-A	13	3	0.00	162	0.077	12	0.0	0.1	24.695	C
C-AB	278	70	0.00	512	0.543	276	0.7	1.2	15.614	C
C-A	654	164	0.00			654				
A-B	49	12	0.00			49				
A-C	757	189	0.00			757				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	199	50	0.00	407	0.489	198	0.5	1.0	17.528	C
B-A	15	4	0.00	73	0.212	15	0.1	0.3	63.194	F
C-AB	410	102	0.00	555	0.739	402	1.2	3.0	23.707	C
C-A	732	183	0.00			732				
A-B	59	15	0.00			59				
A-C	927	232	0.00			927				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	199	50	0.00	406	0.491	199	1.0	1.0	17.949	C
B-A	15	4	0.00	71	0.218	15	0.3	0.3	66.910	F
C-AB	410	102	0.00	555	0.739	409	3.0	3.2	25.680	D
C-A	732	183	0.00			732				
A-B	59	15	0.00			59				
A-C	927	232	0.00			927				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	163	41	0.00	467	0.348	164	1.0	0.6	12.311	B
B-A	13	3	0.00	159	0.079	13	0.3	0.1	25.509	D
C-AB	278	70	0.00	512	0.543	286	3.2	1.3	16.929	C
C-A	654	164	0.00			654				
A-B	49	12	0.00			49				
A-C	757	189	0.00			757				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	136	34	0.00	505	0.270	137	0.6	0.4	10.107	B
B-A	11	3	0.00	226	0.047	11	0.1	0.1	17.222	C
C-AB	229	57	0.00	539	0.424	231	1.3	0.8	12.107	B
C-A	552	138	0.00			552				
A-B	41	10	0.00			41				
A-C	634	158	0.00			634				

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.38	0.00	0.00	0.38	0.38			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.74	0.57	1.03	1.44	1.49			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.54	0.54	1.03	1.44	1.49			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	1.20	0.10	1.04	2.02	2.75			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.95	0.03	0.28	0.95	1.42			N/A	N/A
B-A	0.25	0.03	0.28	0.51	1.37			N/A	N/A
C-AB	3.01	0.04	0.37	7.40	16.03			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.97	0.03	0.30	1.45	4.34			N/A	N/A
B-A	0.27	0.03	0.30	0.78	1.17			N/A	N/A
C-AB	3.24	0.03	0.33	5.57	16.87			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.56	0.05	0.53	1.35	1.45			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	1.30	0.05	0.48	3.19	5.00			N/A	N/A

18:15 - 18:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.39	0.03	0.34	1.12	1.34			N/A	N/A
B-A	0.05	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.78	0.04	0.36	1.83	3.42			N/A	N/A

ISTEAD RISE / WROTHAM ROAD - 2031 | Base + CD + PD | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Istead Rise - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	ISTEAD RISE / WROTHAM ROAD	T-Junction	Two-way	Two-way	Two-way		8.92	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.92	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031	Base + CD + PD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wrotham Road S		ONE HOUR	✓	957	100.000
B - Istead Rise		ONE HOUR	✓	305	100.000
C - Wrotham Road N		ONE HOUR	✓	807	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0	56	901
	B - Istead Rise	19	0	286
	C - Wrotham Road N	590	217	0

Proportions

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0.00	0.06	0.94
	B - Istead Rise	0.06	0.00	0.94
	C - Wrotham Road N	0.73	0.27	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	From			
	A - Wrotham Road S	3	3	3
	B - Istead Rise	3	3	3
	C - Wrotham Road N	3	3	3

Average PCU Per Veh

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	From			
	A - Wrotham Road S	1.030	1.030	1.030
	B - Istead Rise	1.030	1.030	1.030
	C - Wrotham Road N	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Wrotham Road S	720	720
	B - Istead Rise	230	230
	C - Wrotham Road N	608	608
08:15-08:30	A - Wrotham Road S	860	860
	B - Istead Rise	274	274
	C - Wrotham Road N	725	725
08:30-08:45	A - Wrotham Road S	1054	1054
	B - Istead Rise	336	336
	C - Wrotham Road N	889	889
08:45-09:00	A - Wrotham Road S	1054	1054
	B - Istead Rise	336	336
	C - Wrotham Road N	889	889
09:00-09:15	A - Wrotham Road S	860	860
	B - Istead Rise	274	274
	C - Wrotham Road N	725	725
09:15-09:30	A - Wrotham Road S	720	720
	B - Istead Rise	230	230
	C - Wrotham Road N	608	608

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.80	45.47	3.7	20.2	E	262	394
B-A	0.29	72.57	0.4	1.4	F	17	26
C-AB	0.55	18.58	1.3	5.3	C	201	302
C-A						539	809
A-B						51	77
A-C						827	1240

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	215	54	0.00	492	0.438	212	0.0	0.8	13.120	B
B-A	14	4	0.00	249	0.057	14	0.0	0.1	15.766	C
C-AB	163	41	0.00	525	0.311	162	0.0	0.5	10.150	B
C-A	444	111	0.00			444				
A-B	42	11	0.00			42				
A-C	678	170	0.00			678				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	257	64	0.00	453	0.568	255	0.8	1.3	18.546	C
B-A	17	4	0.00	180	0.095	17	0.1	0.1	22.724	C
C-AB	196	49	0.00	488	0.401	195	0.5	0.7	12.622	B
C-A	530	132	0.00			530				
A-B	50	13	0.00			50				
A-C	810	202	0.00			810				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	315	79	0.00	394	0.800	306	1.3	3.4	39.280	E
B-A	21	5	0.00	77	0.272	20	0.1	0.4	64.136	F
C-AB	245	61	0.00	445	0.552	243	0.7	1.2	18.202	C
C-A	643	161	0.00			643				
A-B	62	15	0.00			62				
A-C	992	248	0.00			992				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	315	79	0.00	392	0.803	314	3.4	3.7	45.470	E
B-A	21	5	0.00	72	0.292	21	0.4	0.4	72.567	F
C-AB	245	61	0.00	445	0.552	245	1.2	1.3	18.577	C
C-A	643	161	0.00			643				
A-B	62	15	0.00			62				
A-C	992	248	0.00			992				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	257	64	0.00	452	0.569	266	3.7	1.4	20.861	C
B-A	17	4	0.00	175	0.098	18	0.4	0.1	23.778	C
C-AB	196	49	0.00	488	0.401	198	1.3	0.7	12.891	B
C-A	530	132	0.00			530				
A-B	50	13	0.00			50				
A-C	810	202	0.00			810				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	215	54	0.00	492	0.438	218	1.4	0.8	13.656	B
B-A	14	4	0.00	247	0.058	15	0.1	0.1	15.957	C
C-AB	163	41	0.00	525	0.311	164	0.7	0.5	10.303	B
C-A	444	111	0.00			444				
A-B	42	11	0.00			42				
A-C	678	170	0.00			678				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.78	0.57	1.03	1.44	1.49			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.46	0.00	0.00	0.46	0.46			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.29	0.09	1.06	2.42	3.13			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.68	0.15	0.92	1.42	1.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	3.40	0.04	0.44	9.39	17.23			N/A	N/A
B-A	0.35	0.03	0.28	0.51	1.17			N/A	N/A
C-AB	1.24	0.03	0.28	1.24	3.37			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	3.73	0.04	0.36	8.30	20.19			N/A	N/A
B-A	0.40	0.04	0.35	1.22	1.43			N/A	N/A
C-AB	1.27	0.03	0.30	1.41	5.30			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.42	0.04	0.42	3.73	6.34			N/A	N/A
B-A	0.11	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.71	0.06	0.66	1.33	1.33			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.82	0.03	0.33	1.74	3.99			N/A	N/A
B-A	0.06	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.47	0.04	0.39	1.32	1.48			N/A	N/A

ISTEAD RISE / WROTHAM ROAD - 2031 | Base + CD + PD | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Istead Rise - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	ISTEAD RISE / WROTHAM ROAD	T-Junction	Two-way	Two-way	Two-way		7.30	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.30	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031	Base + CD + PD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wrotham Road S		ONE HOUR	✓	898	100.000
B - Istead Rise		ONE HOUR	✓	207	100.000
C - Wrotham Road N		ONE HOUR	✓	1057	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0	56	842
	B - Istead Rise	15	0	192
	C - Wrotham Road N	734	323	0

Proportions

	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
From	A - Wrotham Road S	0.00	0.06	0.94
	B - Istead Rise	0.07	0.00	0.93
	C - Wrotham Road N	0.69	0.31	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	A - Wrotham Road S	3	3	3
	B - Istead Rise	3	3	3
	C - Wrotham Road N	3	3	3

Average PCU Per Veh

From	To			
		A - Wrotham Road S	B - Istead Rise	C - Wrotham Road N
	A - Wrotham Road S	1.030	1.030	1.030
	B - Istead Rise	1.030	1.030	1.030
	C - Wrotham Road N	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Wrotham Road S	676	676
	B - Istead Rise	156	156
	C - Wrotham Road N	796	796
17:15-17:30	A - Wrotham Road S	807	807
	B - Istead Rise	186	186
	C - Wrotham Road N	950	950
17:30-17:45	A - Wrotham Road S	989	989
	B - Istead Rise	228	228
	C - Wrotham Road N	1164	1164
17:45-18:00	A - Wrotham Road S	989	989
	B - Istead Rise	228	228
	C - Wrotham Road N	1164	1164
18:00-18:15	A - Wrotham Road S	807	807
	B - Istead Rise	186	186
	C - Wrotham Road N	950	950
18:15-18:30	A - Wrotham Road S	676	676
	B - Istead Rise	156	156
	C - Wrotham Road N	796	796

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.53	19.81	1.1	5.0	C	176	264
B-A	0.27	82.53	0.4	1.4	F	14	21
C-AB	0.79	28.84	4.4	24.1	D	342	513
C-A						628	942
AB						51	77
AC						773	1159

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	0.00	504	0.287	143	0.0	0.4	10.222	B
B-A	11	3	0.00	222	0.051	11	0.0	0.1	17.536	C
C-AB	244	61	0.00	540	0.453	241	0.0	0.8	12.281	B
C-A	551	138	0.00			551				
A-B	42	11	0.00			42				
A-C	634	158	0.00			634				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	0.00	467	0.370	172	0.4	0.6	12.543	B
B-A	13	3	0.00	155	0.087	13	0.1	0.1	26.079	D
C-AB	300	75	0.00	517	0.580	297	0.8	1.4	16.717	C
C-A	650	163	0.00			650				
A-B	50	13	0.00			50				
A-C	757	189	0.00			757				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	211	53	0.00	402	0.526	209	0.6	1.1	19.086	C
B-A	17	4	0.00	64	0.258	16	0.1	0.3	75.407	F
C-AB	482	121	0.00	612	0.788	472	1.4	4.0	25.602	D
C-A	682	170	0.00			682				
A-B	62	15	0.00			62				
A-C	927	232	0.00			927				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	211	53	0.00	398	0.531	211	1.1	1.1	19.807	C
B-A	17	4	0.00	61	0.270	16	0.3	0.4	82.530	F
C-AB	482	121	0.00	612	0.788	480	4.0	4.4	28.837	D
C-A	682	170	0.00			682				
A-B	62	15	0.00			62				
A-C	927	232	0.00			927				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	0.00	465	0.371	175	1.1	0.6	12.841	B
B-A	13	3	0.00	151	0.089	14	0.4	0.1	27.326	D
C-AB	300	75	0.00	517	0.580	311	4.4	1.5	18.964	C
C-A	650	163	0.00			650				
A-B	50	13	0.00			50				
A-C	757	189	0.00			757				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	0.00	504	0.287	145	0.6	0.4	10.367	B
B-A	11	3	0.00	220	0.051	11	0.1	0.1	17.790	C
C-AB	244	61	0.00	540	0.453	247	1.5	0.9	12.779	B
C-A	551	138	0.00			551				
A-B	42	11	0.00			42				
A-C	634	158	0.00			634				

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.83	0.57	1.03	1.44	1.49			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.59	0.10	0.86	1.41	1.48			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	1.40	0.08	1.07	2.78	3.75			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.10	0.03	0.28	1.10	2.25			N/A	N/A
B-A	0.32	0.03	0.29	0.51	1.12			N/A	N/A
C-AB	3.98	0.04	0.45	11.07	20.31			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.14	0.03	0.30	1.53	5.04			N/A	N/A
B-A	0.36	0.03	0.34	1.14	1.37			N/A	N/A
C-AB	4.44	0.04	0.37	10.19	24.15			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.62	0.06	0.58	1.40	1.50			N/A	N/A
B-A	0.10	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	1.54	0.05	0.45	4.01	6.62			N/A	N/A

18:15 - 18:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.42	0.04	0.37	1.22	1.40			N/A	N/A
B-A	0.06	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.88	0.03	0.34	1.96	4.20			N/A	N/A

Junctions 11															
PICADY 11 - Priority Intersection Module															
Version: 11.0.0.2177															
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Filename: Junction 2 - The Drove Way - Istead Rise v0.2.j11

Path: \\vtp-cloud\Projects\0-25\25-305 Land North of Drove Way - Istead Rise\02 TECHNICAL\A ANALYSIS\D. MODELLING

Report generation date: 07/05/2026 16:21:50

- »THE DROVE WAY / ISTEAD RISE - 2026 | Base | AM
- »THE DROVE WAY / ISTEAD RISE - 2026 | Base | PM
- »THE DROVE WAY / ISTEAD RISE - 2031 | Base | AM
- »THE DROVE WAY / ISTEAD RISE - 2031 | Base | PM
- »THE DROVE WAY / ISTEAD RISE - 2031 | Base + CD | AM
- »THE DROVE WAY / ISTEAD RISE - 2031 | Base + CD | PM
- »THE DROVE WAY / ISTEAD RISE - 2031 | Base + CD + PD | AM
- »THE DROVE WAY / ISTEAD RISE - 2031 | Base + CD + PD | PM

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	THE DROVE WAY / ISTEAD RISE - 2026 - Base															
Stream B-AC	D1	0.4	1.4	9.11	0.27	A	3.04	A	D2	0.6	2.7	10.10	0.36	B	4.47	A
Stream C-AB		0.2	0.5	6.68	0.15	A				0.3	1.4	6.97	0.23	A		
	THE DROVE WAY / ISTEAD RISE - 2031 - Base															
Stream B-AC	D3	0.4	1.6	9.34	0.28	A	3.09	A	D4	0.6	2.8	10.48	0.38	B	4.60	A
Stream C-AB		0.2	0.5	6.74	0.16	A				0.3	1.5	7.05	0.24	A		
	THE DROVE WAY / ISTEAD RISE - 2031 - Base + CD															
Stream B-AC	D5	0.4	1.7	9.52	0.29	A	2.99	A	D6	0.6	2.9	10.69	0.38	B	4.40	A
Stream C-AB		0.2	0.5	6.78	0.16	A				0.3	1.5	6.99	0.24	A		
	THE DROVE WAY / ISTEAD RISE - 2031 - Base + CD + PD															
Stream B-AC	D7	0.6	2.6	10.32	0.35	B	3.59	A	D8	0.7	3.0	11.36	0.41	B	4.85	A
Stream C-AB		0.2	0.9	6.91	0.18	A				0.4	1.6	7.29	0.28	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. Junction LOS and Junction Delay are demand-weighted averages.

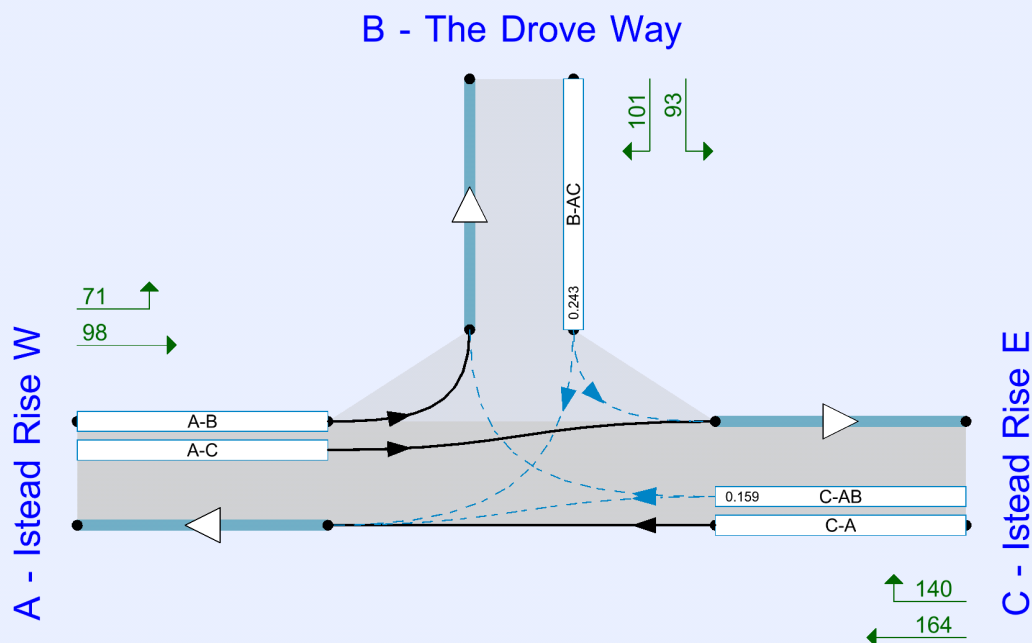
File summary

File Description

Title	The Drove Way / Istead Rise
Location	
Site number	J2
Date	16/03/2026
Version	1.0
Status	(new file)
Identifier	PM
Client	Ptarmigan
Jobnumber	25/305
Enumerator	VP\GJosy
Description	

Units

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



Flows show original traffic demand (PCU/hr)
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026	Base	AM	ONE HOUR	08:00	09:30	15	✓
D2	2026	Base	PM	ONE HOUR	17:00	18:30	15	✓
D3	2031	Base	AM	ONE HOUR	08:00	09:30	15	✓
D4	2031	Base	PM	ONE HOUR	17:00	18:30	15	✓
D5	2031	Base + CD	AM	ONE HOUR	08:00	09:30	15	✓
D6	2031	Base + CD	PM	ONE HOUR	17:00	18:30	15	✓
D7	2031	Base + CD + PD	AM	ONE HOUR	08:00	09:30	15	✓
D8	2031	Base + CD + PD	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	THE DROVE WAY / ISTEAD RISE	✓	100.000	100.000

THE DROVE WAY / ISTEAD RISE - 2026 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	The Drove Way/Istead Rise -	T-Junction	Two-way	Two-way	Two-way		3.04	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.04	A

Arms

Arms

Arm	Name	Description	Arm type
A	Istead Rise W		Major
B	The Drove Way		Minor
C	Istead Rise E		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Istead Rise E	6.90			208.0	✓	1.00

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 - The Drove Way	One lane	5.00	35	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	599	0.105	0.265	0.167	0.378
B-C	764	0.113	0.284	-	-
C-B	694	0.259	0.259	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026	Base	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Istead Rise W		ONE HOUR	✓	235	100.000
B - The Drove Way		ONE HOUR	✓	137	100.000
C - Istead Rise E		ONE HOUR	✓	234	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	0	67	168
	B - The Drove Way	76	0	61
	C - Istead Rise E	148	86	0

Proportions

	To			
From		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	0.00	0.29	0.71
	B - The Drove Way	0.55	0.00	0.45
	C - Istead Rise E	0.63	0.37	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
From		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	3	3	0
	B - The Drove Way	3	3	3
	C - Istead Rise E	3	3	3

Average PCU Per Veh

	To			
From		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	1.030	1.030	1.000
	B - The Drove Way	1.030	1.030	1.030
	C - Istead Rise E	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Istead Rise W	177	177
	B - The Drove Way	103	103
	C - Istead Rise E	176	176
08:15-08:30	A - Istead Rise W	211	211
	B - The Drove Way	123	123
	C - Istead Rise E	210	210
08:30-08:45	A - Istead Rise W	259	259
	B - The Drove Way	151	151
	C - Istead Rise E	258	258
08:45-09:00	A - Istead Rise W	259	259
	B - The Drove Way	151	151
	C - Istead Rise E	258	258
09:00-09:15	A - Istead Rise W	211	211
	B - The Drove Way	123	123
	C - Istead Rise E	210	210
09:15-09:30	A - Istead Rise W	177	177
	B - The Drove Way	103	103
	C - Istead Rise E	176	176

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.27	9.11	0.4	1.4	A	126	189
C-AB	0.15	6.68	0.2	0.5	A	81	122
C-A						133	200
A-B						61	92
A-C						154	231

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	103	26	0.00	592	0.174	102	0.0	0.2	7.564	A
C-AB	66	16	0.00	661	0.100	65	0.0	0.1	6.227	A
C-A	110	28	0.00			110				
A-B	50	13	0.00			50				
A-C	126	32	0.00			126				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	123	31	0.00	578	0.213	123	0.2	0.3	8.151	A
C-AB	79	20	0.00	657	0.121	79	0.1	0.1	6.419	A
C-A	131	33	0.00			131				
A-B	60	15	0.00			60				
A-C	151	38	0.00			151				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	38	0.00	558	0.270	150	0.3	0.4	9.088	A
C-AB	99	25	0.00	654	0.151	98	0.1	0.2	6.678	A
C-A	159	40	0.00			159				
A-B	74	18	0.00			74				
A-C	185	46	0.00			185				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	38	0.00	558	0.270	151	0.4	0.4	9.107	A
C-AB	99	25	0.00	654	0.151	99	0.2	0.2	6.684	A
C-A	159	40	0.00			159				
A-B	74	18	0.00			74				
A-C	185	46	0.00			185				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	123	31	0.00	578	0.213	124	0.4	0.3	8.176	A
C-AB	79	20	0.00	657	0.121	80	0.2	0.1	6.426	A
C-A	131	33	0.00			131				
A-B	60	15	0.00			60				
A-C	151	38	0.00			151				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	103	26	0.00	592	0.174	103	0.3	0.2	7.601	A
C-AB	66	16	0.00	661	0.100	66	0.1	0.1	6.240	A
C-A	110	28	0.00			110				
A-B	50	13	0.00			50				
A-C	126	32	0.00			126				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.19	0.03	0.26	0.48	0.50			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.03	0.32	1.27	1.42			N/A	N/A
C-AB	0.19	0.03	0.26	0.47	0.49			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

THE DROVE WAY / ISTEAD RISE - 2026 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	The Drove Way/Istead Rise -	T-Junction	Two-way	Two-way	Two-way		4.47	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.47	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026	Base	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Istead Rise W		ONE HOUR	✓	162	100.000
B - The Drove Way		ONE HOUR	✓	186	100.000
C - Istead Rise E		ONE HOUR	✓	291	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
From	A - Istead Rise W	0	68	94
	B - The Drove Way	97	0	89
	C - Istead Rise E	157	134	0

Proportions

	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
From	A - Istead Rise W	0.00	0.42	0.58
	B - The Drove Way	0.52	0.00	0.48
	C - Istead Rise E	0.54	0.46	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	3	3	0
	B - The Drove Way	3	3	3
	C - Istead Rise E	3	3	3

Average PCU Per Veh

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	1.030	1.030	1.000
	B - The Drove Way	1.030	1.030	1.030
	C - Istead Rise E	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Istead Rise W	122	122
	B - The Drove Way	140	140
	C - Istead Rise E	219	219
17:15-17:30	A - Istead Rise W	146	146
	B - The Drove Way	167	167
	C - Istead Rise E	262	262
17:30-17:45	A - Istead Rise W	178	178
	B - The Drove Way	205	205
	C - Istead Rise E	320	320
17:45-18:00	A - Istead Rise W	178	178
	B - The Drove Way	205	205
	C - Istead Rise E	320	320
18:00-18:15	A - Istead Rise W	146	146
	B - The Drove Way	167	167
	C - Istead Rise E	262	262
18:15-18:30	A - Istead Rise W	122	122
	B - The Drove Way	140	140
	C - Istead Rise E	219	219

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.36	10.10	0.6	2.7	B	171	256
C-AB	0.23	6.97	0.3	1.4	A	129	193
C-A						138	207
A-B						62	94
A-C						86	129

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	140	35	0.00	603	0.232	139	0.0	0.3	7.963	A
C-AB	104	26	0.00	682	0.152	103	0.0	0.2	6.398	A
C-A	115	29	0.00			115				
A-B	51	13	0.00			51				
A-C	71	18	0.00			71				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	42	0.00	590	0.283	167	0.3	0.4	8.753	A
C-AB	125	31	0.00	684	0.183	125	0.2	0.2	6.635	A
C-A	136	34	0.00			136				
A-B	61	15	0.00			61				
A-C	85	21	0.00			85				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	205	51	0.00	572	0.358	204	0.4	0.6	10.069	B
C-AB	157	39	0.00	689	0.228	157	0.2	0.3	6.957	A
C-A	164	41	0.00			164				
A-B	75	19	0.00			75				
A-C	103	26	0.00			103				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	205	51	0.00	572	0.358	205	0.6	0.6	10.104	B
C-AB	157	39	0.00	689	0.228	157	0.3	0.3	6.966	A
C-A	164	41	0.00			164				
A-B	75	19	0.00			75				
A-C	103	26	0.00			103				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	42	0.00	590	0.283	168	0.6	0.4	8.799	A
C-AB	125	31	0.00	684	0.183	126	0.3	0.2	6.646	A
C-A	136	34	0.00			136				
A-B	61	15	0.00			61				
A-C	85	21	0.00			85				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	140	35	0.00	603	0.232	140	0.4	0.3	8.024	A
C-AB	104	26	0.00	682	0.152	104	0.2	0.2	6.420	A
C-A	115	29	0.00			115				
A-B	51	13	0.00			51				
A-C	71	18	0.00			71				

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.57	0.03	0.26	0.57	0.57			N/A	N/A
C-AB	0.32	0.03	0.26	0.47	0.50			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.57	0.03	0.30	1.33	2.66			N/A	N/A
C-AB	0.32	0.03	0.32	1.11	1.40			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.00	0.00	0.41	0.41			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

18:15 - 18:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

THE DROVE WAY / ISTEAD RISE - 2031 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	The Drove Way/Istead Rise -	T-Junction	Two-way	Two-way	Two-way		3.09	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.09	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2031	Base	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Istead Rise W		ONE HOUR	✓	245	100.000
B - The Drove Way		ONE HOUR	✓	142	100.000
C - Istead Rise E		ONE HOUR	✓	243	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
From	A - Istead Rise W	0	70	175
	B - The Drove Way	79	0	63
	C - Istead Rise E	154	89	0

Proportions

	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
From	A - Istead Rise W	0.00	0.29	0.71
	B - The Drove Way	0.56	0.00	0.44
	C - Istead Rise E	0.63	0.37	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	3	3	0
	B - The Drove Way	3	3	3
	C - Istead Rise E	3	3	3

Average PCU Per Veh

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	1.030	1.030	1.000
	B - The Drove Way	1.030	1.030	1.030
	C - Istead Rise E	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Istead Rise W	184	184
	B - The Drove Way	107	107
	C - Istead Rise E	183	183
08:15-08:30	A - Istead Rise W	220	220
	B - The Drove Way	128	128
	C - Istead Rise E	218	218
08:30-08:45	A - Istead Rise W	270	270
	B - The Drove Way	156	156
	C - Istead Rise E	268	268
08:45-09:00	A - Istead Rise W	270	270
	B - The Drove Way	156	156
	C - Istead Rise E	268	268
09:00-09:15	A - Istead Rise W	220	220
	B - The Drove Way	128	128
	C - Istead Rise E	218	218
09:15-09:30	A - Istead Rise W	184	184
	B - The Drove Way	107	107
	C - Istead Rise E	183	183

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.28	9.34	0.4	1.6	A	130	195
C-AB	0.16	6.74	0.2	0.5	A	84	127
C-A						139	208
A-B						64	96
A-C						161	241

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	0.00	589	0.182	106	0.0	0.2	7.670	A
C-AB	68	17	0.00	660	0.104	68	0.0	0.1	6.261	A
C-A	115	29	0.00			115				
A-B	53	13	0.00			53				
A-C	132	33	0.00			132				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	32	0.00	574	0.222	127	0.2	0.3	8.300	A
C-AB	82	21	0.00	656	0.126	82	0.1	0.2	6.463	A
C-A	136	34	0.00			136				
A-B	63	16	0.00			63				
A-C	157	39	0.00			157				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	39	0.00	553	0.283	156	0.3	0.4	9.318	A
C-AB	102	26	0.00	653	0.157	102	0.2	0.2	6.733	A
C-A	165	41	0.00			165				
A-B	77	19	0.00			77				
A-C	193	48	0.00			193				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	39	0.00	553	0.283	156	0.4	0.4	9.340	A
C-AB	102	26	0.00	653	0.157	102	0.2	0.2	6.737	A
C-A	165	41	0.00			165				
A-B	77	19	0.00			77				
A-C	193	48	0.00			193				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	32	0.00	574	0.223	128	0.4	0.3	8.327	A
C-AB	82	21	0.00	656	0.126	83	0.2	0.2	6.468	A
C-A	136	34	0.00			136				
A-B	63	16	0.00			63				
A-C	157	39	0.00			157				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	0.00	588	0.182	107	0.3	0.2	7.709	A
C-AB	68	17	0.00	660	0.104	68	0.2	0.1	6.276	A
C-A	115	29	0.00			115				
A-B	53	13	0.00			53				
A-C	132	33	0.00			132				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.20	0.03	0.26	0.48	0.50			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.03	0.32	1.31	1.62			N/A	N/A
C-AB	0.20	0.03	0.26	0.47	0.50			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

THE DROVE WAY / ISTEAD RISE - 2031 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	The Drove Way/Istead Rise -	T-Junction	Two-way	Two-way	Two-way		4.60	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.60	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2031	Base	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Istead Rise W		ONE HOUR	✓	169	100.000
B - The Drove Way		ONE HOUR	✓	194	100.000
C - Istead Rise E		ONE HOUR	✓	304	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
From	A - Istead Rise W	0	71	98
	B - The Drove Way	101	0	93
	C - Istead Rise E	164	140	0

Proportions

	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
From	A - Istead Rise W	0.00	0.42	0.58
	B - The Drove Way	0.52	0.00	0.48
	C - Istead Rise E	0.54	0.46	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	3	3	0
	B - The Drove Way	3	3	3
	C - Istead Rise E	3	3	3

Average PCU Per Veh

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	1.030	1.030	1.000
	B - The Drove Way	1.030	1.030	1.030
	C - Istead Rise E	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Istead Rise W	127	127
	B - The Drove Way	146	146
	C - Istead Rise E	229	229
17:15-17:30	A - Istead Rise W	152	152
	B - The Drove Way	174	174
	C - Istead Rise E	273	273
17:30-17:45	A - Istead Rise W	186	186
	B - The Drove Way	214	214
	C - Istead Rise E	335	335
17:45-18:00	A - Istead Rise W	186	186
	B - The Drove Way	214	214
	C - Istead Rise E	335	335
18:00-18:15	A - Istead Rise W	152	152
	B - The Drove Way	174	174
	C - Istead Rise E	273	273
18:15-18:30	A - Istead Rise W	127	127
	B - The Drove Way	146	146
	C - Istead Rise E	229	229

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.38	10.48	0.6	2.8	B	178	267
C-AB	0.24	7.05	0.3	1.5	A	135	203
C-A						144	216
A-B						65	98
A-C						90	135

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	146	37	0.00	601	0.243	145	0.0	0.3	8.114	A
C-AB	109	27	0.00	682	0.159	108	0.0	0.2	6.448	A
C-A	120	30	0.00			120				
A-B	53	13	0.00			53				
A-C	74	18	0.00			74				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	44	0.00	587	0.297	174	0.3	0.4	8.975	A
C-AB	132	33	0.00	685	0.192	131	0.2	0.3	6.698	A
C-A	142	35	0.00			142				
A-B	64	16	0.00			64				
A-C	88	22	0.00			88				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	214	53	0.00	567	0.376	213	0.4	0.6	10.434	B
C-AB	165	41	0.00	691	0.238	165	0.3	0.3	7.038	A
C-A	170	42	0.00			170				
A-B	78	20	0.00			78				
A-C	108	27	0.00			108				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	214	53	0.00	567	0.376	214	0.6	0.6	10.477	B
C-AB	165	41	0.00	691	0.238	165	0.3	0.3	7.048	A
C-A	170	42	0.00			170				
A-B	78	20	0.00			78				
A-C	108	27	0.00			108				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	44	0.00	587	0.297	175	0.6	0.4	9.027	A
C-AB	132	33	0.00	685	0.192	132	0.3	0.3	6.712	A
C-A	142	35	0.00			142				
A-B	64	16	0.00			64				
A-C	88	22	0.00			88				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	146	37	0.00	600	0.243	146	0.4	0.3	8.180	A
C-AB	109	27	0.00	682	0.159	109	0.3	0.2	6.469	A
C-A	120	30	0.00			120				
A-B	53	13	0.00			53				
A-C	74	18	0.00			74				

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.61	0.03	0.26	0.61	0.61			N/A	N/A
C-AB	0.34	0.03	0.26	0.47	0.50			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.03	0.30	1.28	2.82			N/A	N/A
C-AB	0.34	0.03	0.33	1.18	1.47			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C-AB	0.26	0.00	0.00	0.26	0.26			N/A	N/A

18:15 - 18:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

THE DROVE WAY / ISTEAD RISE - 2031 | Base + CD | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	The Drove Way/Istead Rise -	T-Junction	Two-way	Two-way	Two-way		2.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.99	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2031	Base + CD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Istead Rise W		ONE HOUR	✓	264	100.000
B - The Drove Way		ONE HOUR	✓	142	100.000
C - Istead Rise E		ONE HOUR	✓	256	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	0	70	194
	B - The Drove Way	79	0	63
	C - Istead Rise E	167	89	0

Proportions

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	0.00	0.27	0.73
	B - The Drove Way	0.56	0.00	0.44
	C - Istead Rise E	0.65	0.35	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	3	3	0
	B - The Drove Way	3	3	3
	C - Istead Rise E	3	3	3

Average PCU Per Veh

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	1.030	1.030	1.000
	B - The Drove Way	1.030	1.030	1.030
	C - Istead Rise E	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Istead Rise W	199	199
	B - The Drove Way	107	107
	C - Istead Rise E	193	193
08:15-08:30	A - Istead Rise W	237	237
	B - The Drove Way	128	128
	C - Istead Rise E	230	230
08:30-08:45	A - Istead Rise W	291	291
	B - The Drove Way	156	156
	C - Istead Rise E	282	282
08:45-09:00	A - Istead Rise W	291	291
	B - The Drove Way	156	156
	C - Istead Rise E	282	282
09:00-09:15	A - Istead Rise W	237	237
	B - The Drove Way	128	128
	C - Istead Rise E	230	230
09:15-09:30	A - Istead Rise W	199	199
	B - The Drove Way	107	107
	C - Istead Rise E	193	193

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.29	9.52	0.4	1.7	A	130	195
C-AB	0.16	6.78	0.2	0.5	A	85	127
C-A						150	225
A-B						64	96
A-C						178	267

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	0.00	583	0.183	106	0.0	0.2	7.752	A
C-AB	68	17	0.00	657	0.104	68	0.0	0.1	6.289	A
C-A	124	31	0.00			124				
A-B	53	13	0.00			53				
A-C	146	37	0.00			146				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	32	0.00	568	0.225	127	0.2	0.3	8.417	A
C-AB	83	21	0.00	653	0.126	82	0.1	0.2	6.496	A
C-A	148	37	0.00			148				
A-B	63	16	0.00			63				
A-C	174	44	0.00			174				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	39	0.00	546	0.287	156	0.3	0.4	9.497	A
C-AB	103	26	0.00	650	0.158	103	0.2	0.2	6.773	A
C-A	179	45	0.00			179				
A-B	77	19	0.00			77				
A-C	214	53	0.00			214				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	39	0.00	546	0.287	156	0.4	0.4	9.524	A
C-AB	103	26	0.00	650	0.158	103	0.2	0.2	6.777	A
C-A	179	45	0.00			179				
A-B	77	19	0.00			77				
A-C	214	53	0.00			214				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	32	0.00	568	0.225	128	0.4	0.3	8.447	A
C-AB	83	21	0.00	653	0.126	83	0.2	0.2	6.501	A
C-A	148	37	0.00			148				
A-B	63	16	0.00			63				
A-C	174	44	0.00			174				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	0.00	583	0.183	107	0.3	0.2	7.793	A
C-AB	68	17	0.00	657	0.104	69	0.2	0.1	6.304	A
C-A	124	31	0.00			124				
A-B	53	13	0.00			53				
A-C	146	37	0.00			146				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.20	0.03	0.26	0.48	0.50			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.03	0.32	1.33	1.68			N/A	N/A
C-AB	0.20	0.03	0.26	0.47	0.50			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

THE DROVE WAY / ISTEAD RISE - 2031 | Base + CD | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	The Drove Way/Istead Rise -	T-Junction	Two-way	Two-way	Two-way		4.40	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.40	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2031	Base + CD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Istead Rise W		ONE HOUR	✓	177	100.000
B - The Drove Way		ONE HOUR	✓	194	100.000
C - Istead Rise E		ONE HOUR	✓	337	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	0	71	106
	B - The Drove Way	101	0	93
	C - Istead Rise E	197	140	0

Proportions

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	0.00	0.40	0.60
	B - The Drove Way	0.52	0.00	0.48
	C - Istead Rise E	0.58	0.42	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	3	3	0
	B - The Drove Way	3	3	3
	C - Istead Rise E	3	3	3

Average PCU Per Veh

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	1.030	1.030	1.000
	B - The Drove Way	1.030	1.030	1.030
	C - Istead Rise E	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Istead Rise W	133	133
	B - The Drove Way	146	146
	C - Istead Rise E	254	254
17:15-17:30	A - Istead Rise W	159	159
	B - The Drove Way	174	174
	C - Istead Rise E	303	303
17:30-17:45	A - Istead Rise W	195	195
	B - The Drove Way	214	214
	C - Istead Rise E	371	371
17:45-18:00	A - Istead Rise W	195	195
	B - The Drove Way	214	214
	C - Istead Rise E	371	371
18:00-18:15	A - Istead Rise W	159	159
	B - The Drove Way	174	174
	C - Istead Rise E	303	303
18:15-18:30	A - Istead Rise W	133	133
	B - The Drove Way	146	146
	C - Istead Rise E	254	254

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.38	10.69	0.6	2.9	B	178	267
C-AB	0.24	6.99	0.3	1.5	A	136	205
C-A						173	259
A-B						65	98
A-C						97	146

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	146	37	0.00	596	0.245	145	0.0	0.3	8.196	A
C-AB	109	27	0.00	685	0.160	109	0.0	0.2	6.426	A
C-A	144	36	0.00			144				
A-B	53	13	0.00			53				
A-C	80	20	0.00			80				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	44	0.00	581	0.300	174	0.3	0.4	9.100	A
C-AB	133	33	0.00	689	0.193	133	0.2	0.3	6.661	A
C-A	170	43	0.00			170				
A-B	64	16	0.00			64				
A-C	95	24	0.00			95				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	214	53	0.00	560	0.381	213	0.4	0.6	10.644	B
C-AB	167	42	0.00	698	0.239	167	0.3	0.3	6.975	A
C-A	204	51	0.00			204				
A-B	78	20	0.00			78				
A-C	117	29	0.00			117				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	214	53	0.00	560	0.381	214	0.6	0.6	10.690	B
C-AB	167	42	0.00	698	0.239	167	0.3	0.3	6.986	A
C-A	204	51	0.00			204				
A-B	78	20	0.00			78				
A-C	117	29	0.00			117				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	44	0.00	581	0.300	175	0.6	0.4	9.155	A
C-AB	133	33	0.00	689	0.193	133	0.3	0.3	6.676	A
C-A	170	43	0.00			170				
A-B	64	16	0.00			64				
A-C	95	24	0.00			95				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	146	37	0.00	596	0.245	146	0.4	0.3	8.264	A
C-AB	109	27	0.00	685	0.160	110	0.3	0.2	6.449	A
C-A	144	36	0.00			144				
A-B	53	13	0.00			53				
A-C	80	20	0.00			80				

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C-AB	0.26	0.00	0.00	0.26	0.26			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.03	0.26	0.62	0.62			N/A	N/A
C-AB	0.35	0.03	0.26	0.47	0.50			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.03	0.30	1.27	2.86			N/A	N/A
C-AB	0.35	0.03	0.33	1.19	1.47			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.26	0.00	0.00	0.26	0.26			N/A	N/A

18:15 - 18:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

THE DROVE WAY / ISTEAD RISE - 2031 | Base + CD + PD | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	The Drove Way/Istead Rise -	T-Junction	Two-way	Two-way	Two-way		3.59	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.59	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031	Base + CD + PD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Istead Rise W		ONE HOUR	✓	267	100.000
B - The Drove Way		ONE HOUR	✓	178	100.000
C - Istead Rise E		ONE HOUR	✓	267	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
From	A - Istead Rise W	0	73	194
	B - The Drove Way	88	0	90
	C - Istead Rise E	167	100	0

Proportions

	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
From	A - Istead Rise W	0.00	0.27	0.73
	B - The Drove Way	0.49	0.00	0.51
	C - Istead Rise E	0.63	0.37	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	3	3	0
	B - The Drove Way	3	3	3
	C - Istead Rise E	3	3	3

Average PCU Per Veh

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	1.030	1.030	1.000
	B - The Drove Way	1.030	1.030	1.030
	C - Istead Rise E	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Istead Rise W	201	201
	B - The Drove Way	134	134
	C - Istead Rise E	201	201
08:15-08:30	A - Istead Rise W	240	240
	B - The Drove Way	160	160
	C - Istead Rise E	240	240
08:30-08:45	A - Istead Rise W	294	294
	B - The Drove Way	196	196
	C - Istead Rise E	294	294
08:45-09:00	A - Istead Rise W	294	294
	B - The Drove Way	196	196
	C - Istead Rise E	294	294
09:00-09:15	A - Istead Rise W	240	240
	B - The Drove Way	160	160
	C - Istead Rise E	240	240
09:15-09:30	A - Istead Rise W	201	201
	B - The Drove Way	134	134
	C - Istead Rise E	201	201

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.35	10.32	0.6	2.6	B	163	245
C-AB	0.18	6.91	0.2	0.9	A	95	143
C-A						150	224
A-B						67	100
A-C						178	267

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	134	34	0.00	593	0.226	133	0.0	0.3	8.030	A
C-AB	77	19	0.00	658	0.117	77	0.0	0.1	6.371	A
C-A	124	31	0.00			124				
A-B	55	14	0.00			55				
A-C	146	37	0.00			146				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	160	40	0.00	577	0.277	160	0.3	0.4	8.866	A
C-AB	93	23	0.00	655	0.142	93	0.1	0.2	6.596	A
C-A	147	37	0.00			147				
A-B	66	16	0.00			66				
A-C	174	44	0.00			174				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	196	49	0.00	555	0.353	195	0.4	0.6	10.280	B
C-AB	116	29	0.00	653	0.178	116	0.2	0.2	6.906	A
C-A	178	44	0.00			178				
A-B	80	20	0.00			80				
A-C	214	53	0.00			214				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	196	49	0.00	555	0.353	196	0.6	0.6	10.316	B
C-AB	116	29	0.00	653	0.178	116	0.2	0.2	6.912	A
C-A	178	44	0.00			178				
A-B	80	20	0.00			80				
A-C	214	53	0.00			214				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	160	40	0.00	577	0.277	161	0.6	0.4	8.912	A
C-AB	93	23	0.00	655	0.142	93	0.2	0.2	6.604	A
C-A	147	37	0.00			147				
A-B	66	16	0.00			66				
A-C	174	44	0.00			174				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	134	34	0.00	593	0.226	134	0.4	0.3	8.089	A
C-AB	77	19	0.00	658	0.117	77	0.2	0.1	6.384	A
C-A	124	31	0.00			124				
A-B	55	14	0.00			55				
A-C	146	37	0.00			146				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.39	0.00	0.00	0.39	0.39			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.03	0.26	0.55	0.55			N/A	N/A
C-AB	0.23	0.03	0.26	0.47	0.50			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.56	0.03	0.30	1.36	2.60			N/A	N/A
C-AB	0.23	0.03	0.28	0.50	0.90			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

THE DROVE WAY / ISTEAD RISE - 2031 | Base + CD + PD | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	The Drove Way/Istead Rise -	T-Junction	Two-way	Two-way	Two-way		4.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.85	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031	Base + CD + PD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Istead Rise W		ONE HOUR	✓	184	100.000
B - The Drove Way		ONE HOUR	✓	210	100.000
C - Istead Rise E		ONE HOUR	✓	359	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
From	A - Istead Rise W	0	78	106
	B - The Drove Way	105	0	105
	C - Istead Rise E	197	162	0

Proportions

	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
From	A - Istead Rise W	0.00	0.42	0.58
	B - The Drove Way	0.50	0.00	0.50
	C - Istead Rise E	0.55	0.45	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	3	3	3
	B - The Drove Way	3	3	3
	C - Istead Rise E	3	3	3

Average PCU Per Veh

From	To			
		A - Istead Rise W	B - The Drove Way	C - Istead Rise E
	A - Istead Rise W	1.030	1.030	1.030
	B - The Drove Way	1.030	1.030	1.030
	C - Istead Rise E	1.030	1.030	1.030

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Istead Rise W	139	139
	B - The Drove Way	158	158
	C - Istead Rise E	270	270
17:15-17:30	A - Istead Rise W	165	165
	B - The Drove Way	189	189
	C - Istead Rise E	323	323
17:30-17:45	A - Istead Rise W	203	203
	B - The Drove Way	231	231
	C - Istead Rise E	395	395
17:45-18:00	A - Istead Rise W	203	203
	B - The Drove Way	231	231
	C - Istead Rise E	395	395
18:00-18:15	A - Istead Rise W	165	165
	B - The Drove Way	189	189
	C - Istead Rise E	323	323
18:15-18:30	A - Istead Rise W	139	139
	B - The Drove Way	158	158
	C - Istead Rise E	270	270

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.41	11.36	0.7	3.0	B	193	289
C-AB	0.28	7.29	0.4	1.6	A	159	239
C-A						170	255
A-B						72	107
A-C						97	146

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	158	40	0.00	595	0.266	157	0.0	0.4	8.424	A
C-AB	127	32	0.00	687	0.185	126	0.0	0.2	6.598	A
C-A	143	36	0.00			143				
A-B	59	15	0.00			59				
A-C	80	20	0.00			80				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	189	47	0.00	580	0.326	188	0.4	0.5	9.462	A
C-AB	155	39	0.00	693	0.223	155	0.2	0.3	6.883	A
C-A	168	42	0.00			168				
A-B	70	18	0.00			70				
A-C	95	24	0.00			95				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	231	58	0.00	558	0.415	230	0.5	0.7	11.294	B
C-AB	196	49	0.00	705	0.278	195	0.3	0.4	7.277	A
C-A	200	50	0.00			200				
A-B	86	21	0.00			86				
A-C	117	29	0.00			117				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	231	58	0.00	558	0.415	231	0.7	0.7	11.358	B
C-AB	196	49	0.00	705	0.278	196	0.4	0.4	7.289	A
C-A	200	50	0.00			200				
A-B	86	21	0.00			86				
A-C	117	29	0.00			117				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	189	47	0.00	579	0.326	190	0.7	0.5	9.535	A
C-AB	155	39	0.00	693	0.223	155	0.4	0.3	6.903	A
C-A	168	42	0.00			168				
A-B	70	18	0.00			70				
A-C	95	24	0.00			95				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	158	40	0.00	595	0.266	159	0.5	0.4	8.505	A
C-AB	127	32	0.00	687	0.185	128	0.3	0.2	6.626	A
C-A	143	36	0.00			143				
A-B	59	15	0.00			59				
A-C	80	20	0.00			80				

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C-AB	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.71	0.03	0.27	0.71	0.71			N/A	N/A
C-AB	0.43	0.03	0.26	0.47	0.50			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.72	0.03	0.29	1.13	3.04			N/A	N/A
C-AB	0.43	0.03	0.33	1.38	1.65			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.05	0.46	1.31	1.43			N/A	N/A
C-AB	0.32	0.00	0.00	0.32	0.32			N/A	N/A

18:15 - 18:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.03	0.28	0.51	0.98			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A