Appendix A – Transport Scoping Report

REPORT

Growing Baldock

Transport Scoping Report

Client: Urban & Civic

Reference: TP1035-ITP-RP-TP-0001
Status: S1/P03
Date: 3 February 2025

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1 Introduction

1.1 Overview

This Transport Scoping Report (TSR) has been prepared by ITP on behalf of Urban & Civic (U&C) in association with a developing outline planning application for the proposed 'Growing Baldock' development.

The proposed Growing Baldock development is a phased development that seeks to deliver up to 3,200 new homes, some 16 hectares (ha) of employment land, community facilities, schools, green spaces, and improved transport connections on land to the north and east of Baldock in North Hertfordshire.

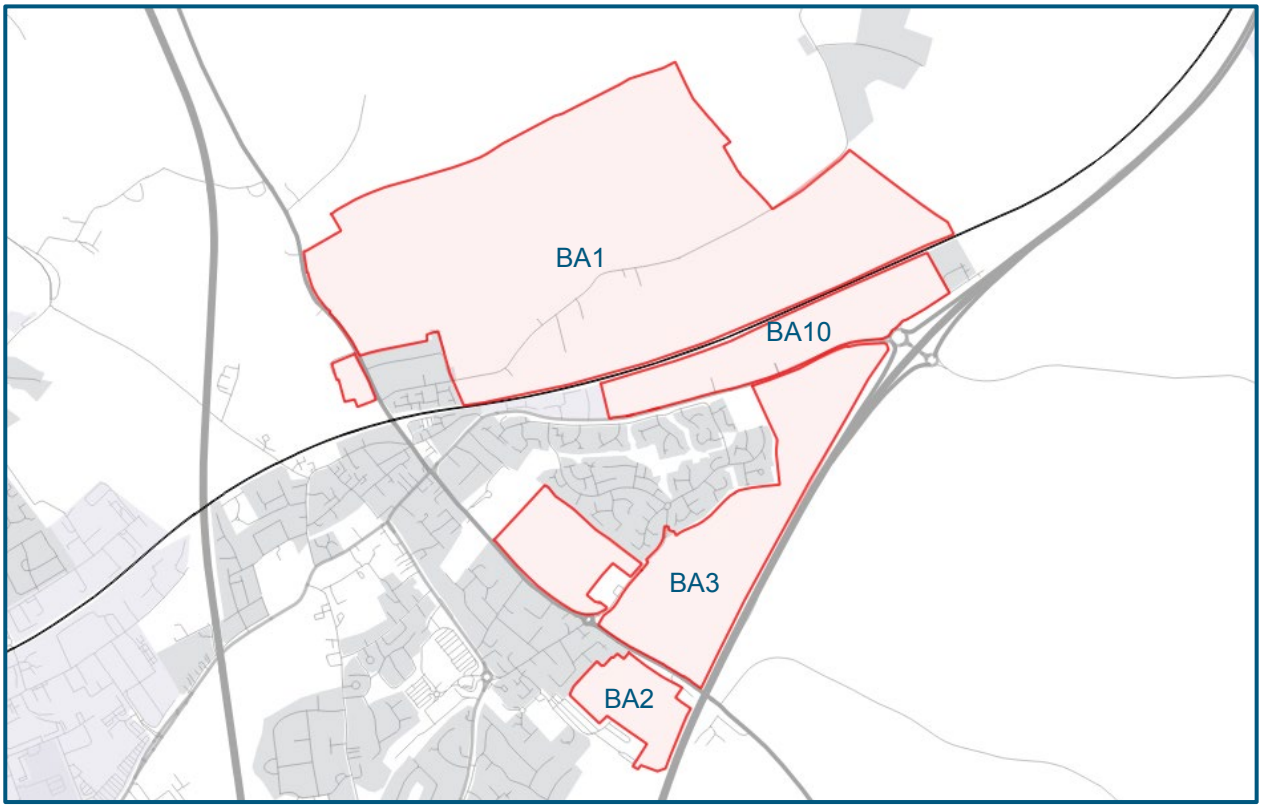
The Local Planning Authority (LPA) is North Hertfordshire Council (NHC) and the Local Highway Authority (LHA) is Hertfordshire County Council (HCC). This TSR has been prepared to facilitate pre-application discussion regarding transport implications and assessment parameters with HCC, as the LHA, and with National Highways (NH), as the Strategic Highway Authority (SHA).

This TSR has been prepared to seek pre-application advice from the LHA, NH, and SHA and to facilitate agreement of assessment principles to confirm the scope of transport planning deliverables required for the developing outline planning application (OPA) in support of the proposed 'Growing Baldock' development. This version of the TSR provides an update to a previously issued version of this document that was submitted in August 2024 and incorporates pre-application advice that was provided by HCC, while providing detail of the development options to be submitted as part of the OPA and how they will be treated within the Transport Assessment.

1.2 Growing Baldock Overview

The Growing Baldock sites include NHC Local Plan allocation sites BA1, BA2, BA3 and BA10, as shown in **Insert 1.1**.

Insert 1.1: Growing Baldock Local Plan Allocations



1.3 Planning History

Two outline planning applications were submitted in 2017/2018 in relation to the allocation sites, which are summarised at **Table 1.1**.

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Table 1-1: Planning History Summary

LPA Reference	Site	NH Reference	Status	Proposal Summary
17/04420/OP	Land east of North Road and north of the railway line, Baldock	NH/040/047 /2018	Withdrawn	Mixed use development comprising up to 2,800 dwellings, a new local centre, two primary schools and a secondary school, a healthcare hub, up to 1,900sqm of 'A' Class land uses (including a supermarket), open space, nature conservation, recreation, landscaping and associated facilities, following demolition of existing structures and vehicular access - outline planning application with all matters reserved other than access
17/04417/OP	Land Between The A505 And The Eastern Edge Of Baldock Inc Land Off Royston Road Baldock	NH/47/2018	Withdrawn	Outline application with all matters other than access reserved, for strategic development to the south-east of Baldock, comprising up to 495 dwellings, up to 18.3ha of Use Class 'B' Employment land uses, means of access, open space, nature conservation, recreation, landscaping and associated facilities, following demolition of existing structures Land Between The A505 And The Eastern Edge Of Baldock Including Land Off Royston Road Baldock Hertfordshire

The consultation responses that were received with regard to the two historic applications summarised above generally focussed on the vehicle traffic impact of the proposed schemes. Challenges were identified by NHC and HCC in relation to the design of site access junctions and off-site mitigation proposals, with concern raised in relation to relatively limited consideration of the implementation and promotion of sustainable travel.

Further to the above, early considerations with regard to the currently developing proposals that form the topic of this TSR have sought to address key shortcomings of the withdrawn applications with respect to promoting sustainable travel and reducing car trips. As discussed below, during previous scoping discussions (c. September 2024) associated with the proposals that forms the topic of this TSR, it has been acknowledged by HCC that the developing Growing Baldock scheme excels beyond the withdrawn application by proposing a vision-led approach that comprises a suite of strategies to support an active and sustainable travel lifestyle for future, and existing, residents and users of Baldock.

1.4 Proposed Development Overview

As outlined above, this TSR has been prepared to determine the transport requirements for the following developing planning application relating to allocation sites BA1, BA3 and BA10:

> *"Outline planning application with all matters reserved except for access in relation to junctions on North Road, Royston Road, Clothall Road and Wallington Road, for up to c. 3,200 homes, up to 16ha employment land, waste infrastructure, local centre, 2 x primary schools, 1 x SEND school, health hub, green infrastructure, primary street, public transport infrastructure and pedestrian/cycle network (including PRoW diversions, mobility hubs and two bridge crossings of the railway), utilities and drainage infrastructure (including diversions of existing, new pumping stations, sustainable drainage, primary sub stations, rising main/strategic sewer, potential net-zero infrastructure), ground remodelling/earthworks and any necessary demolitions."*

It is currently envisaged that the outline planning application for the above will be prepared for submission in the third quarter of 2025.

The developing masterplan has been formulated further to consultations with NHC and HCC (summarised below in **Section 1.5**) and the currently envisaged phasing of the delivery of the scheme is discussed in **Section 5** of this TSR.

As part of the development of the conceptual basis of the proposals that form the topic of this TSR, significant work has been carried out to understand the transport context of the Site including existing transport provision, key local movements, active travel infrastructure, street conditions and review of road safety. The extensive work carried out to establish the baseline facilitated formulation of a set of strengths, weaknesses, opportunities and threats which have been considered in the definition of a transport vision and set of objectives.

Further to the above, collaborative work was undertaken with U&C's design team to prepare a suite of strategies that have informed development of a Strategic Masterplan (SMP). The masterplan proposals have been subject to review and discussions with HCC (as summarised below in **Section 1.5**), and relevant discussions have provided a basis of agreement in respect of the 'Transport Vision' for Growing Baldock (outlined at **Section 1.6**). The masterplan work has set the context for the access, active travel, sustainable travel, parking and servicing strategies that are proposed for discussion as part of this TSR.

1.5 Summary of HCC, NHC and NH Discussions in relation to Masterplan

Since 2021 the ITP team has engaged extensively with officers at NHC and HCC to ensure broad alignment regarding the approach to development of the transport elements.

The main forum for discussion has been a series of Transport Task Groups including HCC, NHC and the U&C team. The topics discussed included:

- Development of vision and transport objectives
- Presenting baseline analysis and reporting, including the analysis of movement patterns within, through and to Baldock
- Streets and PRoW auditing approach and scoping
- Approach to developing active and sustainable modes strategy
- Presentation of active and sustainable modes strategy

- Development of access road options and selection of preferred option
- Input to preferred off-site interventions strategy (including specific focus on key interventions at Whitehorse Street junction, North Road / Station Road and Royston Road)

These meetings have helped guide the preferred strategy for off-site transport interventions. The preferred approach to vision, masterplan principles and off-site interventions has also informed a series of community engagements within Baldock, including two full public consultations and targeted engagement with specific interest groups.

In addition to the formal Transport Task Group, there have also been a series of one-on-one meetings, discussions and walk abouts with HCC and NHC. Key discussions have included:

- Agreeing on the scope of surveys (agreed in 2021 and undertaken in 2022)
- Identification of highway boundaries in relation to off-site interventions
- Discussion and analysis of impacts of expanding Knights Templar school, both in terms of people movements and local off-site impacts and mitigations
- Analysis of capacity of key junctions including Whitehorse Street / Station Road and Clothall Road / Wallington Road

NHC have provided (January 2024) a note setting out residual matters they would wish to see incorporated into the Transport Assessment and/or other planning documents, including the following:

- Proposed cycle route along North Road / Station
- Detail of one-way shuttle working under the rail bridge on Station Road
- Changes to permitted movements at the Whitehorse Street junction
- Use of modal filters
- Design principles of the main site access road
- HGV movements within Baldock
- Active travel route within Clothall Common
- Northern access to the railway station
- Location, form and scale of secondary school

Initial discussions have also begun with Active Travel England. This was facilitated by NHC and focused on the proposed off-site intervention on North Road / Station Road.

1.6 Transport Assessment Scoping Discussions

An initial iteration of this TSR was submitted to HCC for discussion in August 2024. Subsequently, an initial scoping meeting was held with HCC, the minutes of which are provided at **Annex A** for reference. Further to that meeting a written response (provided at **Annex B**) was issued by HCC in which further clarifications were requested. The key points highlighted in HCC's written response are summarised below:

- **Phasing Triggers**: Agreement is required on the suitability of residential development north of the railway before key infrastructure is in place to reduce severance caused by the railway. Metrics for identifying trigger points need to be agreed upon, considering capacity, behavior change, background trips, and a broader network analysis

- **Education Strategy**: a section addressing the emerging complexities around Secondary School proposals should be included
- **Monitor and Manage Approach**: a monitor and manage approach should be adopted over a standardised travel plan.

This update of the TSR takes account of the points raised above and provides further consideration of optioneering pertaining to the provision of education facilities and the implications of such on the proposed assessment methodology and intervention proposals. In particular, with consideration of the proposed education offer, as discussed at **Section 5**, the OPA will seek approval for the following development options which have implications for the land use mix in the flexible land use parcel in the southern half of BA3:

- Development Option 1: up to 12 Form-Entry (FE) secondary school and 1 Special Educational Needs and Disabilities (SEND) school on Plot BA3;
- Development Option 2: Financial contributions to expansion of the existing KTS site (to 8-12 FE) at existing site and provision of SEND school and residential on BA3; or
- Development Option 3: up to 5FE secondary school, SEND school and residential on BA3.

1.7 Transport Vision for Growing Baldock

The transport vision for Growing Baldock applies a 'vision-led' approach, which has been developed and refined through analytical research and extensive project experience. The proposed approach is consistent with the modal hierarchy set out in HCC's Local Transport Plan and has been agreed by HCC and NHC as part of consultation exercises discussed below.

The proposed vision for Growing Baldock is summarised as follows:

> *"Growing Baldock will create a place that prioritises quality of life over traffic movement. Walking, cycling and public transport will be the quickest and most enjoyable way to travel on-site, with off-site connections enhanced to key destinations, benefitting existing communities and businesses in the town. Through masterplan design, mix of uses and delivery of new infrastructure, the need to travel off-site will be reduced, with non-car options being the first choice when travel is required, encouraging active, healthy lifestyles."*

Key to achieving this Vision is the Transport Strategy which is founded on the principles of the transport system as a whole being a Sustainable System, and for this system to ensure that the Growing Baldock proposals contribute to the creation of a 'liveable neighbourhood'. By locating facilities and services within reasonable walking and cycling distance of homes, with those that are accessed more frequently closer, a neighbourhood can be created that encourages sustainable modes of travel.

The Transport Vision that has formed an intrinsic part of the developing proposals is discussed in greater detail in **Section 5**.

1.8 Guidance

The contents of this TSR have been informed by HCC's Roads in Hertfordshire guidance document, which sets out considerations for pre-application and planning submission requirements for proposed developments in the County. With regard to larger schemes, the HCC Guidance states that "*a Transport Assessment (TA) will be required where a development has more significant transport implications*". The scale of the proposed development exceeds the prescribed thresholds for preparation of a TA and this TSR has been prepared with consideration of this requirement.

Of specific relevance to this TSR, the HCC Guidance states that "*having established the need for a TA it is suggested that a scoping study is carried out at an early stage to establish:*

- *The data required and availability; The area over which analysis is required;*
- *The assessment years and analysis period at which assessment is required;*
- *Development trip generation, trip distribution, assignment and traffic growth factors to be used; and*
- *The general methodology to be employed*."

With regard to travel planning, the HCC Guidance stipulates that "*in all cases where a TA is needed HCC will require an agreed Travel Plan (TP) with clearly defined targets and monitoring proposals. This will be secured by either a planning condition or a planning obligation under Section 106 of the Town and Country Planning Act. The TP may assist in reducing the scale of highway improvements required by reducing potential journeys by car associated with the development*." Specific travel planning guidance is published by HCC and reliance will be made on such in preparing travel plan(s) in support of the proposed scheme.

In respect of the above, it is noted that the proposed vision-led approach for Growing Baldock will be supported by a Monitor and Manage Framework, that is discussed in greater detail at **Section 10** of this TSR.

In parallel with the above, this TSR is informed by guidance contained within '*Planning for the future: A guide to working with National Highways on planning matters'*, published by NH in October 2023. In particular with regard to a vision-led approach the NH guidance states the following:

"In broad terms, a vision-led approach can be summarised as follows:

> *1. Establish a vision - understand the relevant national and local policy context; identify the drivers of change/key external factors acting on the plan or proposed development; set-out a place-based vision statement with associated outcomes that supports the principles of sustainable development.*
>
> *2. Develop scenarios - develop plausible future scenarios that help to understand the uncertainties that may impact on the ability to deliver the vision. 10*
>
> *3. Generate options – generate, sift and prioritise options that can help achieve the vision.*
>
> *4. Test options – test how the prioritised options perform in each of the plausible future scenarios (for example, is every option effective in all scenarios or are some less resilient and have some significant risks?).*
>
> *5. Produce a vision strategy – produce a strategy for realising the vision that accounts for the identified uncertainty and includes a 'monitor and manage' approach to identify and address when the vision is unlikely to be achieved.*

The vision-led approach is relevant to both the plan-making and decision-taking stages (proportionate to the scale, sensitivity and complexity of the development proposal).

The DfT has addressed future uncertainty in the transport system in its TAG Uncertainty Toolkit19 and it is anticipated that further guidance on vision-led approaches will be forthcoming in due course, including in the Local Transport Plan Guidance due to be published by the DfT in late 2023. In the interim, there is relevant advice in the public domain including from TRICS Consortium Ltd20 and Mott Macdonald/University of the West of England21.

In engaging with local authorities and development promoters, we will seek to use our Connecting the county plan and relevant route strategy/strategies22 to help inform the vision for a local plan or development proposal"

1.9 Proposed Approach to Planning Application and Transport Assessment Structure

Following HCC and NH's review and approval of the principles and parameters discussed within this TSR, a TA will be prepared by ITP for submission in support of the emerging application.

The currently envisaged assessment requirements for planning submission (informed by guidance discussed above), and key transport considerations that have informed the development of the SMP, have been used to formulate a proposed structure for the TA and Environmental Statement (ES) Transport and Access chapter that will be prepared in support of the Growing Baldock planning application.

The purpose of the TA will be to provide a robust analysis of the impact of the proposed development on the local and strategic transport network and to identify how the proposed transport strategies and interventions associated with the Growing Baldock scheme will achieve the vision and principles set out in **Section 6**.

Within the context of the above, and taking into account HCC guidance and more recent best practice (in particular suggestions from the Fixing TAs Working Group that is co-chaired by a colleague within ITP's Baldock team), it is proposed that the TA report would be based on the following structure:

- Non-technical Summary
- Introduction
- The Vision and Objectives
- Outcomes / Metrics of Success
- Existing Baldock
  - Accessibility audit
  - Surveys / data collected
  - Road safety record
  - Existing challenges to access and mobility
- Growing Baldock
  - Description of proposed development – phasing, land uses, density, schools
  - Masterplanning principles
- Enabling all Journeys
  - Transport Strategies
  - Interventions
- Trip Generation
- Impact Assessment
- Monitor and Manage
- Summary and Conclusions

In addition to the TA, a Framework Travel Plan (FTP) will be prepared to accord with HCC guidance, providing a framework against which use-specific travel plans can be developed subsequent to achieving outline planning consent. The FTP will support the Monitor and Manage Framework that forms a key facet of the 'vision-led' approach to Growing Baldock.

Subsequent to the LHA, NH and SHA's review of this TSR, confirmation of the scope and the structure of the TA is requested to allow ITP to progress associated assessments and preparation of the report. Where required, the scope and structure can be adjusted to achieve an agreed position that can serve as a record of the scoping discussions.

1.10 Transport Scoping Report Structure

Following this introductory section, this TSR is structured as follows:

- Relevant Policy Documents
- Site Context
- Baseline Study
- Developing Masterplan
- Transport Strategy
- Trip Generation, Modal Split, Distribution and Assignment
- Transport Impact
- Proposed New and Modified Infrastructure
- Monitor and Manage Framework
- Summary and Way Forward

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2 Relevant Policy Documents

2.1 Overview

This section sets out relevant national and local planning and transport policy and guidance that will be referenced in preparation of the TA and FTP.

2.2 Policy and Guidance Documents

The following documents are identified to include relevant policies and guidance that will be referenced in the preparation of the TA, FTP and the strategies that will inform the development of the scheme:

- National Planning Policy Framework (December 2024);
- Travel Plans, Transport Assessments and Statements, Planning Practice Guidance (March 2014 and subsequent updates);
- Cycle Infrastructure Design: Local Transport Note 1/20 (July 2020);
- Department for Transport Decarbonising Transport: A Better, Greener Britain (July 2021);
- 'Planning for the future: A guide to working with National Highways on planning matters', (NH, October 2023)
- Active Travel England: framework document for working with Department for Transport (2022);
- North Hertfordshire Council (NHC) Local Plan;
- Hertfordshire's Local Transport Plan 2018;
- Roads in Hertfordshire: A Design Guide
- Hertfordshire's Sustainable Modes of Travel Strategy (SMoTS); and
- Active travel strategy and road safety strategy

The proposed scheme will be developed and refined to adhere with the prevailing policies that are relevant to the developing OPA and the TA will provide an assessment of policy compliance. In particular, it is noted that the December 2024 update of the National Planning Policy Framework (NPPF) at Paragraph 109 states that "*transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places. This should involve:*

a) making transport considerations an important part of early engagement with local communities;

b) ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places;

c) understanding and addressing the potential impacts of development on transport networks;

d) realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated;

e) identifying and pursuing opportunities to promote walking, cycling and public transport use; and

f) *identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains.*"

In regard of the above, it is highlighted that the scope of work set out in this TSR, and indeed the work that has been carried out to date in developing strategies and the SMP for Growing Baldock, align with the transport principles of this recent update of the NPPF, in particular capturing the 'vision-led' principles.

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3 Site Context

3.1 Overview

This Section of the TSR sets out the site context in respect of the active travel, public transport and local highway networks.

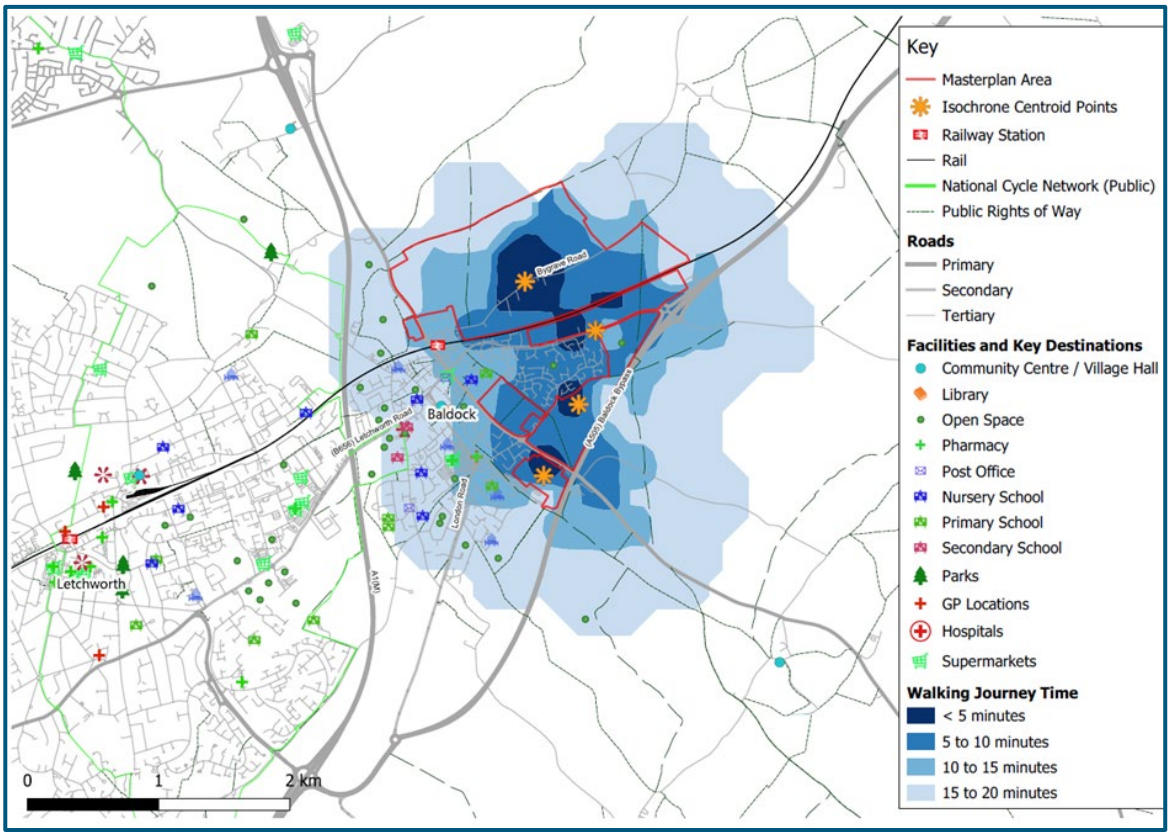
Baldock is situated within the North Hertfordshire District, which is a Local Authority in the most northerly section of Hertfordshire. To the west, the town borders Letchworth, and several small villages surround the remaining sides including Bygrave to the north. Other neighbouring towns include Stevenage, Hitchin and Royston.

3.2 Existing Active Travel Connectivity

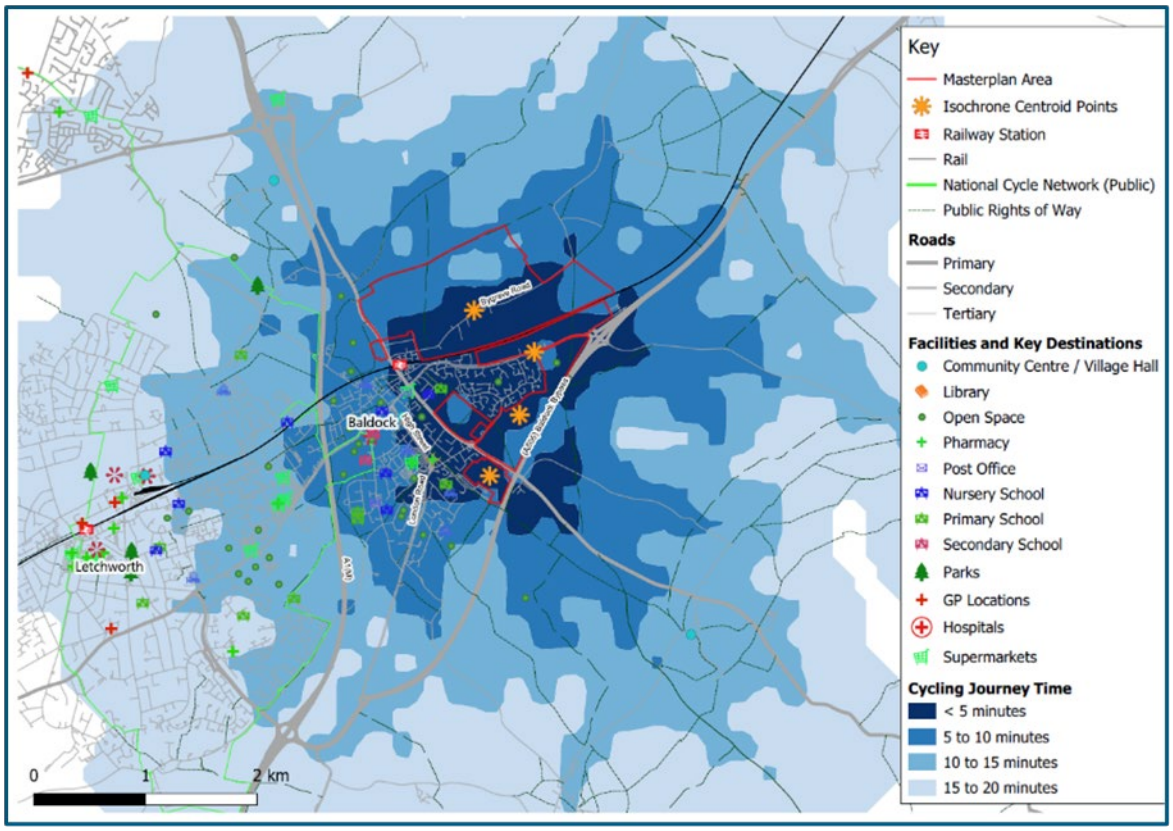
The environment around Baldock predominantly comprises farmland and rural villages with surrounding Public Rights of Way (PRoW) consisting predominantly of Bridleways. The National Cycle Network (NCN) does not run directly through Baldock, but Route 12 reaches the western extent of the town with an off-road, unlit cycle path. There is no dedicated cycle infrastructure within the existing town.

Walking and cycling accessibility are presented using journey time isochrones, within the context of existing PRoWs and the NCN at **Insert 3.1** and **Insert 3.2** respectively**.**

Insert 3.1: Walking Isochrones and Existing Active Travel Network



Insert 3.2: Cycling Isochrones and Existing Active Travel Network



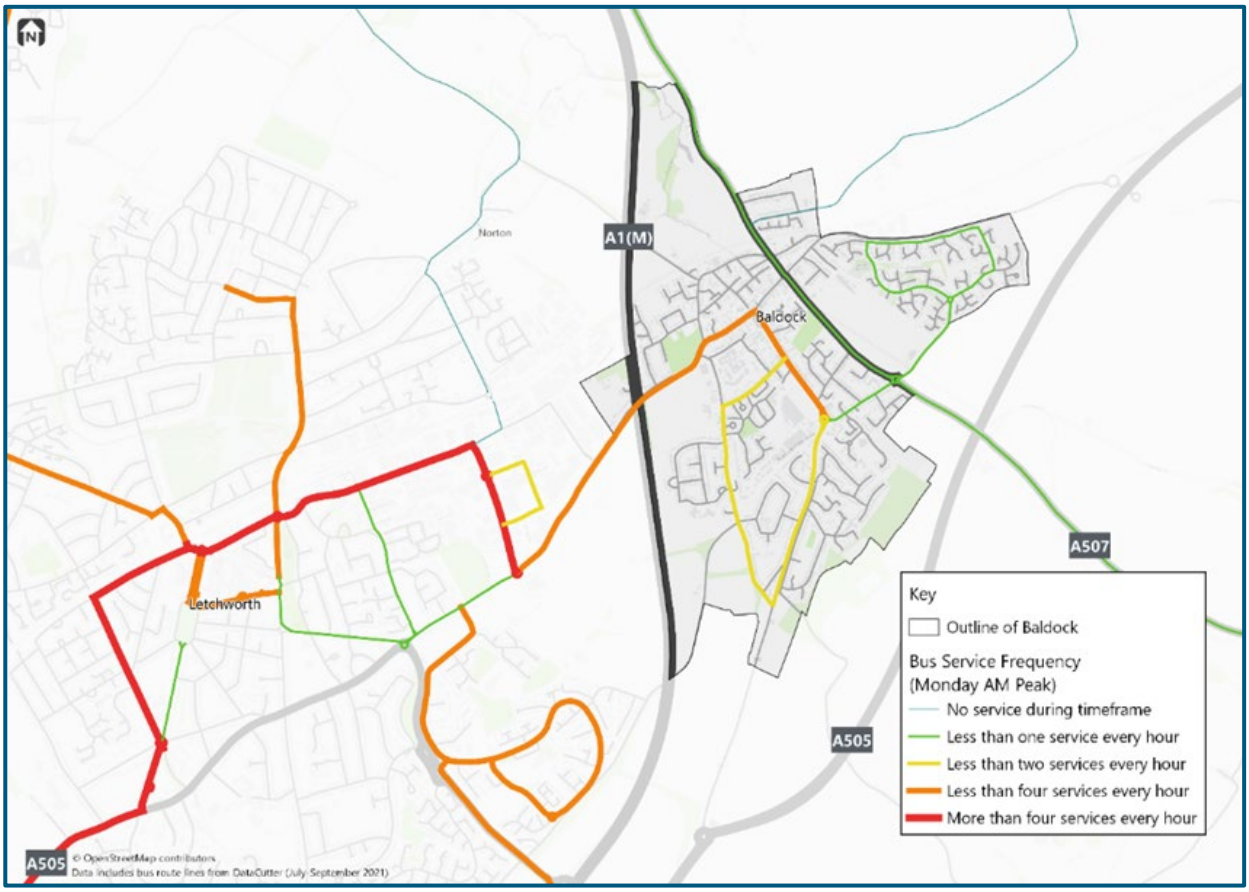
Streets within the centre of Baldock are predominantly provided with surfaced footpaths and street lighting. Detailed audits of the existing cycle and pedestrian infrastructure within Baldock have been undertaken, making use of a range of audit tools including the Walking Route Audit Tool, LTN 1/20 Cycle Level of Service and Healthy Streets. It is proposed that the outputs of these exercises will be presented as part of the TA, to assess the suitability of existing routes and support the proposed areas for improvement. Further details regarding the active travel audits are provided in **Section 4.2**.

3.3 Existing Public Transport Connectivity

3.3.1 Bus Connectivity

Baldock is served by multiple bus services of varying levels of service frequency. The most frequent services connect the Town Centre, Knights Templar School and South Baldock into Letchworth Garden City. **Insert 3.3** provides an overview of existing bus services in and around Baldock, with specific regard to peak hour frequencies.

Insert 3.3: Local Bus Services and Peak Hour Frequencies



3.3.2 Rail Connectivity

Baldock railway station is located to the southwest of BA1, accessible from Mallard Court. Baldock railway station is served by Thameslink and Great Northern services, which provide a connection to London Kings Cross within an approximate 40-minute journey time.

Baldock railway station is currently provided with a total of 85 car parking spaces, including three accessible bays, as well as 52 cycle parking spaces. The existing cycle parking spaces at the station are sheltered, lit and provided with CCTV.

A summary of the services accessible from Baldock railway station is presented in **Table 3.1**.

Table 3-1: Summary of Rail Services Accessible from Baldock Railway Station

Destination	Days of Operation	Frequency	Journey Time	Hours of Operation
Cambridge	Mon–Sun	3 / hour	24 mins	05:47 – 01:00
Stevenage	Mon–Sun	4 / hour	13 mins	05:17 – 00:18
Farringdon	Mon–Sun	2 / hour	46 mins	05:17 – 22:17
Hitchin	Mon–Sun	4 / hour	7 mins	05:17 – 00:18
Letchworth Garden City	Mon–Sun	4 / hour	3 mins	05:17 – 00:18
London Blackfriars	Mon–Sun	2 / hour	51 mins	05:17 – 22:17
London Kings Cross	Mon–Sun	2 / hour	40 mins	05:26 – 00:18
Finsbury Park	Mon–Sun	4 / hour	34 mins	05:17 – 00:18
City Thameslink	Mon–Sat	2 / hour	48 mins	05:17 – 21:17

3.4 Local Highway Context

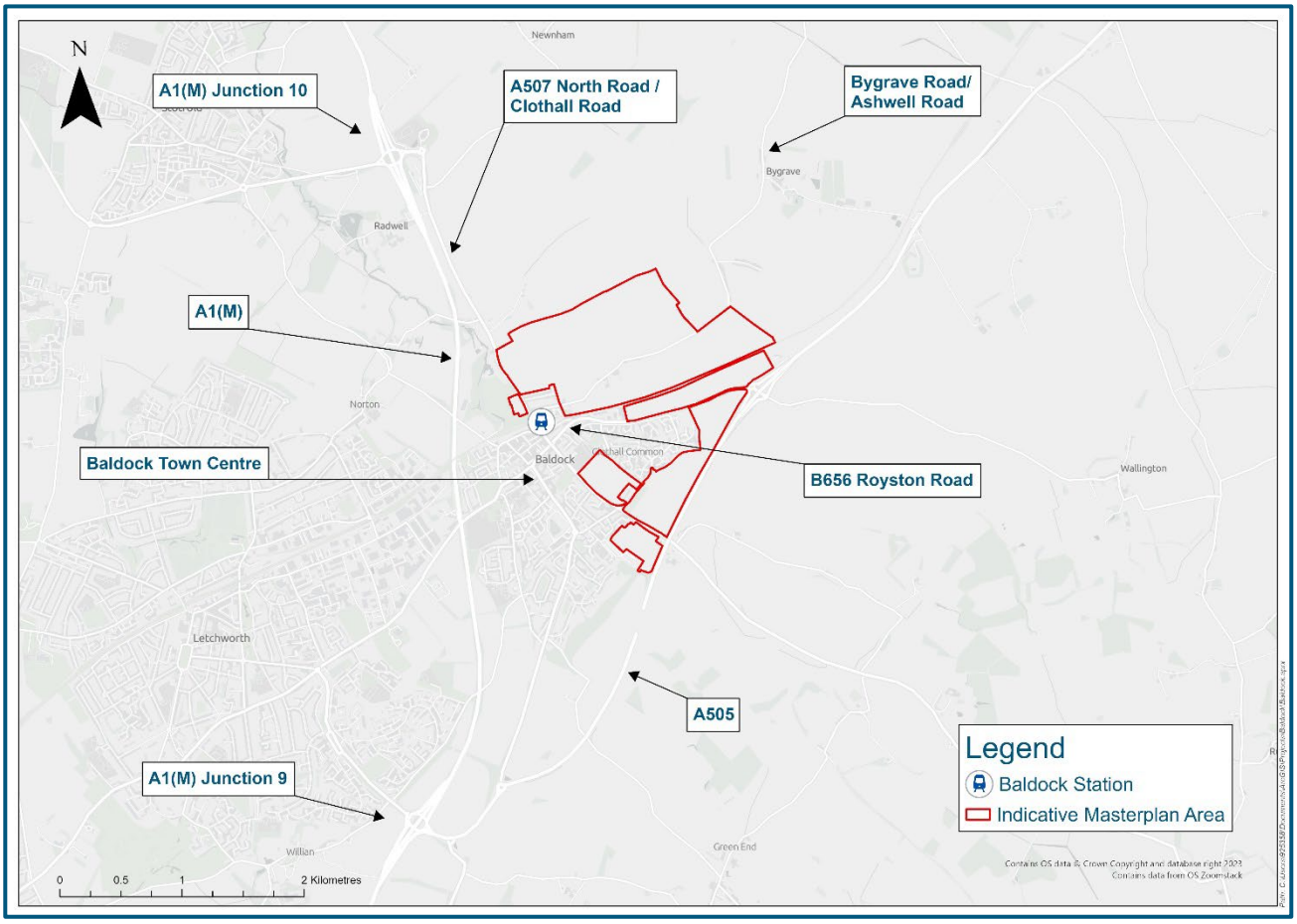
Baldock is situated between the A1 (M), to its west, the A505 to its east and the A507 connects these two strategic routes via a north-south road through the town. Junctions 9 and 10 of the A1(M) provide connectivity between the locality and the wider region, including connections to London, Cambridge and the Midlands.

As indicated in **Insert 1.1**, the development area is situated to the north and east of the existing town. Baldock town centre and Rail Stations are within proximity of the western extent of the proposed development area. The key road network in vicinity of the allocated plots that form the proposed development area are summarised as follows:

- **Local Roads**
  - A507 North Road / Clothall Road: The A507 is a single carriageway road, which travels through the centre of Baldock from A1(M) Junction 10 in the north, before passing over the A505 Baldock Bypass in the south
  - Bygrave Road/Ashwell Road: Bygrave Road connects the A507 North Road to the North of Baldock with Bygrave. At its western extent, it meets the A507 in the form of a priority junction.
  - B656 Royston Road/ Whitehorse Street/ Hitchin Street/ Letchworth Road: The B656 enters Baldock town centre from Letchworth in the west. The road is subject to a 30mph speed limit from around 80m east of the B656 Letchworth Road/ Hopewell Road junction to approximately 30m east of the B656 Royston Road/ Icknield Way East junction.
  - In the vicinity of the site, the A505 operates as a dual carriageway road, located to the south of Baldock, routing between Leighton Buzzard to the southwest and Great Abington to the northeast. The A505 is subject to the national speed limit in the vicinity of the site.
- **Strategic Roads**:
  - The A1(M) runs approximately 750m to the west of Baldock town centre. Junction 9 is located to the south west of the town, providing access to Baldock via the A505 to the southeast of the junction and access to Letchworth to the northwest of the junction using the A505 Letchworth Gate. There are on and off slip roads to/ from the A1(M) mainline in northbound and southbound directions.

A plan which illustrates the masterplan sites with respect to the key local and strategic roads is presented in **Insert 3.4**.

Insert 3.4: Local Highway Context



3.5 Summary

A review of the existing site context indicates that the locality provides opportunities for facilitating travel by active and sustainable modes. The baseline study presented in the following Section of this TSR provides the basis for initial conceptual design development (discussed in **Section 5**) as well as the proposed approach to the assessment of transport impact (discussed in **Section 8**).

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4 Baseline Study

4.1 Overview

This Section of the TSR presents an overview of baseline studies that have been carried out to inform the transport strategy. The baseline studies to date have sought to establish a position for existing transport conditions with respect to existing active travel, public transport and highway demand, usage and patterns.

A review of baseline surveys and existing transport conditions is presented in **Annex C**.

4.2 Active Travel Baseline

Data collection exercises have been carried out with respect of the local active travel routes to formulate a broad baseline position in respect of local walking and cycling movements. The following data collection sources will be interrogated and presented as part of the assessment work presented in the TA:

- Strava Data – for local cycling and walking movements;
- PRoW usage survey; and
- Mobile phone data.

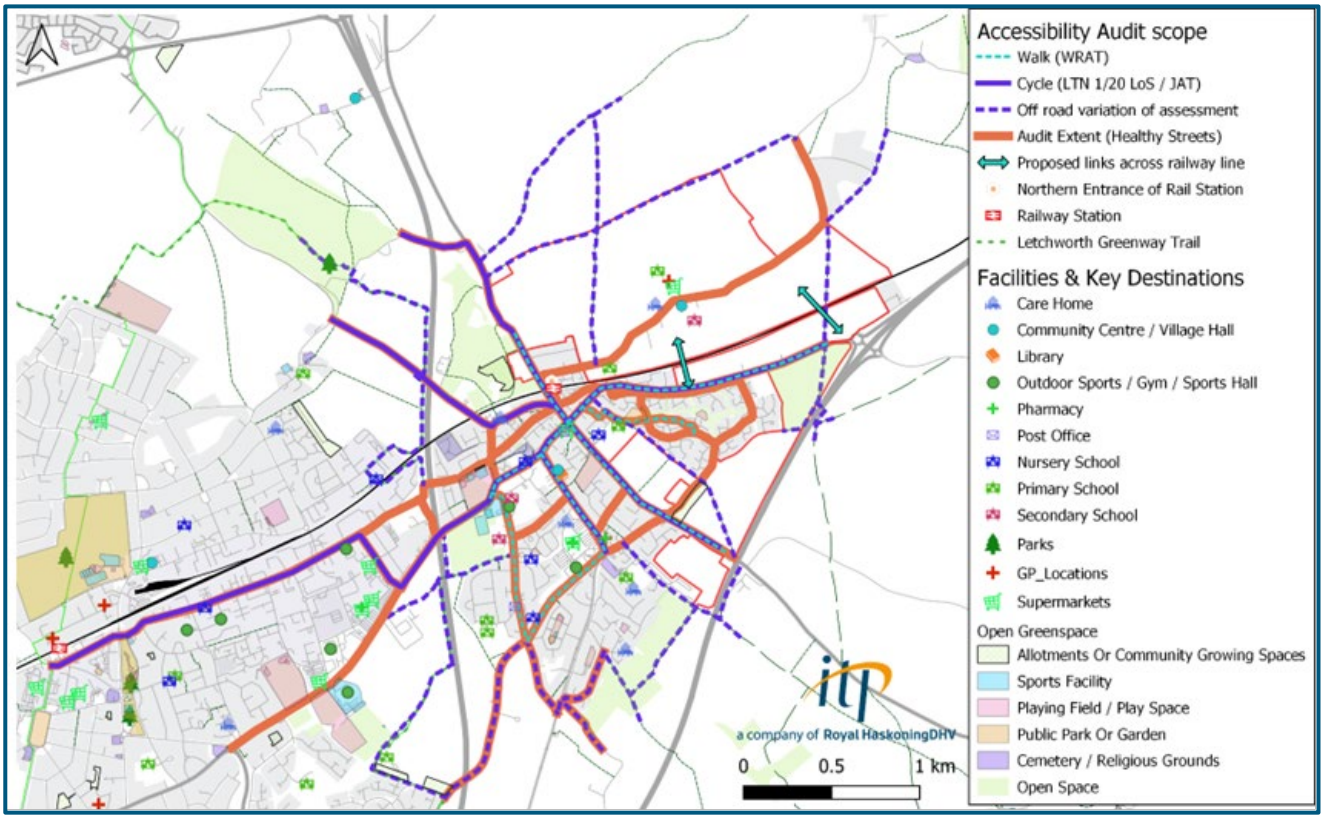
The Strava survey data was provided between the 20th–26th of September 2019. A survey of PRoW was undertaken between the 8th-21st of July 2022, in the vicinity of the site. Mobile phone data, supplied by Teralytics for September 2019 and 2021, provided origin-destination data for the area in which the site is located. A summary of these data sources is provided in **Annex C**.

With consideration of the above, detailed audits of the existing cycle and pedestrian (including PRoW) conditions within Baldock has been carried out, making use of a range of audit tools including the Walking Route Audit Tool, LTN 1/20 Cycle Level of Service and Healthy Streets.

It is proposed that the outputs of these exercises will be presented as part of the TA to assess the suitability of existing routes and support the proposed areas for improvement to inform the active travel strategy that has been substantially developed through the development of the masterplan in close collaboration with NHC and HCC.

The proposed study area for the detailed active travel audits is presented within **Insert 4.1**.

Insert 4.1: Accessibility Audit Scope



4.3 Public Transport Baseline

A review of existing rail and bus services, and available facilities at public transport access points, will be provided as part of the TA.

4.4 Highway Baseline

The scope of assessment, with regards to the highway baseline conditions, will be provided in accordance with the previously withdrawn application; the traffic survey study area and methodology, provided as part of the previous application, was approved by HCC.

As part of the baseline studies carried out in support of the masterplan, traffic flow data from Automatic Traffic Counter (ATC), Automatic Number Plate Recognition (ANPR) and Manual Classified Count (MCC) surveys have been commissioned to provide an overview of the operation of the existing highway within the broadly identified study area.

In developing a robust basis for data collection, a review of the assessment presented in the withdrawn applications has been carried out. While the TA for the withdrawn applications did not present a comprehensive record of scoping discussions and basis for the definition of a ‘study area’, it is noted that those TAs presented the following surveys:

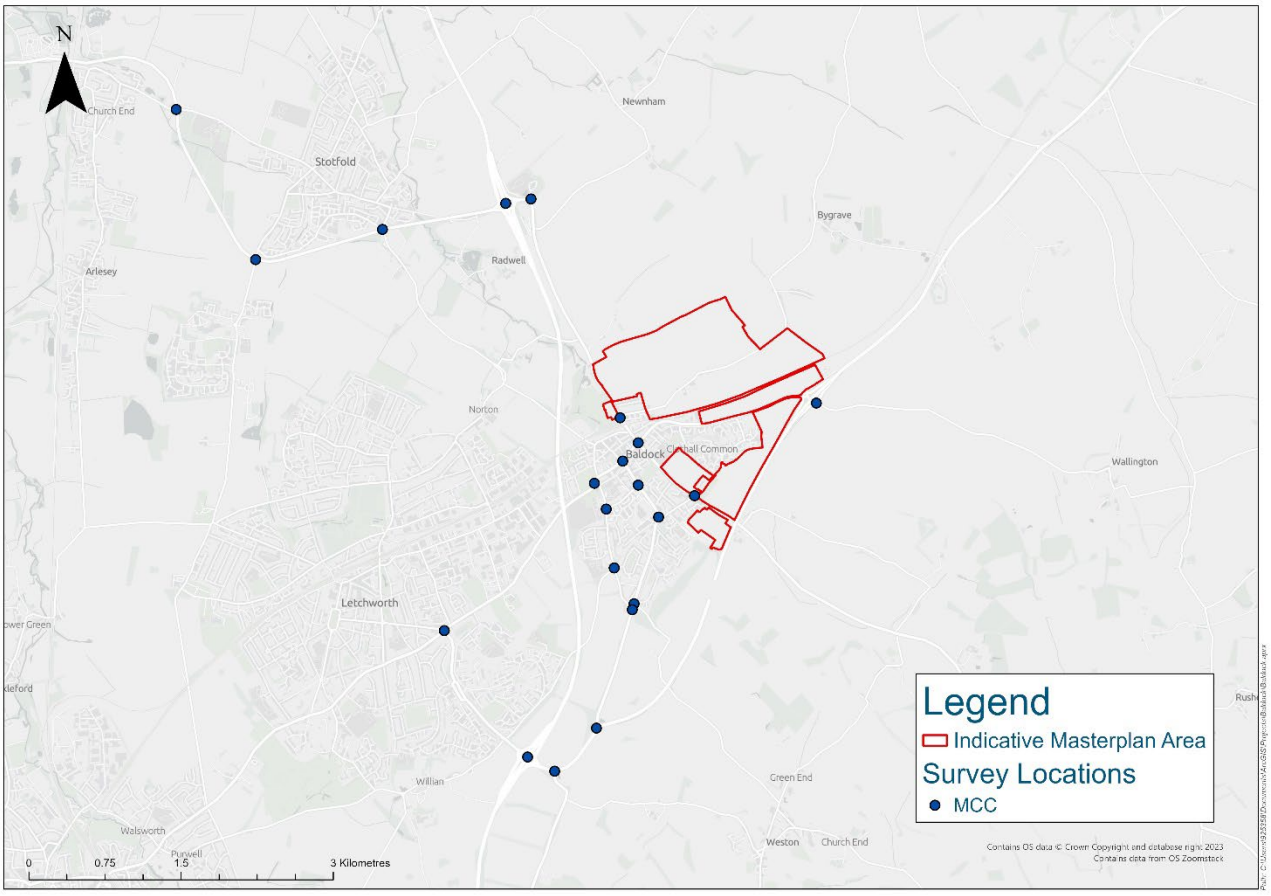
- MCC of 15 junctions in May 2015 for the periods of 07:30-09:30 (AM Period) and (16:30-18:30)
- MCC of 2 junctions in June 2014 for the same periods as above
- Journey time surveys (10 runs per route) for the following routes:

- A507 Clothall Road/ Warren Lane junction to A507 Great North Road/ A1(M) Junction 10.
- B656 Royston Road/ A505 Baldock bypass junction to B656 Letchworth Road to the immediate west of the A1(M).
- B197 London Road/ A505 Baldock bypass junction to Church Street/ Icknield Way junction.

In developing an initial baseline study, the current proposals have built on the scope of the surveys of the withdrawn applications and extended the area of study to 22 junctions that were deemed to be of interest in ensuring that the availability of data can extend beyond the anticipated area of impact of the development, to facilitate some resilience in analysis of future year modelling scenarios (discussed at **Section 8**).

Insert 4.2 below are the locations of the 22 junctions that have been surveyed as part of the work that has been carried out to date to inform the developing proposals that form the topic of this TSR. The surveys were carried out in July 2022 with extended survey hours (compared to the withdrawn application) of weekday AM (07:00-10:00) and PM (16:00-19:00).

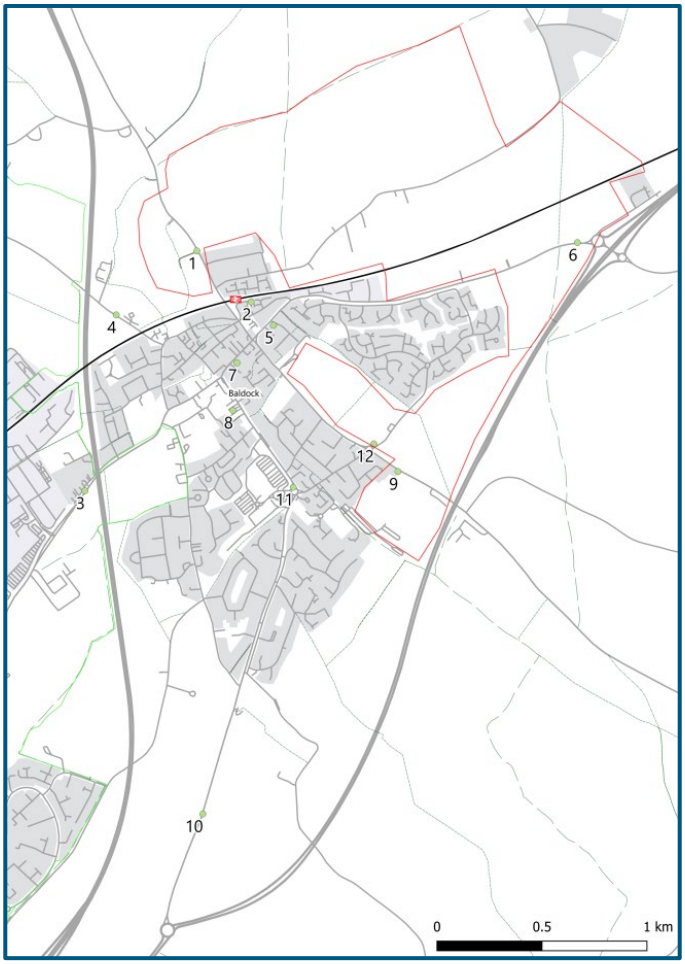
Insert 4.2: Identified MCC Locations



Similarly informed by the scope of the withdrawn applications, an ANPR cordon survey was undertaken to facilitate an understanding of existing traffic movements across the town to be created. The location of the cordon cameras for this assessment is shown in **Insert 4.3**.

The ANPR cameras recorded the vehicle class and direction of travel for each camera, as well as the point and time the vehicle entered and left the cordon. The commissioned surveys allow an analysis to be undertaken of traffic movements through Baldock, as well as information such as heavy goods vehicle (HGV) volumes and movements and proportions of through traffic.

Insert 4.3: ANPR Cordon Camera Locations



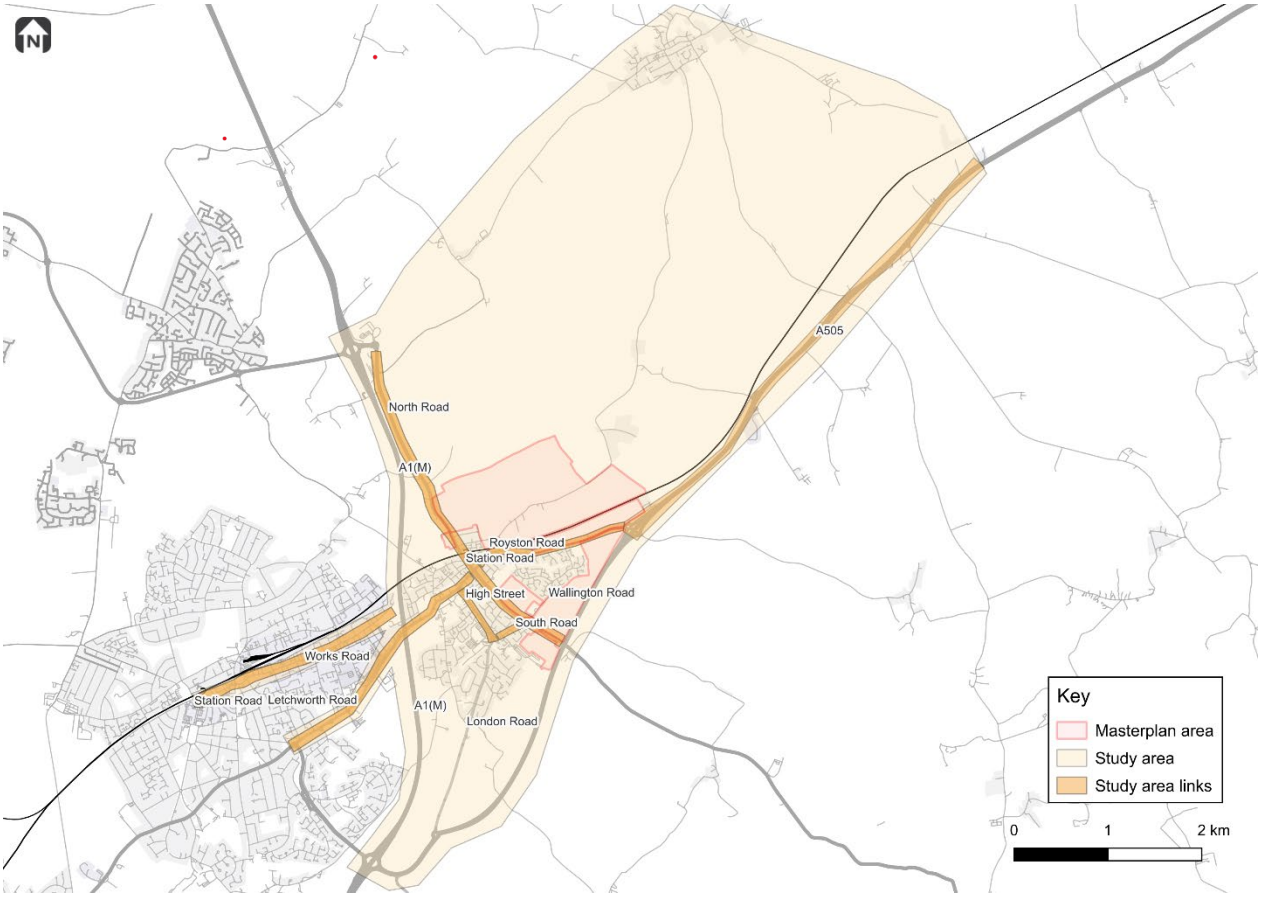
As outlined above, a review of baseline surveys and existing traffic conditions is presented in **Annex C**. It is assumed that the traffic surveys undertaken as part of the previous application, the scope of which were approved by HCC at the time, remain representative of the existing highway baseline conditions. Therefore, no additional surveys are proposed.

4.5 Highway Safety Study Area

As part of the withdrawn applications, the study area for the highway safety review of the TA associated with the 'Baldock North' and 'Baldock South' was agreed with HCC to consider "*Clothall Common and a part of Baldock, from the A507/ Bygrave Road junction in the north, Clothall Road and High Street/ South Road roundabout in the west, A507 Clothall Road to the north of its structure over the A505 in the south and a point approximately 200m northeast of the centre of the A505/ B656 Royston Road/ Wallington dumbbell roundabouts in the east. In addition, the analysis covered A1(M) Junctions 9 and 10*."

In the context of the above, the preliminary assessment work carried out in developing the masterplan considered a similar study area (to that of the withdrawn applications), with the proposed study area. During engagement with HCC there was a request for an for the highway safety review indicated at **Insert 4.4** below.

Insert 4.4: Proposed Highway Safety Study Area



The study area shown in **Insert 4.4**, spans the length of the highway network in the vicinity of the application site including A1(M), B656 Letchworth Road, Works Road, North Road / Clothall Road, High Street, South Road and the A507. The study area covers the whole of Baldock town and extends to Letchworth Garden City as shown in **Insert 4.4**.

A preliminary review of personal injury collision (PIC) data has been undertaken, using open-source data from the CrashMap website (www.crashmap.co.uk). The review, which focussed on the most recently available five-year period of PIC data (2018 to 2022) indicates that 148 collisions occurred in the identified study area. As part of the TA, it is proposed that PIC data would be obtained from HCC, in order to undertake a detailed highway safety review.

An assessment of the potential causal factors relating to these PICs would be undertaken in preparation of the TA to establish whether there is an underlying road safety problem which could be exacerbated by changes to movement patterns within the town resulting from the proposals. Should highway safety deficiencies be highlighted in the review of highway safety records within the study area, suitable measures and interventions will be considered to mitigate the impact of the proposed development on highway safety.

4.6 Summary

This Section of the TSR has presented the currently proposed study areas in respect of the key areas of impact assessment that are envisaged as part of the preparation of the TA. It is requested that the LHA, NH and SHA review and provide confirmation of the suggested study areas to facilitate a consistent approach to the technical assessment work that is to be submitted as part of the developing planning application.

It is again noted that the study area for the withdrawn applications has been used as an initial point of reference that can be refined as part of the scoping exercise. The currently developing proposals have been formulated on the aspiration to deliver a significantly lower level of car use. It is suggested that the anticipated lower levels of car use delivered by the developing proposals would result in a more limited area of impact, compared to that of the withdrawn applications. As such, where appropriate, a reduction in the suggested study areas would allow for a more focussed TA and facilitate a more efficient review of the application by the LHA and SHA.

5 Development Proposals

5.1 Overview

As set out in the introductory Section of this TSR, the scope of the proposed outline planning application is:

> *"Outline planning application with all matters reserved except for access in relation to junctions on North Road, Royston Road, Clothall Road and Wallington Road, for up to c. 3,200 homes, up to 16ha employment land, waste infrastructure, local centre, 2 x primary schools, 1 x SEND school, health hub, green infrastructure, primary street, public transport infrastructure and pedestrian/cycle network (including PRoW diversions, mobility hubs and two bridge crossings of the railway), utilities and drainage infrastructure (including diversions of existing, new pumping stations, sustainable drainage, primary sub stations, rising main/strategic sewer, potential net-zero infrastructure), ground remodelling/earthworks and any necessary demolitions."*

The following development options will be assessed:

- Development Option 1: up to 12 Form-Entry (FE) secondary school and 1 Special Educational Needs and Disabilities (SEND) school on Plot BA3;
- Development Option 2: Financial contributions to expansion of the existing KTS site (to 8-12 FE) at existing site and provision of SEND school and residential on BA3; or
- Development Option 3: up to 5FE secondary school, SEND school and residential on BA3.

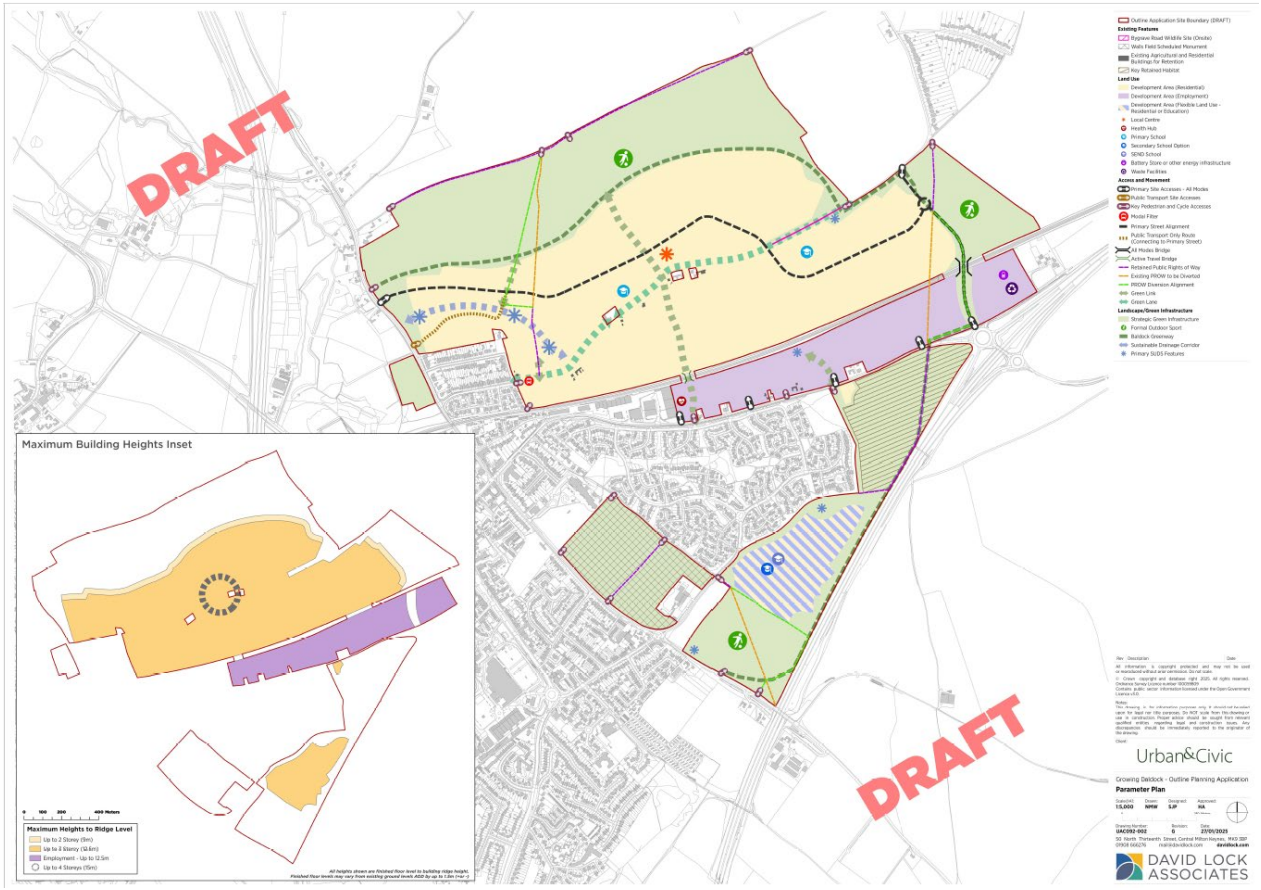
The development options that seek to capture the proposed secondary education scenarios. Accordingly, this Section provides an overview of the current optioneering considered for provision of secondary education to meet the needs generated by the development.

5.2 Current Land Use

The currently proposed parameter plan is provided at **Insert 5.1** below (provided at higher resolution in **Annex D**).

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Insert 5.1: Draft Proposed Parameter Plan



The currently proposed draft development schedule, as considered in the draft parameter plan is provided below at **Table 5.1**.

Table 5-1: Proposed Emerging Schedule of Land Uses by Plot

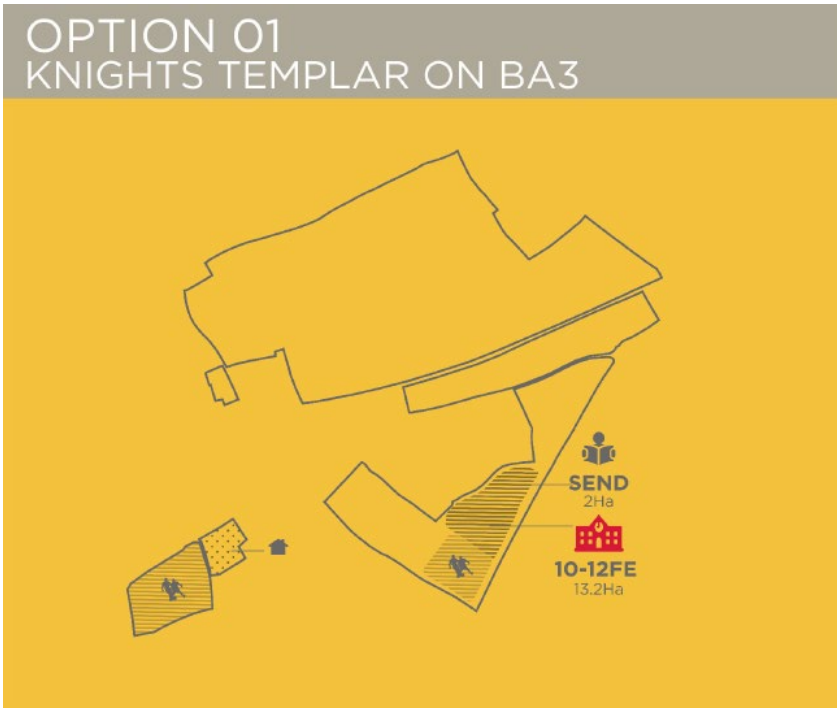
Plot / Land Use	Proposed Land Use	Quantum	Units
Plot BA1			
Residential	C3	2750	Dwellings
Convenience retail	E	700	Sqm (Floor Area)
Other retail / takeaway / café	E	800	Sqm (Floor Area)
Nursery	E	550	Sqm (Floor Area)
Gym	E	650	Sqm (Floor Area)
Office	E	550	Sqm (Floor Area)
Community hall	F2	500	Sqm (Floor Area)
Pub	Sui generis	750	Sqm (Floor Area)
Care Home	C2	3500	Sqm (Floor Area)
Sports Pavilion	D2	500	Sqm (Floor Area)
Primary School (x2)	F1	3	Form Entry
Plot BA10			
Medical Centre	E	1500	Sqm (Floor Area)
Vehicle depot	Sui generis	1500	Sqm (Floor Area)
Waste transfer station	B2	3500	Sqm (Floor Area)
Office	E	26500	Sqm (Floor Area)
Light Industrial	E	26500	Sqm (Floor Area)
Industrial	B2	26500	Sqm (Floor Area)
Plot BA3			
Flexible land use (residential or secondary school)	C3 F1	Up to 300 dwellings Up to 12	Dwellings FE (secondary)
Sports Pavilion	D2	250	Sqm (Floor Area)
SEND School	F1	2	Form Hectares
Plot BA2			
Residential	C3	200	Dwellings

5.3 Development Options

In consultation with HCC Education Authority, numerous options for the provision of secondary education places to meet the needs of the Growing Baldock development have been explored over 2024. Options have included the expansion of the existing Knights Templar School (KTS), or a new or KTS relocated school provision on parcel BA3. The North Hertfordshire Strategic Sites Project Board has agreed that flexibility to deliver one of three school options be retained in both the SMP and OPA.

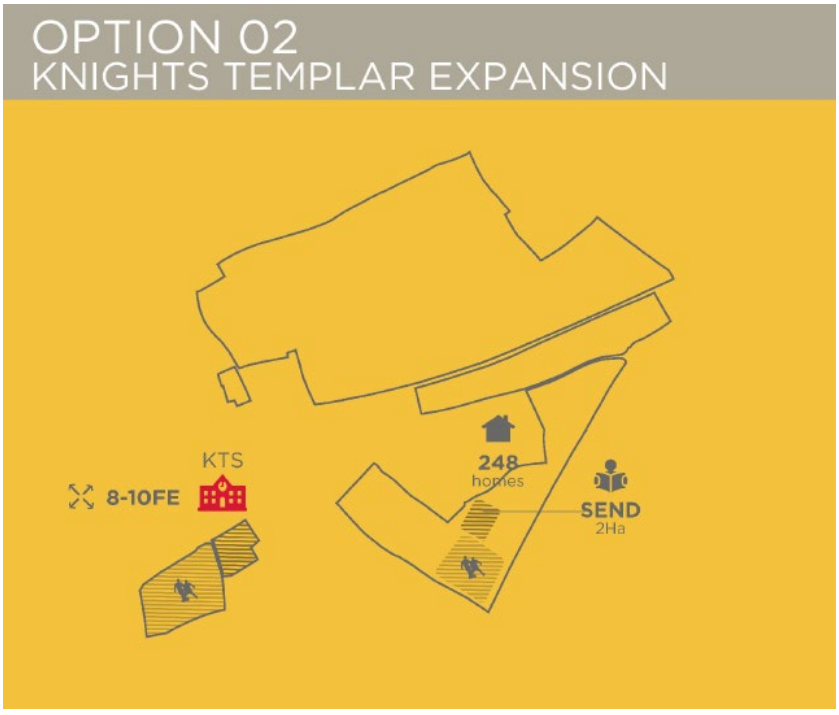
Insert 5.2-5.4 illustrate the development options and provide description of the key elements of each option.

Insert 5.2: Development Option 1 - Knights Templar Relocation/Expansion on BA3



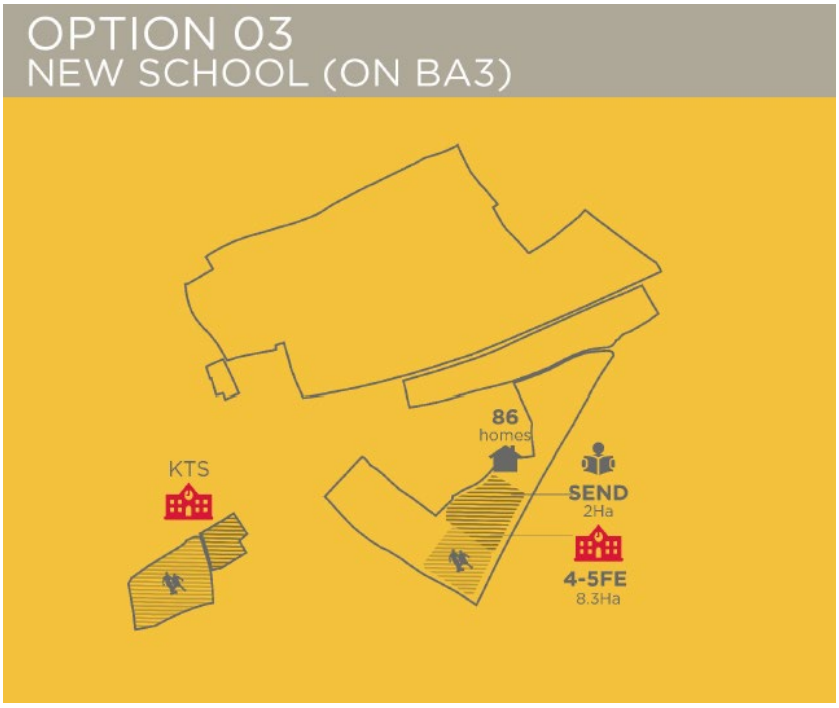
- 10-12 FE secondary school built on BA3 (with pitches on Urban Open Land (UOL) to south
- 2ha SEND school on BA3

Insert 5.3: Development Option 2 Knights Templar Expansion on Existing Site



- 2ha SEND school on BA3
- Residential development of remainder of southern part of BA3

Insert 5.4: Development Option 3: Second Secondary School on BA3



- 4-5 FE secondary school built on BA3 (with pitches on Urban Open Land (UOL) to south
- 2ha SEND school on BA3
- Residential development of remainder of southern part of BA3

5.3.1 Strategic Masterplan

The SMP has been updated to reflect the three options, showing flexible land use (residential / education) on BA3 and a potential expansion of KTS. .

The OPA would also be prepared to allow flexibility for all three options to be implemented, depending on the further review of the education provision. This will allow either a contribution to be made to delivery of a KTS expansion, or for U&C to build a new school on reserved land at BA3.

The TA will present all three development options with specific consideration of transport parameters. The exact package of measures to be delivered in each scenario, either directly or by way of contribution will be established through the TA and further review of the education provision.

It is noted that the expansion of KTS on the existing site (Option 2) would not be part of the outline planning application that forms the topic of this TSR. It is however consider the transport implications of such will be considered by the TA as appropriate.

5.3.2 Subsequent Approvals

It is anticipated that all of the school options above will require further planning approval post OPA and the school review process (either reserved matters applications if the school is provided on BA3 or a detailed planning application for the works to expand Knights Templar on its existing site. In every scenario, the applications will include more detailed assessments of the transport (and other) implications and mitigation required to support the selected option.

6 Transport Strategy

6.1 Overview

Reflecting our approach to the project, as set out in the introduction, and as agreed with HCC and NHC, ITP has developed a Mobility Vision for the developing Growing Baldock proposals. This reflects the need to deliver growth differently, guided by a clear vision, and in a way that embeds active and sustainable travel first while being place, and masterplan-led. Furthermore, it is noted that this approach aligns with the vision-led principles that are promoted by the NPPF.

In the context of the above, this Section of the TSR sets out the developing Transport Strategy that currently forms the basis of relevant principles that inform the evolving masterplan design.

For the purpose of this TSR, the Transport Strategy is presenting as an overview of key considerations that are considered to be common to various configurations of Growing Baldock that may arise from the optioneering discussed at **Section 5**. Where relevant, the TA will present refinement of the Transport Strategy to capture any option-specific variations to the proposed strategy.

6.2 Mobility Vision

The Mobility Vision and Key Principles set out below will continue to be refined as the work progresses and as feedback is received from the Councils. As part of the TA, specific case studies and best practice outcomes from comparable developments would be examined. These will provide practical insights and reinforce the proposed Mobility Vision.

Growing Baldock will be a place that prioritises quality of life over traffic movement. Walking, cycling and public transport will be the quickest and most enjoyable way to travel, with connections enhanced to key destinations, benefitting existing communities and businesses in the town. Through masterplan plan design, mix of uses and delivery of new infrastructure, the need to travel off-site will be reduced, with non-car options being the first choice when travel is required, encouraging active, healthy lifestyles.

6.3 Masterplan Principles

The transport strategy has been developed to deliver the vision and key objectives for the development. The key objectives are as follows:

- **Reducing traffic dominance in Baldoc**k will be achieved through proposals that reduce demand for car travel, paired with off-site improvements that manage existing traffic demand and interventions that prioritise active and sustainable modes of travel.
- **Safe, direct and coherent networks for active modes** will be prioritised on- and off-site, connecting new and existing residents to employment, education, retail and leisure facilities, supported by mobility hubs, and interventions to reduce severance of existing infrastructure, including the rail line, A1(M) and B656.
- **Delivering a green infrastructure network** that will incorporate and enhance existing walking, cycling and equestrian access, encouraging leisure journeys and connecting to the existing rights of way and greenway network.

- **Prioritising buses above private vehicles** will be achieved by providing efficient routes that enhance connectivity, and high quality and accessible stops that maximise catchment, connecting the sites to each other, Baldock and other key destinations.
- **Excellent access to rail,** supporting sustainable travel to wider destinations. This will be delivered through enhanced pedestrian and cycling connections to the station, particularly to the north of the rail line, ensuring the first stage of rail trips are made mostly by foot or cycle.
- **Managing freight and logistics** within the site through the careful consideration of access, parking, loading bays and integration of mobility hubs will allow for efficient delivery of goods, as well as access by service and emergency vehicles.
- **Reducing reliance on the private car** so that around 50% of all trips are made by other modes will be achieved by designing a movement network that ensures trips within the site are quicker and easier to make on foot, by bike or by public transport, and through applying progressive, connectivity-related and EV enabled parking standards.

6.4 Liveable Neighbourhood

A key objective of the Transport Strategy for Growing Baldock is to create new 'Liveable Neighbourhoods' that aim to reduce car dependency and promote active and sustainable forms of travel through appropriate masterplanning principles and supporting initiatives and strategies. Additionally, through implementing the proposed development and through creation of improved connectivity, it is envisaged that the active and sustainable travel network will be improved for existing residents.

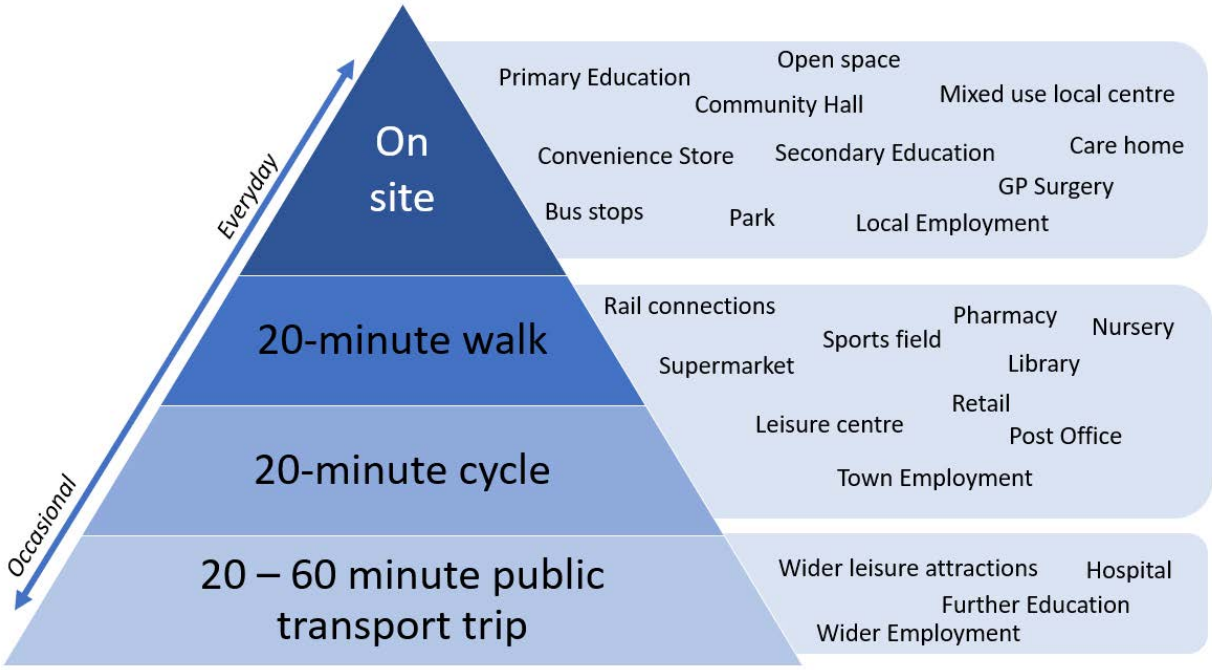
The delivery of Liveable Neighbourhoods builds on the principles of '20-minute neighbourhoods', '15-minute cities' or 10-minute towns', that are terms used to describe the concept of creating places where daily facilities and services are available to access within a short journey by foot, cycle or public transport. It centres around the improvement in quality of life for all and facilitating places where everyone can thrive without the need to own or use a car.

Nationally, 80% of journeys under a mile are made on foot, which usually equates to around a 20-minute walk (or seven-minute cycle). This means, that by locating more facilities / key destinations closer to homes, as well as designing according to the LTP4 user hierarchy and placing the movements of people (rather than vehicles) at the centre of the transport strategy and emerging masterplan design, more trips can be made by sustainable modes.

Baldock is a compact town and provides a range of facilities for existing residents, some of which will be used by those travelling from the development sites. While many everyday facilities will be provided on site, occasional facilities will be provided off-site.

Insert 6.1 sets out our interpretation of the everyday and occasional facilities needed to create a 20-minute neighbourhood in Baldock.

Insert 6.1: Illustrative Approach to Reviewing Future Accessible Facilities



The TA prepared to support the application will demonstrate how the delivery of a 'Liveable Neighbourhood' is achievable through supporting masterplanning principles that will be presented and elaborated in due course.

6.5 Transport Strategy

The overarching principles discussed above will be realised through development of a series of proposed strategies that include but are not limited to the following:

- Access and Movement Framework
- Active Travel Strategy
- Public Transport Strategy
- Vehicle Access Strategy
- Parking Strategy
- Servicing Strategy
- Wayfinding Strategy

It is envisaged that through consultation with, and input from the LHA, NH and SHA on the key principles and parameters discussed in this TSR, the above strategies can be developed to support the Transport Vision for Growing Baldock.

6.6 Access and Movement Framework

As part of ongoing collaborative work with the scheme masterplanner, David Lock Associates (DLA) and landscape designers Bradley Murphy Design (BMD), the currently proposed access and movement strategy for the developing proposals has been advanced in respect of the principles established in support of the draft parameter plan, that, as discussed at **Section 1**, has been subject to review by NHC and HCC.

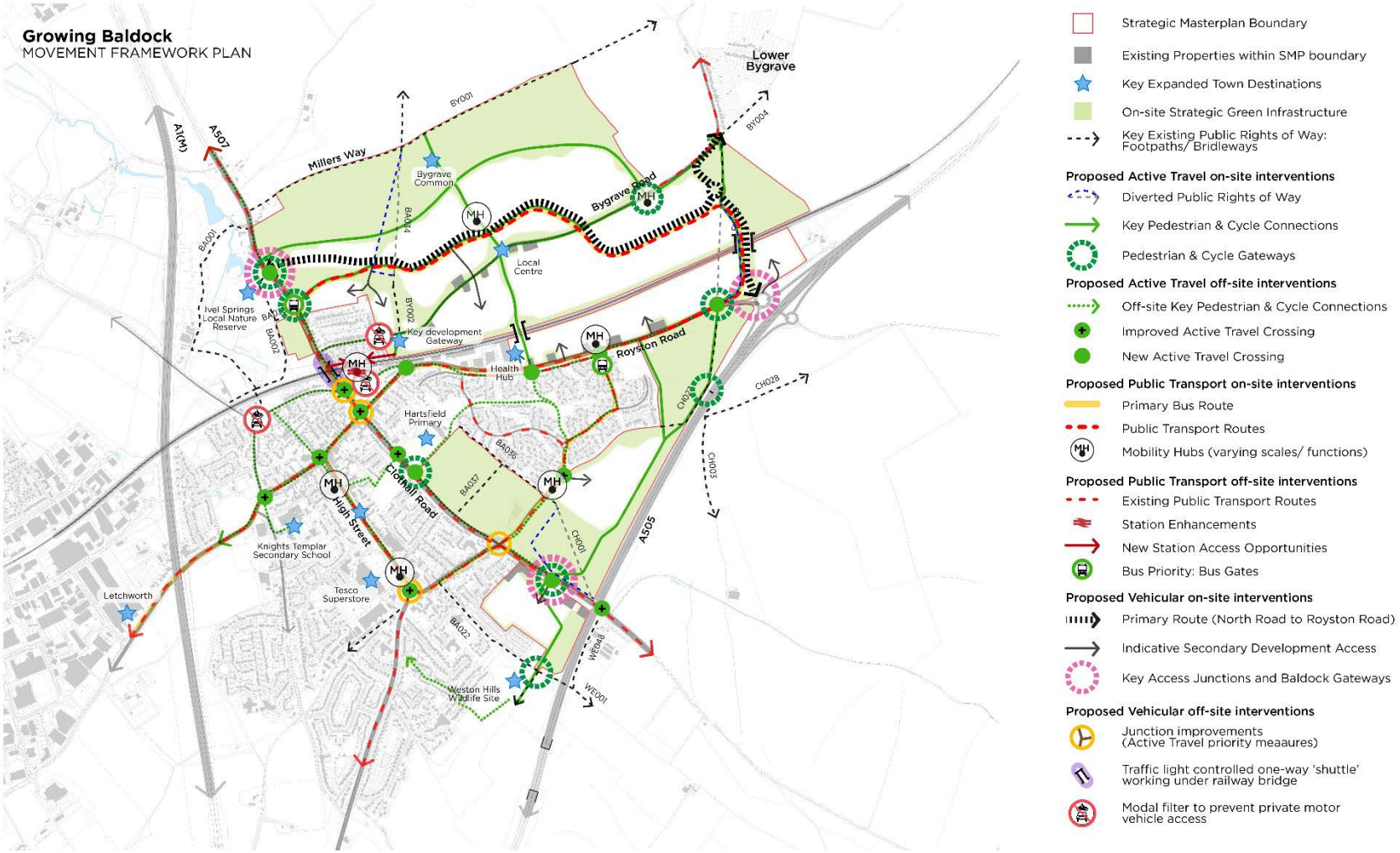
Key to the delivery of the overarching vision and objectives is the integration of the off-site routes to the internal site networks and providing active travel and street networks that prioritise walking, cycling and public transport for trips from residential areas to the education, health, retail and leisure facilities on site.

Access by private car will be possible to all areas of site but will not be direct, particularly for trips between communities within BA1 and from BA1 to the town centre, BA10 and BA3. This 'filtered permeability' approach will ensure that local trips are quicker on foot, by cycle and by public transport thereby supporting the facilitation of a 'Liveable Neighbourhood'. This includes connections to the rail station.

The currently considered key points of access and movement framework for the developing masterplan are presented at **Insert 6.2** overleaf.

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Insert 6.2: Proposed Conceptual Active and Sustainable Travel Network



6.7 Active Travel Strategy

The Growing Baldock proposals seek to provide a sustainable urban extension of the existing town of Baldock and by virtue of the proximity of the proposed development plots to existing town centre facilities, the scheme provides tangible opportunities for delivering a robust active travel strategy.

Discussions have been undertaken with ATE, as part of a pre-application pilot, regarding the Active Travel Strategy. Ongoing engagement will take place with ATE, as part of the pre-application process.

The active travel strategy will form a vital element of the vision-led approach for Growing Baldock that seeks to deliver a scheme that prioritises and promotes walking and cycling as a realistic alternative to private-car use for a large proportion of typical daily trips.

The proposed active travel strategy will be developed in conjunction with the landscape strategy and will seek to deliver cohesive connections between the existing streets in Baldock and the green routes that connect Baldock to the wider active travel network.

The conceptual basis of the proposed active travel strategy has been based on providing new linkages and enhancing existing links, between the proposed development plots and key destinations. The design development considered in support of the emerging proposals consisted of identifying a core set of routes based on the location of development plots and key destinations. Subsequently, a journey-based approach has been used to consider the types of interventions that can be implemented to improve the core network. The proposed approach identifies how different users would seek to travel to the key destinations from the residential development sites. This exercise has been devised to ensure that a full range of trips are considered, not just commuting. The strategy will also identify and address any potential conflicts between different transport modes and provide solutions to mitigate them, as required.

Many journeys to and from the proposed development would be undertaken as part of a multi-modal trip, with most journeys starting on foot. Therefore, the Active Travel Strategy will seek to ensure that active travel routes are integrated with existing and proposed public transport hubs, to facilitate multi-modal journeys.

6.8 Public Transport Strategy

Improving access to rail and bus services will form a vital part of the transport strategy for the developing proposals.

Prioritising buses above private vehicles will be achieved by providing efficient routes that enhance connectivity, and high quality and accessible stops that maximise catchment, connecting the sites to each other, Baldock and other key destinations. The key on-site principles could include:

- Bus access within site to best practice with sections of dedicated running
- Ensure bus alignments are able to accommodate future route enhancements and technology improvements
- Bus stops provided to maximise catchment (e.g. majority of properties within 400m of a stop) within sites
- Mobility hubs provide access to bus services at the heart of local centres and at points of interchange between modes

- Increased density around primary mobility hubs on-site (BA1)
- Seek to operate a bus service from early occupation, as part of a wider travel initiative for the town
- Provide free bus tickets and mobility credits as part of a wider 'Mobility as a Service' (MaaS) offer to residents

Excellent rail access with better facilities and access will support sustainable travel to wider destinations. These will be delivered alongside enhanced pedestrian and cycling connections to the station, particularly to the north of the rail line, ensuring the first stage of rail trips are made mostly by foot or bike.

6.9 Vehicle Access Strategy

The vehicle access strategy is a key part of delivering the overarching vision and key objectives for the development. As a key principle the transport strategy seeks to ensure that walking, cycling, wheeling and public transport are the quickest and easiest choice for local journeys.

The access road proposed as part of the development serving plot BA1, forms part of the overall Vehicle Access Strategy. Many of the interventions set out previously in the Active and Sustainable Modes Strategy (ASMS) have implications for car-borne trips in Baldock, but the proposed interventions which directly affect vehicles are outlined below:

- The access road and the access junctions at either end of it, on Royston Road and North Road and its role in allowing interventions on- and off-site to be completed by providing additional connections around the town
- Modal filters on Bygrave Road, Norton Road, Football Close and Icknield Way (details to be agreed through on-going consultation, including with local residents)
- Shuttle working system under the rail bridge on Station Road
- Reconfiguration of the B656 / A507 crossroads to ban turns from Station Road to Royston Road (and vice versa) and from Whitehorse Street to Station Road (phasing of interventions to be identified through the TA, and incorporated into the Monitor and Manage Framework)

Whilst most of the above relates to the reallocation of road space and greater prioritisation of active and sustainable modes, it is also proposed through the Vehicle Access Strategy to investigate highway capacity improvements at Junction 9 of the A1(M). This could reduce volumes of through traffic within Baldock.

6.9.1 Non-residential Parking Provisions

NHC parking standards for non-residential uses will be challenged to reduce car reliance for daily trips to commercial uses in the proposed development.

6.10 Parking Strategy

A key component for ensuring high levels of active and sustainable mode share is the proper management of car parking, both in terms of the level of car parking provision and how and where it is provided. Early consideration has been given to local car ownership levels and adopted car parking standards in developing a conceptual parking strategy that is to be further developed subject to pre-application advice that is sought as part of this scoping exercise.

6.10.1 Car Ownership

Census 2021 Car ownership data demonstrates car ownership levels above the national average. In Baldock, 85% of households own at least one car, compared with 76.5% nationally. **Table 6.1** indicates that the largest proportion of households own one car or van and that the average number of car ownership can be approximated as around 1.35 cars per household.

Table 6-1: 2021 Census Car Ownership Data

Category	Baldock
Population	4,680
No cars or vans in household	15%
1 car or van in household	45.4%
2 cars or vans in household	29.5%
3 or more cars or vans in household	10.1%
Average Cars per Household	~ 1.35

6.10.2 Vehicle Parking at New Developments Supplementary Planning Document

The parking strategy for the developing proposals has given consideration to NHC's 2011 Vehicle Parking at New Development Supplementary Planning Document (SPD) that details the long-term plan for parking as part of the District's vision of being a "vibrant place to live and prosper". It is acknowledged that whilst parking has a role in promoting sustainable travel choices in most locations, demand management through parking is most appropriate at the trip destination rather than at the trip origin (i.e. at home).

The residential parking standards presented in the NHC's Parking SPD (summarised at

Table 6.2) refer to 'minimum' standards that enforce a level of car dominance in new development.

Table 6-2: NHC Adopted Residential Parking Standards

Class Use C3	Car Parking Standard	Minimum Standard Cycle Parking
1 bedroom	1 Space per dwelling Minimum	1 secure covered space per dwelling. None if garage or secure area provided within curtilage of dwelling.
2+bedrooms	2 spaces Minimum	

The SPD notes that garages are often underused, with less than half used for parking. Grouped parking designs for residential developments to be in smaller, surface parking areas (with allocated parking where appropriate) are preferred rather than garages, with visitor/unallocated parking ranges from 0.25-0.75 per dwelling.

Table 6.3 below summarises non-residential car parking standards presented in the NHC Parking SPD that will be referenced in developing a parking strategy that will support the 'Vision-led' approach to the proposals.

Table 6-3: NHC 2011 Parking SPD - Employment Use Car Parking Standards

Class Use	Maximum Car parking Standard (includes visitor spaces)
B1 – Business	
B1 (a) Offices	1 space per 30 m2 GFA
B1 (b) Research and Development, High-tech/B1 (c) Light industry	1 space per 35 m2 GFA
B2 - General Industry	
General Industry	1 space per 50 m2 GFA (lorry provision to be checked against benchmark standards)
B8 – Storage and distribution	
Wholesale distribution, builders merchants, storage	1 space per 75 m2 GFA (lorry provision to be checked against benchmark standards)
Mixed B1/B2/B8 (unless heavily orientated to B8) for use where individual land use components are not known	1 space per 40 m2 GFA (lorry provision to be checked against benchmark standards)

6.10.3 Proposed Average Residential Parking Provisions

In support of the 'Vision-led' approach, the Transport Strategy for the developing proposals will seek to challenge the minimum standards set out in the 2011 NHC Parking SPD to deliver a development that is not reliant on car use. Through the development of a suite of measures and design principles in support of reduced car reliance, and in seeking to support the sustainable transport aspirations of the proposals, the emerging proposals will seek to, on average, incorporate a level of car parking provision below NHC's prescribed parking standards across the proposed development. The level of car parking provided would be sensitive to the public transport and amenity accessibility levels across the proposed development site.

6.10.4 Car Club

The aspirations for reduced car ownership will be supported with the introduction of a Car Club to support the development. New residents will be provided with paid Car Club membership to encourage residents to use the scheme, as part of a package of travel planning measures.

Zipcar state that *"every Zipcar takes an average of 10-15 privately owned cars off the roads of the UK because members often sell (or don't replace) a car when they join."* The expansion of the Zipcar network through the site will therefore provide a tangible benefit to the sustainable credentials of the development, by encouraging reduced levels of car ownership and an associated reduction in development traffic demand.

6.11 Servicing Strategy

Managing servicing (deliveries, collections and maintenance) within the site through the careful consideration of access, parking, loading bays and integration of mobility hubs will allow for efficient delivery of goods, as well as access by service and emergency vehicles. The key on-site principles include:

- Introduce vehicle access and loading restrictions within sites to manage freight and logistics
- Introduce consolidation points and ‘last mile’ cargo bikes and e-vans for distribution to properties
- Provide pick up / drop off lockers at mobility hubs

6.12 Wayfinding Strategy

Vital to the effective operation of the overall access strategy will be the implementation of a Wayfinding Strategy that will be developed in outline as part of the emerging design development work that will be advanced as part of the preparation of the TA. This may include an examination of specific case studies from other relevant developments, which could provide practical guidance.

The outline Wayfinding Strategy will set out the role of signage and design features that will be used to direct all modes of travel around the parameter plan area and to facilitate efficient connectivity between various elements of the parameter plan and amenities in the wider locality.

6.13 Framework Travel Plan

A Framework Travel Plan (FTP) will be produced to cover the overall development. In accordance with national and local policy, the Travel Plan will set out measures that will be introduced into the development to enable and encourage residents to travel to and from the site by modes other than single occupancy vehicles (SOV).

The Travel Plan will include measures such as a travel options information booklet and other appropriate travel option marketing material, car clubs, a car sharing scheme and a coordinated approach to the promotion of the travel plan including participation in local and national walking and cycling events, health initiatives as well as a launch event for the Travel Plan. The introduction of a Framework Travel Plan will set out the principles for each detailed phase and enable a consistent and effective approach to sustainable travel as the development progresses. This will ensure that residents are fully aware of their sustainable travel options from the time of occupation, helping them to have access to all of their possible travel options from the start.

The Travel Plan will set targets for reducing SOV travel, and corresponding targets to increase the use of active and sustainable travel modes. Data will be collected from travel surveys and the success of the Travel Plan at meeting these targets will be monitored using surveys as necessary. The Travel Plan will accord with HCC guidance.

The FTP will support the Monitor and Manage Framework discussed at **Section 8**.

7 Trip Generation, Modal Split, Distribution and Assignment

7.1 Overview

Based on the Vision-led principles discussed with NHC and HCC as part of the development of the proposed scheme, this Section of the TSR sets out the trip generation, distribution and modal split methodologies that are proposed to be utilised as part of the TA that will be prepared in support of the emerging planning application.

It is proposed that the traditional trip generation exercise carried out for the withdrawn applications (discussed in **Section 1**) be used as an initial starting position for the residential trip rates to represent a traditional approach with limited sustainable travel interventions, that will be referred to as a 'Business as Usual' (BAU) scenario. TRICS will be used for the commercial BAU scenario, due to the new mix of uses proposed. Within the BAU scenario, the TRICS Decide and Provide methodology will be employed to derive trip rates that reflect current trends regarding working from home, but without affecting overall mode share.

The mode shift away from the car and the BAU mode share will be identified, taking into account the proposed strategies and package of interventions outlined above. This vision-led scenario will be consistent with the vision and principles. The mode shift assumptions will be made making use of a bespoke Mode Shift Model (MSM).

In summary, the TA will set out trip generation and mode split for the following scenarios:

- Business as Usual (standard trip generation methodology from withdrawn applications) and reduced trip rates (TRICS Decide and Provide)
- Vision-led (MSM)

This Section will be structured as follows:

- Trip Internalisation
- Trip generation
- Trip distribution and assignment

7.2 Trip Internalisation

The development proposals will result in significant levels of trip internalisation, resulting from the mix of land uses proposed. This reflects people who would live, study and work at the development. These individual trips would therefore not generate external vehicular trips on the highway network. This subsection presents an overview of the methodology for estimating the proportion of trips generated by the proposed scheme that will not enter the external active travel, public transport or highway networks.

Given that standard TRICS surveys do not effectively capture the trip rates and mode shares of wholly internal trips within development sites, the previously submitted TSR proposed that mode share of 'internal' trips would be altered in all trip generation scenarios to better reflect the likelihood of these shorter distance trips being made by sustainable modes. Informed by developments of similar scale, such as the Cambourne development in Cambridge, it was previously assumed that up to 30% of residential trips and 20% of employment trips would be internal to the site.

A more robust approach will be employed within the TA, as set out below.

Case Study Benchmarking

This update of the TSR captures case study research that has been carried out by ITP to derive a robust and further refined methodology in respect of trip internalisation assumptions. Below is a review undertaken to benchmark and compare containment assumptions of other large-scale developments within England. A summary of these sites, which are at various stages of planning and delivery, is presented in **Table 7.1**. The case study research assesses trip containment methodology for each of the identified large residential-led mixed use developments.

Table 7-1: Developments Reviewed

Name of site	Location of site	Planning reference	Size
Otterpool Park	Folkestone and Hythe, Kent	Y19/0257/FH	8,500 dwellings
Harlow and Gilston	Hertfordshire and Essex	3/19/1045/OUT	8,500 dwellings
Sittingbourne and Teynham	Swale, Kent	21/503906/EOUT	1,250 dwellings
Longcross	Runnymede, Surrey	RU.22/0393	1,700 dwellings
Dunton Hills	Brentwood, Essex	21/01525/OUT	3,700 dwellings
Salt Cross	West Oxfordshire	20/01734/OUT	2,200 dwellings
Dunsfold Park	Waverley, Surrey	WA/2015/2395	1,800 dwellings
Long Marston	Stratford-upon-Avon, Warwickshire	18/01892/OUT	3,100 dwellings
Salden Chase	Aylesbury Vale, Buckinghamshire	15/00314/AOP	1,855 dwellings

Of these identified sites, all have planning permission of some form except the Sittingbourne and Tenyham and Salt Cross developments.

The case study approach involves assessing a breakdown of land use and journey purpose for each of the developments presented at **Table 7.1** to gather a range of external and internal trip proportions for large residential-led mixed use developments. **Table 7.2** presents a summary of the case study research.

Table 7-2: Summary of Methods of Calculation and Ranges of Trip Internalisation

Trip purpose	Methods of calculation	Range of trip internalisation figures*
Employment	Census O-D data Census Journey to Work data Census population groupings Examples of other locations	7% - 20%
Education (primary)	Assumptions Est. pupils per household Private / state school attendance	88% - 100%
Education (secondary)	Assumptions Est. pupils per household Private / state school attendance	29% - 90%
Leisure purposes	Assumptions based on on-site land uses	80% - 100%
Health centres	Assumptions based on on-site land uses	30% - 80%
Community centre	Assumptions based on on-site land uses	90% - 100%
Retail / personal business	TEMPro data NTS data Assumption based on type of jobs and distance likely to travel for these	50% - 90%
Hotel	Assumption based on type of jobs and distance likely to travel for these	80% - 100%
Care home	Assumption based on on-site land uses	10% - 50%

**Where development includes land use type*

The initial findings of the case study research suggests that trip internalisation methodologies vary between developments, with no consistent agreed methodology for their calculation. Generally, approaches utilise an evidence base for employment and educational trips such as National Travel Survey data, sometimes alongside Origin-Destination data. For other land uses an assumption is generally made based on professional judgement, informed by demographics and site location / context.

Table 7.3 below sets out maximum, minimum and mean average levels of containment in respect of categorised trip purposes. These will be the starting point for further refinement within the TA.

Table 7-3: Trip Containment Factor Comparison (daily rates)

Purpose	Case Studies Range		
	Minimum	Maximum	Mean Average
Commuting	7%	20%	14%
Education or Escort Education	29%	100%	65%
Shopping	50%	90%	70%
Leisure	80%	100%	90%
Other (nursery and healthcare)	10%	100%	55%

As more detail on the land use assumptions (particularly) destination land uses are understood this analysis can be refined and used to inform scenario testing for future trip generation and wider network distribution.

For the remainder of this Section, the broad internalisation assumptions discussed at the beginning of this subsection (i.e., 30% of residential trips and 20% of employment trips would be internal to the site) will be utilised to facilitate initial estimation of trip generation.

7.3 Trip Generation

7.3.1 Business as Usual

Residential

The business-as-usual scenario has been based on the TRICS[1] trip rates adopted in the TAs submitted to support the withdrawn planning applications for the development sites. As outlined above, those TAs adopt a 'traditional' approach to trip generation and mode share, where significant volumes of vehicle-borne trips were predicted and planned for.

The residential trips for 2,750 dwellings, presented in **Table 7.4:** , includes residential development at BA1 and BA3, and excludes trip generation for BA2's 250 dwellings. The overall number of dwellings assessed in the TA will reflect the final masterplan. The full TRICS data is provided in **Annex E**.

[1] TRICS refers to the Trip Rate Information Computer System, which is a database of multi-modal surveys of developments in the UK, allowing for trip rates to be calculated for different land uses.

Table 7-4: Residential Business As Usual Residential Trip Rates and Associated Trips (Trip Rate per Dwelling) (2,750 dwellings)

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
	Arrivals	Departs	Two-Way	Arrivals	Departs	Two-Way	Arrivals	Departs	Two-Way
Vehicle	0.153	0.428	0.581	0.415	0.177	0.592	2.417	2.380	4.797
Walk	0.035	0.135	0.17	0.036	0.036	0.072	0.392	0.404	0.796
Cycle	0.003	0.015	0.018	0.011	0.005	0.016	0.047	0.046	0.093
Public Transport	0	0.027	0.027	0.02	0.003	0.023	0.113	0.118	0.231
Total People	0.191	0.605	0.796	0.482	0.221	0.703	2.969	2.948	5.917
Residential Development External Trips (70% BA1, 90% BA3)									
Vehicle	305	854	1159	828	353	1181	4822	4748	9570
Walk	70	269	339	72	72	144	782	806	1588
Cycle	6	30	36	22	10	32	94	92	186
Public Transport	0	54	54	40	6	46	225	235	461
Total People	381	1207	1588	962	441	1402	5923	5881	11804

Non-residential land uses

The BA10 employment allocation would comprise different land uses, which have been outlined in **Table 5.1**. The trip rates and resultant trips are identified in **Table 7.5** and **Table 7.6** respectively. The overall quantum of development and land use mix in the TA will reflect the final masterplan. The full TRICS outputs are contained in **Annex F**.

Table 7-5: Employment - Business As Usual Trip Rates

Land Use	Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
		Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way
Medical Centre (Use Class E) 1,500sqm	Vehicle	2.563	1.359	3.922	1.058	1.952	3.010	24.549	24.225	48.774
	Walk	0.789	0.610	1.399	0.504	0.781	1.285	8.825	9.041	17.866
	Cycle	0.049	0.000	0.049	0.016	0.041	0.057	0.359	0.344	0.703
	Public Transport	0.301	0.081	0.382	0.114	0.195	0.309	2.594	2.578	5.172
	Total People	4.328	2.286	6.614	1.952	3.514	5.466	44.026	43.693	87.719
Sports Pavillion (Use Class D2) 500sqm	Vehicle	0.315	0.105	0.420	0.189	0.315	0.504	5.347	4.247	9.594
	Walk	0.210	0.000	0.210	1.135	0.441	1.576	5.464	5.623	11.087
	Cycle	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Public Transport	0.000	0.000	0.000	0.000	0.000	0.000	1.840	1.840	3.680

Land Use	Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
		Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way
	Total People	0.578	0.158	0.736	1.324	0.883	2.207	13.484	12.656	26.140
Vehicle Depot (Sui Generis) 1,500sqm	Vehicle	0.971	0.261	1.232	0.213	0.663	0.876	7.289	7.336	14.625
	Walk	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Cycle	0.000	0.000	0.000	0.024	0.024	0.048	0.024	0.024	0.048
	Public Transport	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Total People	-	-	-	-	-	-	-	-	-
Waste Transfer Station (Use Class B2) 3,500sqm (trip rate per ha)	Vehicle	35.981	32.243	68.224	0.000	3.261	3.261	512.445	517.891	1030.336
	Walk	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Cycle	0.000	0.000	0.000	0.000	0.000	0.000	0.467	0.467	0.934
	Public Transport	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Total People	-	-	-	-	-	-	-	-	-
Office (Use Class E) 26,500sqm	Vehicle	1.531	0.153	1.684	0.096	1.133	1.229	5.223	5.344	10.567
	Walk	0.096	0.008	0.104	0.004	0.093	0.097	0.697	0.707	1.404
	Cycle	0.090	0.001	0.091	0.004	0.084	0.088	0.268	0.247	0.515
	Public Transport	0.089	0.004	0.093	0.005	0.064	0.069	0.241	0.222	0.463
	Total People	2.033	0.206	2.239	0.141	1.516	1.657	7.329	7.336	14.665
Light Industrial (Use Class E) 26,500sqm	Vehicle	0.039	0.026	0.065	0.037	0.041	0.078	0.588	0.633	1.221
	Walk	0.002	0.000	0.002	0.003	0.001	0.004	0.045	0.049	0.094
	Cycle	0.001	0.000	0.001	0.001	0.000	0.001	0.008	0.008	0.016
	Public Transport	0.002	0.000	0.002	0.001	0.003	0.004	0.012	0.013	0.025
	Total People	0.052	0.028	0.080	0.042	0.054	0.096	0.696	0.766	1.462
Industrial (Use Class B2) 26,500sqm	Vehicle	0.177	0.037	0.214	0.047	0.105	0.152	1.385	1.428	2.813
	Walk	0.005	0.000	0.005	0.000	0.010	0.010	0.029	0.033	0.062
	Cycle	0.000	0.000	0.000	0.000	0.005	0.005	0.044	0.026	0.070
	Public Transport	0.035	0.000	0.035	0.167	0.130	0.297	1.266	1.268	2.534
	Total People	0.247	0.040	0.287	0.240	0.272	0.512	3.281	3.315	6.596

**Note: discrepancies between the sum of individual modes and 'total people' figures relate to vehicle passengers trips*

Table 7-6: Employment - Business As Usual Total Trips (External Trips 80%)

Land Use	Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
		Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way
Medical Centre (Use Class E) 1,500sqm	Vehicle	31	16	47	13	23	36	295	291	585
	Walk	9	7	17	6	9	15	106	108	214
	Cycle	1	0	1	0	0	1	4	4	8
	Public Transport	4	1	5	1	2	4	31	31	62
	Total People	52	27	79	23	42	66	528	524	1053
Sports Pavillion (Use Class D2) 500sqm	Vehicle	1	0	2	1	1	2	21	17	38
	Walk	1	0	1	5	2	6	22	22	44
	Cycle	0	0	0	0	0	0	0	0	0
	Public Transport	0	0	0	0	0	0	7	7	15
	Total People	2	1	3	5	4	9	54	51	105
Vehicle Depot (Sui Generis) 1,500sqm	Vehicle	12	3	15	3	8	11	87	88	176
	Walk	0	0	0	0	0	0	0	0	0
	Cycle	0	0	0	0	0	1	0	0	1
	Public Transport	0	0	0	0	0	0	0	0	0
	Total People	-	-	-	-	-	-	-	-	-
Waste Transfer Station (Use Class B2) 3,500sqm	Vehicle	10	9	19	0	1	1	143	145	288
	Walk	0	0	0	0	0	0	0	0	0
	Cycle	0	0	0	0	0	0	0	0	0
	Public Transport	0	0	0	0	0	0	0	0	0
	Total People	-	-	-	-	-	-	-	-	-
Office (Use Class E) 26,500sqm	Vehicle	325	32	357	20	240	261	1107	1133	2240
	Walk	20	2	22	1	20	21	148	150	298
	Cycle	19	0	19	1	18	19	57	52	109
	Public Transport	19	1	20	1	14	15	51	47	98
	Total People	431	44	475	30	321	351	1554	1555	3109

Land Use	Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
		Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way
Light Industrial (Use Class E) 26,500sqm	Vehicle	8	6	14	8	9	17	125	134	259
	Walk	0	0	0	1	0	1	10	10	20
	Cycle	0	0	0	0	0	0	2	2	3
	Public Transport	0	0	0	0	1	1	3	3	5
	Total People	11	6	17	9	11	20	148	162	310
Industrial (Use Class B2) 26,500sqm	Vehicle	38	8	45	10	22	32	294	303	596
	Walk	1	0	1	0	2	2	6	7	13
	Cycle	0	0	0	0	1	1	9	6	15
	Public Transport	7	0	7	35	28	63	268	269	537
	Total People	52	8	61	51	58	109	696	703	1398
Total	Vehicle	424	75	499	54	305	359	2072	2111	4183
	Walk	32	9	41	12	33	45	291	298	589
	Cycle	20	0	20	2	20	21	73	64	137
	Public Transport	30	2	32	38	44	82	361	357	718
	Total People	570	98	669	121	445	566	3210	3228	6438

**Note: discrepancies between modal figures and total people figures relate to vehicle passengers, which are not counted in the individual modal figures*

Education Trips

In the business-as-usual scenario, a 'first principles' approach has been taken to calculate the multi-modal trip generation of the existing school, providing the foundation to inform travel patterns and implications of an expanded school, either on the existing Knights Templar site or at BA3. This approach has been informed by either national / publicly available data, or data and information provided by Knights Templar School.

Knights Templar School undertook a 'hands up' survey in October 2023, in which pupils across all year groups (except sixth form) were asked how they currently travel to school. Based on this information, aggregating rail trips with walking trips, scooter trips with cycling and 'car then walk' trips with car trips (as worst case), the resulting mode shares for different home areas are presented in **Table 7.7**.

Table 7-7: Pupil Mode Shares for Different Home Areas

Travel Mode	Survey Results	Pupils within Baldock	Pupils Outside of Baldock
Car	23%	20%	60%
Walk	57%	61%	6%
Cycle	6%	5%	5%
Public Transport	14%	14%	29%
Total	100%	100%	100%

Knights Templar School was unable to provide detailed data relating to where its 130 staff live and how they travel to school, however, some general/anecdotal information was provided, suggesting that most staff drive and many come from a reasonable distance away. On that basis, the Census 'Location of usual residence and place of work by method of travel to work' dataset (WU03EW) was used as a proxy to represent staff travel patterns. A summary of the resulting staff travel mode share is presented in **Table 7.8.**

Table 7-8: Summary Staff Travel Mode

Travel Mode	Percentage
Car	76%
Walk	19%
Cycle	3%
Public Transport	2%
Total	100%

The resulting pupil and staff trip rates and total trips associated with the existing school are presented in **Table 7.9**. For the purpose of this assessment, it has been assumed that all staff and pupils would arrive at the school during the traditional AM peak period (08:00-09:00). It is anticipated that most pupils would depart from school between 15:00-16:00. Therefore, it has been assumed for this assessment that all staff at the school would depart during the PM peak period (17:00-18:00).

Table 7-9: Education - Business As Usual Trips and Mode Share (Existing 1,428 Pupils / 130 Staff)

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00) *			Daily		
	Arrivals	Departs	Two-Way	**Arrivals**	**Departs**	**Two-Way**	Arrivals	Departs	Two-Way
Vehicle	0.385	0.000	0.385	0.000*	0.741*	0.741*	0.385	0.385	0.770
Walk	0.388	0.000	0.388	0.000*	0.215*	0.215*	0.388	0.388	0.776
Cycle	0.047	0.000	0.047	0.000*	0.029*	0.029*	0.047	0.047	0.094
Public Transport	0.180	0.000	0.180	0.000*	0.018*	0.018*	0.180	0.180	0.360
Total People	1.000	0.000	1.000	0.000*	1.000*	1.000*	1.000	1.000	2.000
Total Trips									
Vehicle	600	0	600	0	96	96	600	600	1200
Walk	605	0	605	0	28	28	605	605	1209
Cycle	73	0	73	0	4	4	73	73	146
Public Transport	281	0	281	0	2	2	281	281	561
Total People	1558	0	1558	0	130	130	1558	1558	3117
*Note: It is assumed that only staff would depart the school during the PM peak period.									

7.3.1.1 TRICS Decide and Provide trip rates

The TRICS Decide and Provide methodology provides a suitable basis for estimating the downward trend in trip making, seen over recent years. As noted above this method will be used to reduce overall trip rates, making of the BAU mode share. A summary is provided below, with full details of the methodology set out in **Annex G**.

Residential

Overall, the trend data shows a substantial fall in total trip making and vehicle trips over the period of 2000-2024, which is in line with DfT data cited in the TRICS guidance. It is noted that while mathematically there has been a reduction in vehicle trips over the period, there is a substantial increase in cycling. The ITP MSM is employed later in this document to provide refined mode share estimates for the proposed development. The residential decide and provide trip rates and total people trips is presented in **Table 7.10**.

Table 7-10: Residential Decide and Provide Residential Trip Rates and Associated Trips (2,750 Dwellings)

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
	Arrivals	Departs	Two-Way	Arrivals	Departs	Two-Way	Arrivals	Departs	Two-Way
Total People	0.176	0.558	0.734	0.441	0.202	0.644	2.748	2.729	5.477
Residential Development External Trips (70% BA1, 90% BA3)									
Total People	352	1113	1465	880	404	1284	5483	5444	10927

The proposed residential development in a Decide and Provide scenario is anticipated to result in 1465 two-way total people trips in the AM peak hour and 1284 two-way total people trips in the PM peak hour, during weekdays.

Non-residential

Overall, the trend data for commercial uses shows a reduction in total trip making over the assessed period. Notably, it is observed that since 2000, there has been a slight reduction in total vehicle trips, which is in line with DfT data cited in the TRICS guidance. The commercial decide and provide trip rates and total people trips is presented in **Table 7.11**.

Table 7-11: Decide and Provide Commercial Trip Rates and Associated Trips (86,500sq.m)

Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
	Arrivals	Departs	Two-Way	Arrivals	Departs	Two-Way	Arrivals	Departs	Two-Way
Total People	0.777	0.134	0.911	0.166	0.610	0.775	4.267	4.291	8.558
Commercial Development External Trips (80% External)									
Total People	538	93	631	115	422	537	2952	2969	5922

The proposed commercial development in a Decide and Provide scenario is anticipated to result in 631 two-way total people trips in the AM peak hour and 537 two-way total people trips in the PM peak hour during weekdays.

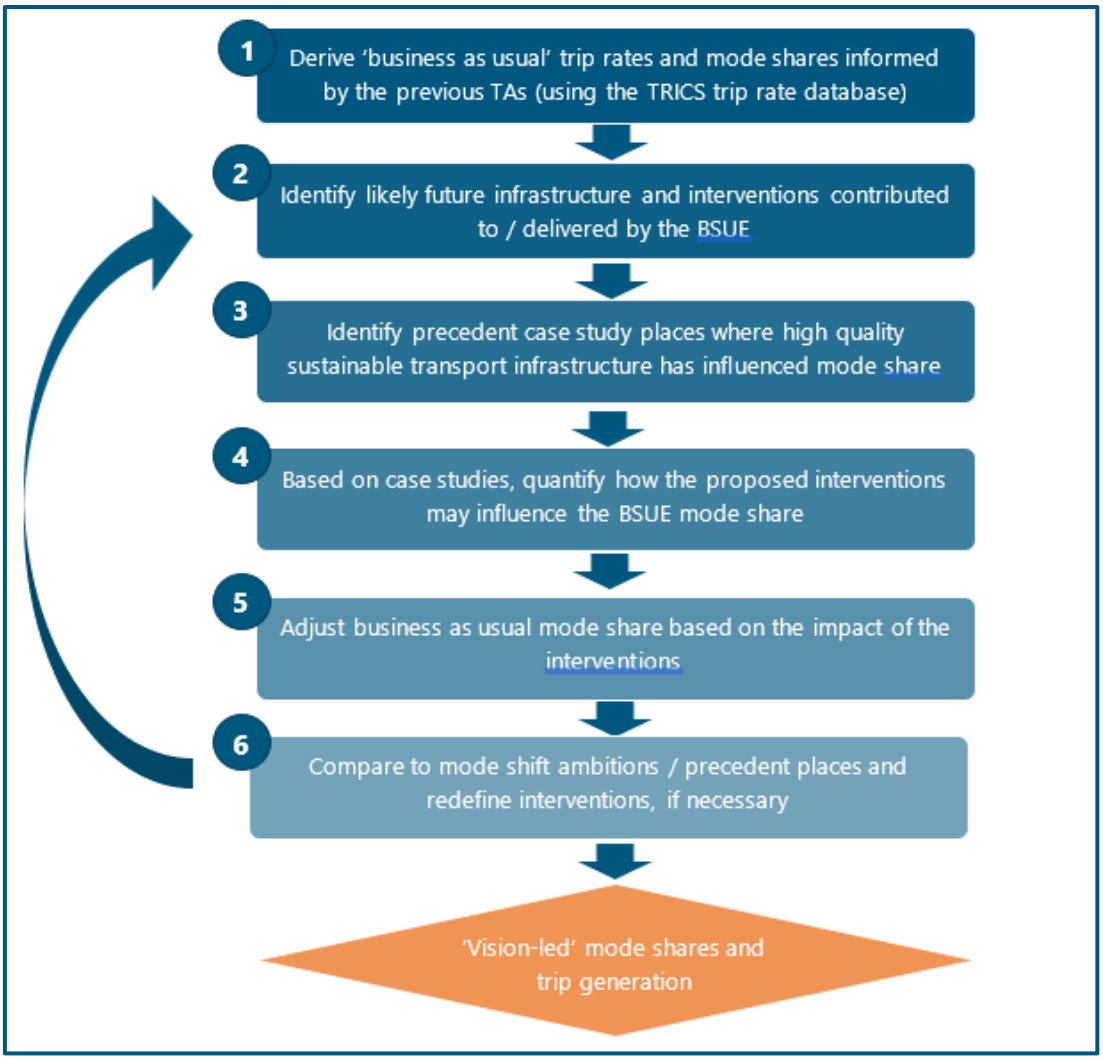
The Decide and Provide “historic trend” process is considered inappropriate for estimating changes to trip generation for educational trips, where there is a need for staff and pupils to be on-site at all times.

7.3.2 Vision-Led

The MSM will be used to determine the vision-led mode share within the TA. The MSM is a spreadsheet tool that facilitates quantification of the impacts of interventions, at a high level. It outputs the likely impacts on mode share, trip generation and carbon equivalent emissions, and allows for comparison of the BAU approach. It is a tool for embedding the vision-led approach in the planning of large-scale growth.

The approach to deriving ‘vision-led’ mode shares and trip rates in the MSM is illustrated in **Insert 7.1**. More detail on the process is set out in **Annex H**, with this section providing a summary. The proposed MSM methodology also provides an approach to estimating carbon equivalent emissions generated by vehicle trips associated with the development sites.

Insert 7.1: Mode Shift Model Approach



The MSM alters the baseline, business-as-usual mode shares (as shown in **Table 7.4** - **Table 7.5**) to reflect more sustainable places which have achieved high active and sustainable mode shares. These adjustments are dependent on a judgement of how effective the proposed on- and off-site interventions are likely to be in providing high quality, reliable, direct infrastructure which engenders low car use.

It is noted that trips relating solely to education within Baldock would not change so significantly, as the baseline vehicle mode share for pupil trips (as demonstrated by **Table 6.3**) is already very low. Some mode shifts, however, would be expected through introduction of the interventions, which will make trips to school very attractive for non-car modes.

Based on the masterplanning principles outlined in this Note, and the emerging interventions in the Active and Sustainable Modes Strategy (ASMS), the themes against which the business-as-usual mode shares have been adjusted (Step 5 in **Insert 7.1**) are:

1) Public transport

2) Active travel

3) Traffic and parking management

4) Placemaking and land use planning

The MSM outputs mode shares and trip rates based on a rating of the proposed interventions against the above themes. A higher rating means that the intervention has very good potential to achieve mode shift away from the baseline, and the extent of the mode shift is informed by the mode shares the precedent 'sustainable places' achieved. A lower rating means that the proposals are likely to perpetuate the norm and achieve similar mode shares and trip rates to other historic developments in the UK (i.e. similar to the baseline in the business-as-usual scenario).

For each theme a rating of N/A, 1, 2, 3 or 4 can be given, to reflect the package of interventions and masterplanning principles proposed. The ratings are described in headline in **Table 7.12** below.

Table 7-12: Masterplan Themes and Ratings

Rating	Description
N/A	Not applicable – this theme will be excluded from the MSM calculations
1	The proposed measures will likely have an insignificant impact on mode share for this theme, and therefore BAU mode share outcomes can be expected
2	The proposed measures will likely have a modest impact for this theme, in comparison to a BAU scenario, and a third of the potential maximum mode shift is applied (i.e. if the maximum mode shift for the theme is a reduction of 28% against the BAU mode share, then a mode shift of 9% would be applied)
3	The proposed measures will likely have a significant impact for this theme, in comparison to a BAU scenario, and two-thirds of the potential maximum mode shift is applied (i.e. if the maximum mode shift for the theme is a reduction of 28% against the BAU mode share, then a mode shift of 18% would be applied)
4	The proposed measures will likely have a transformational impact for this theme, in comparison to a BAU scenario, and the maximum mode shift is applied (i.e. if the maximum mode shift for the theme is a reduction of 28% against the BAU mode share, then a mode shift of 28% would be applied)

A record of the theme ratings applied, and their rationale is set out in **Table 7.13** below.

Table 7-13: Theme Ratings Applied

Site	Trip length	Theme	Rating	Rationale
BA1	Internal trips (30% of trips)	Public transport	3	The majority of residents will be within a short walk of a bus stop, connecting them to the full range of on-site facilities. The bus service is expected to be high frequency (~every 10 minutes at peak times) but many short local trips will be quicker and more cost effective on foot and by bike. The impact of public transport on mode share for these trips is therefore expected to be significant, but not transformational in comparison to a BAU scenario.
		Active Travel	4	All residents will have access to high-quality walking and cycling routes, including traffic-free routes. Filtered permeability will make walking and cycling the quickest choice. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	4	The access road will have a 20mph design speed. All residential streets will have a 10mph design speed. Controlled parking zones will be investigated to manage on-street parking. Lower levels of car parking will be provided at points of higher connectivity, with a general principle of applying lower car parking levels than adopted standards across the whole site. A mix of off-plot and unallocated car parking will be provided, alongside on-plot parking. Where parking is off-plot it will be charged for annually. Filtered permeability will make walking and cycling the quickest choice. The impact of the traffic and parking management measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Placemaking and Land Use	4	A full range of day-to-day uses will be provided on-site, including primary schools, health, leisure and retail facilities. The public realm and landscaping will be exemplary, encouraging walking and cycling. The impact of the placemaking and land use

Site	Trip length	Theme	Rating	Rationale
				measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
BA1	Baldock / station / Letchworth trips (30% of trips)	Public transport	4	The majority of residents will be within a short walk of a bus stop, connecting them to Baldock. The bus service is expected to be high frequency (~every 10 minutes at peak times). A range of on- and off-site bus priority measures are proposed in order to provide journey time advantage. A new access to the rail station is proposed, as well as improvements to the rail station building, which will encourage use of rail for trips to Letchworth and longer distance trips to destinations such as London and Cambridge. The impact of public transport on mode share for these trips is therefore expected to be transformational in comparison to a BAU scenario.
		Active Travel	4	A network of traffic-free and low traffic cycle routes is to be provided both on- and off-site, including a dedicated active travel bridge over the railway, with connections made to the town centre and Knights Templar school. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	The on-site street network will ensure result in it being quicker to get off the site and into Baldock by bike and bus than by car. The package of off-site highway interventions include a range of reductions in highway capacity and access restrictions in order to allow for reallocation of roadspace for improved walking, cycling and bus infrastructure. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed, however. The impact of the traffic and

Site	Trip length	Theme	Rating	Rationale
BA1				parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	4	The proposed walking, cycling and public transport interventions will support safe and convenient access to Baldock town centre, with many facilities within 20 minutes of walk of much of the site. Baldock town centre is an attractive and vibrant centre with a full range of uses. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	2	The potential changes to vehicle access and capacity within and particularly for trips through Baldock will influence mode choice for some longer distance trips. The impact of traffic and parking management measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
		Placemaking and Land Use	N/A	The proposed placemaking and land use measures are not relevant to these trips.
BA3	Internal trips (10% of trips)	Public transport	N/A	The proposed public transport measures are not relevant to these trips, given the relatively small size of the site.
		Active Travel	3	All residents will have access to high-quality walking and cycling routes, including traffic-free

Site	Trip length	Theme	Rating	Rationale
BA3				routes. The impact of the active travel measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Traffic and Parking Management	3	The internal road network will be designed to encourage slow speeds (10mph to 20mph design speed, depending on the street). A general principle of applying lower car parking levels than adopted standards is proposed across the site. A mix of off-plot and unallocated car parking will be provided, alongside on-plot parking. Where parking is off-plot it will be charged for annually. The impact of the traffic and parking management measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
		Placemaking and Land Use	3	Given the scale of the site, a relatively limited range of day-to-day uses will be provided on-site. The public realm and landscaping will be exemplary, encouraging walking and cycling. The impact of the placemaking and land use measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (50% of trips)	Public transport	3	The majority of residents will be within a short walk of a bus stop, connecting them to Baldock. The bus service is expected to be high frequency (~every 10 minutes at peak times). A range of on- and off-site bus priority measures are proposed in order to provide journey time advantage. Improvements to the rail station building are proposed, which will encourage use of rail for trips to Letchworth and longer distance trips to destinations such as London and Cambridge. The impact of public transport on mode share for these trips is therefore expected to be significant in comparison to a BAU scenario.
		Active Travel	3	The site will connect to a network of traffic-free and low traffic cycle routes, including to a dedicated active travel bridge over the railway, with new connections made to the town centre and station in

Site	Trip length	Theme	Rating	Rationale
BA3				particular. The impact of the active travel measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Traffic and Parking Management	3	The on-site street network will ensure result in it being quicker to get off the site and into Baldock by bike and bus than by car. The package of off-site highway interventions include a range of reductions in highway capacity and access restrictions in order to allow for reallocation of roadspace for improved walking, cycling and bus infrastructure. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed, however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	3	The proposed walking, cycling and public transport interventions will support safe and convenient access to Baldock town centre, with many facilities within 20 minutes of walk of much of the site. Baldock town centre is an attractive and vibrant centre with a full range of uses. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on

Site	Trip length	Theme	Rating	Rationale
BA3				mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	While the changes to capacity and access could have some limited on long distance trip making on balance, the impact of traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Placemaking and Land Use	N/A	The proposed placemaking and land use measures are not relevant to these trips.
BA10	Internal trips (20% of trips)	Public transport	N/A	The proposed public transport measures are not relevant to these trips, given that the proposed bus service will not run within it.
		Active Travel	4	A traffic-free active travel route is proposed within the site, connecting the land uses and proposed green and social spaces. This, combined with filtered permeability will ensure that walking and cycling is the quickest mode within the site. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	4	Parking levels below adopted levels are proposed. Vehicle access will be managed to individual plot accesses while walking and cycling will be directly
		Placemaking and Land Use	3	A mix of uses will be provided on-site, as well as an active travel bridge to the local centre proposed in BA1. The quality of the public realm and landscaping will be exemplary. The impact of the placemaking and land use measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (40% of trips)	Public transport	4	The site will be well connected to the train station, including with proposed improved quality walking routes. The site will be served by the proposed bus service, supported by priority measures. The impact of the public transport measures on mode share for

Site	Trip length	Theme	Rating	Rationale
BA10				these trips is expected to be transformational in comparison to a BAU scenario.
		Active Travel	4	The site will be directly connected to the proposed on- and off-site traffic walking and cycling routes to BA1, Clothall Common, the station and Baldock town centre. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	Changes to traffic access at the Whitehorse Street junction and speed restrictions (reduced speed limit along Royston Road), combined with enhanced walking and cycling routes and bus services will influence modal choice. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed, however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	4	The site will have access to BA1, Clothall Common, the station and Baldock town centre via high-quality traffic free and lightly trafficked routes, including via a new bridge. This provides access to a wide range of day to day uses that will be more quickly accessed by modes other than the car. This will complement the mix of uses on-site. The impact of the placemaking and land use management measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence

Site	Trip length	Theme	Rating	Rationale
BA10				longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	While the changes to capacity and access could have some limited on long distance trip making on balance, the impact of traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Placemaking and Land Use	N/A	The proposed placemaking and land use measures are not relevant to these trips.

For the purpose of comparing the trip generation scenarios the trip generation at BA3 have been provided assuming residential land use. A summary of trip rates, mode share and trip generation outputted by the MSM for the vision-led scenario is provided in the tables below, with detailed outputs included in **Annex I.**

Table 7-14: Vision-led Scenario Internal trips

Site	Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
		Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way
Residential (BA1 – 2400 dwellings)	Vehicles	14	44	58	35	16	51	219	217	436
	Public transport	9	28	37	23	10	33	140	139	280
	Active travel	104	329	433	260	119	379	1620	1608	3228
Residential (BA3 – 350 dwellings)	Vehicles	2	7	9	6	3	8	34	34	69
	Public transport	0	0	0	0	0	0	1	1	2
	Active travel	4	12	16	10	4	14	61	60	121
Commercial (BA10 - 86,500 sq.m)	Vehicles	93	17	110	8	64	72	417	426	843
	Public transport	17	3	20	4	17	21	113	113	226
	Active travel	10	1	10	12	14	26	112	111	224
Whole site	Vehicles	109	68	177	49	83	132	670	678	1348
	Public transport	26	32	57	27	27	54	255	253	508
	Active travel	117	342	459	282	138	420	1793	1780	3573

Table 7-15: Vision-led Scenario Trips to Baldock and Letchworth

Site	Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
		Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way
Residential (BA1 – 2400 dwellings)	Vehicles	67	164	231	191	77	268	1074	1050	2124
	Public transport	6	42	48	32	10	41	191	194	385
	Active travel	54	196	250	94	59	154	714	721	1435
Residential (BA3 – 350 dwellings)	Vehicles	21	55	77	59	24	84	340	333	673
	Public transport	2	11	12	8	2	10	48	49	97
	Active travel	8	32	40	10	9	18	93	96	189
	Vehicles	137	25	162	8	90	98	579	594	1174

Site	Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
		Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way
Commercial (BA10 - 86,500 sq.m)	Public transport	43	7	50	11	41	51	273	273	547
	Active travel	60	8	68	32	60	91	433	434	867
Whole site	Vehicles	225	244	469	259	191	450	1993	1977	3970
	Public transport	50	60	110	51	53	103	512	516	1029
	Active travel	122	236	357	136	128	263	1241	1250	2491

Table 7-16: Vision-led Scenario Residual trips

Site	Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
		Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way
Residential (BA1 – 2400 dwellings)	Vehicles	135	379	515	365	156	520	2148	2115	4263
	Public transport	0	24	24	18	3	20	100	105	205
	Active travel	34	133	166	41	36	77	390	400	790
Residential (BA3 – 350 dwellings)	Vehicles	20	55	75	53	23	76	313	308	622
	Public transport	0	3	3	3	0	3	15	15	30
	Active travel	5	19	24	6	5	11	57	58	115
Commercial (BA10 - 86,500 sq.m)	Vehicles	200	35	235	26	144	170	953	971	1924
	Public transport	25	4	29	6	25	31	167	167	334
	Active travel	14	1	15	18	21	39	166	164	330
Whole site	Vehicles	355	470	825	444	323	766	3414	3394	6808
	Public transport	25	32	56	27	28	55	282	287	569
	Active travel	53	153	206	65	62	128	613	622	1235

The outcomes of the MSM are summarised in **Table 7.17** external trips associated with the residential and commercial land uses at the application site.

Table 7-17: Vision-led Scenario Total External Trips

Site	Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily		
		Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way	Arr'	Dep'	Two-Way
Residential (2,750 dwellings)	Vehicles	243	654	897	668	279	948	3875	3806	7681
	Public transport	8	80	88	60	15	75	354	363	717
	Active travel	101	380	480	152	109	261	1254	1275	2529
Commercial (86,500 sq.m)	Vehicles	337	60	397	34	234	268	1532	1565	3097
	Public transport	67	12	79	17	66	83	441	440	881
	Active travel	74	9	83	50	80	130	599	598	1197

The proposed residential development is anticipated to result in 897 two-way external vehicle trips in the AM peak hour and 948 two-way external vehicle trips in the PM peak hour, during weekdays. The proposed commercial development is anticipated to result in 397 two-way external vehicle trips in the AM peak hour and 268 two-way external vehicle trips in the PM peak hour, during weekdays.

7.4 Total Trip Generation and Mode Split Comparison

This section considers the total trip generation, including internal and external trips, associated with the proposed development. **Table 7.18** and **Table 7.19** below respectively set out the resultant total trip generation for all the BAU and Vision-led scenarios for the proposed residential and commercial uses.

Table 7-18: Residential Use Resultant Total Trip Generation Comparison

Mode	BAU			Vision-led		
	Two-way Daily Trips	D&P Two-way Daily Trips	% Trip rate reduction	Two-way Daily Trips	Difference compared to BAU	% Difference compared to BAU
Vehicle	13192	10802	-18%	8185	-2617	-24%
Active Travel	2445	3792	55%	5878	2086	55%
Public Transport	635	468	-26%	998	531	113%
Total People	16272	15062	-7%	15062	0	0%

Table 7-19: Commercial Use Resultant Total Trip Generation Comparison

Mode	BAU			Vision-led		
	Two-way Daily Trips	D&P Two-way Daily Trips	% Difference compared to BAU	Two-way Daily Trips	Difference compared to BAU	% Difference compared to BAU
Vehicle	5229	4809	-8%	3941	-869	-18%
Active Travel	908	835	-8%	1421	586	70%
Public Transport	897	825	-8%	1107	282	34%
Total People	8048	6469	-20%	6469	0	0%

The mode split comparison for the BAU and Vision-led scenarios is presented in **Table 7.20** and **Table 7.21**.

Table 7-20: Mode Split Comparison – Residential (Total Trips)

Mode	Census Travel to Work Mode Split*		Business as Usual (BAU)	Vision-led	
	2011*	2021*	Mode Split	Mode Split	% change compared to BAU
Vehicle	65%	43%	72%	54%	-17%
Active Travel	12%	9%	25%	39%	14%
Public Transport	12%	4%	3%	7%	4%

Table 7-21: Mode Split Comparison – Commercial (Total Trips)

Mode	Business as Usual (BAU)	Vision-led	
	Mode Split	Mode Split	% change compared to BAU
Vehicle	74%	61%	-13%
Active Travel	13%	22%	9%
Public Transport	13%	17%	4%

In summary, the Vision-led scenario has a significant impact on active travel and public transport trips across both residential and commercial land uses, based on the proposed package of interventions.

With regards to the education land use, through the delivery of the Growing Baldock development, several interventions will be introduced within Baldock to encourage walking, cycling and bus use and to make these modes quicker and more convenient than travelling by car, for some journeys. Given that Knights Templar School is unlikely to expand without the Growing Baldock development being delivered, it is reasonable to assume that the interventions being delivered alongside the Growing Baldock development will also come to fruition and effect a modal shift.

It is not anticipated that trips relating solely to education within Baldock would change so significantly, as the baseline vehicle mode share for pupil trips (refer to **Table 7.7**) is already very low. Some mode shifts, however, would be expected through the introduction of the interventions, which will make trips to school from the new Growing Baldock development sites, in particular, very attractive for non-car modes.

The resultant MSM scenario pupil mode shares, applied in the 'future' scenario, are presented in **Table 7.22**. As many staff live outside of Baldock, it is not anticipated that there would be any material shift in mode share as a result of the Growing Baldock development interventions (and no shifts have been applied in this assessment).

Table 7-22: Mode Split Comparison – Education (Pupils Only)

Travel Mode	Pupils within Baldock (with MSM assumptions)	Pupils Outside of Baldock (with MSM assumptions)
Car	10% (-10)	55% (-5)
Walk	66% (+5)	6%
Cycle	10% (+5)	5%
Bus	14%	34% (+5)
Total	100%	100%

7.5 Trip Distribution and Assignment for Development Trips

Reliance will be made on the COMET model for trip distribution and assignment at strategic level. Trip distribution and assignment for localised modelling will be informed by relevant outputs from the COMET model.

8 Transport Impact

8.1 Overview

This section provides the proposed methodology for assessing the impact of the proposed development on the local highway network. The details of the proposed scenarios to be tested are provided along with a summary of the proposed modelling assessments.

The proposed assessment methodology has been provided to initiate discussions with HCC and NH, as part of the pre-application process.

8.2 Capacity Assessment Methodology

8.2.1 Capacity Assessment Overview

It is proposed that the capacity assessment element of the review of transport impacts be carried out primarily in respect of the highway network and additionally consider public transport impact as discussed further below. With consideration of the scale (level of detail) of the capacity assessment, the following methods are proposed:

- Strategic Level – COMET Modelling
- Local Level – Local Junction Modelling and VISSIM Modelling

8.2.2 Strategic Modelling – COMET

A new COMET model is expected to be available in April 2025 and it is currently proposed that reliance will be made on use of this model for the strategic impact assessment element of the TA.

It is envisaged that the COMET model will provide a basis for assessment of highway and public transport capacity. Further discussions with HCC are to be undertaken, as part of the pre-application process, to determine the scenarios to be modelled within COMET.

8.2.3 Local Modelling

The local modelling (making use of a range of appropriate tools discussed below) will test in more detail the operation of the network where interventions are proposed or where capacity challenges are suggested by the COMET outputs.

Junction capacity assessments will be undertaken using Junctions 10 (PICADY and ARCADY) software. This software is produced by TRL and is the industry's standard modelling software to assess the performance and capacity of give-way priority junctions.

It is proposed that assessments of signalised junctions within the area of study would be undertaken using the industry standard LinSig 3 modelling software. A VISSIM model has been built and will be used to test the implications of the development on the Station Road corridor. Results of the junction assessments are proposed to be considered in the context of the Ratio of Flow to Capacity (RFC) (Junctions 10), Degree of Saturation (LinSig), and the average delay and queue lengths experienced by vehicles. The outputs from these models will be used to refine our vision-led transport strategy with further model iterations undertaken as needed. While the standard model outputs above will be assessed and reported, we will seek to balance the benefits of the proposed interventions for all modes and quality of place more generally within the study area, with private vehicle capacity. The impact of congestion and delay on bus services will be carefully considered and mitigations developed, as needed.

8.2.4 Assessment Study Area

The COMET modelling will be used to determine links and junctions that are likely to require further refined modelling. With consideration of the Strategic Road Network, it is not considered that any assessment beyond that of Junction 9 and Junction 10 of the A1 (M) will be required.

8.2.5 Assessment Years

It is proposed that the following scenarios be assessed to determine the traffic impact of the scheme at each of the identified junctions for the weekday AM, PM and Saturday peak hours:

- 2028 Opening Year,
- 2033 Interim Phase,
- 2040 Future Year.

The above will be confirmed further to development phasing exercises that will be completed pending an agreed position on trip generation with HCC.

8.2.6 Base Traffic and Growth

Several traffic surveys have been undertaken in the vicinity of the site (refer to **Section 4**) in the year 2022, and these 2022 surveys would inform the baseline year scenarios. It is proposed that the traffic associated with the baseline and future year scenarios would be informed by relevant base and growth information sourced from the COMET Model.

8.2.7 Modelling Scenarios

The delivery of planned interventions will be informed by the assessment work discussed at **Section 8** and the programme of the intervention packages will be presented in the TA in respect of the phasing of the proposed development. The trigger points for delivery of intervention will respond to, but not be solely influenced by, capacity impacts and will be developed in further discussion with NHC and HCC.

The assessment of capacity impacts will make use of COMET and local modelling, as set out above. We anticipate developing a series of scenarios to test within COMET that fully capture and identify the differences between the BAU and vision-led scenarios, taking into account a range of possible assumptions in relation to background traffic growth.

Table 8.1 sets out the indicative inputs to the scenarios that proposed for modelling in COMET (and subsequent local junction modelling). The BAU scenarios take the conventional approach of adopting the 'core' DfT traffic growth assumptions and the development trip generation using TRICS. We will benchmark traffic growth in the area around Baldock over the last ten to fifteen years, to establish the appropriate TEMPro growth to apply in the BAU scenario. Alongside the MSM outputs, the vision-led scenarios assume that over time, the rate of background traffic growth will begin to reduce as political, societal and technological trends change.

Table 8-1: Indicative Modelling Scenario Overview

Scenario	Rationale	Background growth	Baldock growth
Business-as-usual scenarios			
Opening Year (2028)	The (new) COMET reference year is understood to be 2023, but this will be before development at Baldock commences. A future opening year / reference year would act as a useful baseline against which to understand the impacts of background growth and growth at Baldock	Standard TEMPro background growth, and committed developments	Low development trips, no mode shift
Interim Phase (2033)	This interim scenario will aid the phasing and delivery programme and will help to establish if / when there are trigger points by which time interventions need to be provided.		Higher development trips, no mode shift
Full Development (2040)	The overarching aim of using COMET to model development impact is to understand whether its impacts when complete will be acceptable, inclusive of the proposed interventions.		High development trips, no mode shift
Vision-led scenarios			
Opening Year (2028)	As above	Standard background growth, e.g. TEMPro Core, and committed developments	Low development trips, low mode shift
Interim Phase (2033)		Background growth beginning to change, e.g. TEMPro Low, and committed developments	Higher development trips, and some mode shift

Scenario	Rationale	Background growth	Baldock growth
Full Development (2040)		Low background growth, e.g. TEMPro Behavioural, and committed developments	High development trips, high mode shift

**All years are indicative at this stage, some are based on early discussions with HCC's modelling team*

In context of the above, it is envisaged that through development of the modelling assumptions as part of the commissioning the COMET model runs, a refined list of three main scenarios will be proposed for modelling as outlined below:

- Opening Year Model (with and without development)
- Interim Phase Model (with and without development) – utilising Vision-led MSM trip rates
- Full Development Model (with and without development) – utilising Vision-led MSM trip rates

It is proposed that the above modelling years would be assessed in respect of the weekday AM and PM peak hours as well as a Saturday Midday peak hour.

It is acknowledged that the formal commissioning process will require for a pro-forma to be completed for review and approval by HCC. Supporting text will be provided to further describe the assumptions that have been utilised in completing the pro-forma.

8.2.8 Assessment of Development Options

The TA analysis will be supported by option-specific COMET model scenario testing. The outputs from the COMET model, combined with local traffic surveys, will be used to gain an understanding of trip distribution and network operation, and the outputs will inform local modelling. The local modelling (making use of a range of appropriate tools such as Junctions 10, LinSig and VISSIM) will test in more detail the operation of the network where interventions are proposed or where capacity challenges are suggested by the COMET outputs. The modelling will be used to provide the optimum balance between delivering clear priority for walking, cycling and public transport without unacceptable impacts on network operation for private vehicles. The options below, relate to the school scenarios set out in **Section 5**.

Development Option 1

Option 1 would represent a 'worst case' scenario in terms of impacts on South Road and Wallington Road, and the junction of Clothall Road / South Road and Wallington Road. A combination of COMET and local modelling will also be used to identify triggers for specific interventions, for example the delivery of changes to the junction at Clothall Road / South Road / Wallington Road, along with the wider phasing plan.

Development Option 2

The modelling process will be the same as for Option 1. As noted above Option 1 would represent a 'worst case' scenario in terms of impacts on Icknield Way, Norton Road, Weston Way and the junctions of Norton Road and Weston Way with Letchworth Road / Hitchin Street. A combination of COMET and local modelling will also be used to identify the triggers for specific interventions, along with assumptions regarding phasing more generally. The phasing plan will include a clear set of assumptions regarding expansion of KTS.

Development Option 3

Options 1 and Options 2 will have assessed 'worst case' impacts in relation to the school options presented. Lower trip generating schools will be present on the KTS and BA3 sites in Option 3. Moreover, the two schools will have more contained catchments than the larger schools in Options 1 and 2. In combination this means that the trip generation at each school will be lower (reflecting lower pupils numbers), as will the movements across the town (reflecting more contained catchments). Local modelling will be used to identify whether the interventions developed in Options 1 and 2 are triggered by Option 3 along the corridors identified above.

The option-specific sections of the TA for Option 3 will outline the specific trip generation, distribution and assignment outcomes, but no additional strategic COMET modelling will be undertaken as it can be assumed (for the reasons set out above) that the impacts will be lower for Option 3 than for either of Options 1 and 2. Local modelling may be used to identify trigger points for specific interventions, as needed.

8.3 Active Travel and Public Transport Impact Assessments

8.3.1 Active Travel Impact Assessments

It is proposed that key pedestrian and cycle routes will be assessed as part of the TA; detailed audits of the existing cycle and pedestrian (including PRoW) conditions within Baldock have been carried out, making use of a range of audit tools including the Walking Route Audit Tool, LTN 1/20 Cycle Level of Service and Healthy Streets. Further details are provided in **Section 4**, with the proposed study area presented in **Insert 4.1**. A package of transformational active travel measures has been developed following extensive discussion with HCC, NHC and the local community as outlined in **Section 6.7**. These have informed the Mode Shift Model and trip generation approach set out above. Based on the active travel assessments and subject to further discussions with HCC, the detailed pedestrian or cycle mitigation measures will be agreed with HCC.

8.3.2 Public Transport Impact Assessment

The impact of development-related trips on the public transport network will be assessed as part of the TA. Improving access to rail and bus services will form a vital part of the transport strategy for the developing proposals. The proposed Public Transport Strategy is outlined in **Section 6.8**.

As outlined previously in this TSR, it is currently envisaged that the COMET modelling will facilitate suitable assessment of public transport impact. The proposed public transport impact assessment will examine existing and future public transport service provision and provide a forecast of the potential impact the development would have on these services. The development impact would be based on the trip generation assessment presented in **Section 7**.

The public transport impact assessment would be subject to further discussions with HCC and local public transport service operators.

9 Proposed New and Modified Infrastructure

9.1 Overview

All new and modified transport infrastructure works associated with the proposed development will be designed with reference to the appropriate active travel, public transport and highway design guidelines and standards. Drawings of all proposed works will be included as part of the assessment, at a level of detail commensurate to the outline nature of the proposed application.

9.2 Highway Design Parameters

In considering the necessary requirements for access and street layout, reference has been made to Manual for Streets and the Roads in Hertfordshire: Highway Design Guide 3rd Edition (2011).

The HCC Highway Design Guide sets out key principles for the design of residential streets.

HCC has developed guidance relating to the hierarchy of roads based on their intended function. The purpose of this approach is to ensure vehicular and pedestrian traffic is concentrated onto roads which are appropriately designed to serve the journey purpose. This approach aims to *'improve safety, discourage the use of residential roads for through traffic, and create safer conditions for all users of residential roads. This is also particularly important for vulnerable users such as pedestrians and cyclists.'*

The road hierarchy, its interface with the wider masterplan, the active travel network and its role in delivering the vision and objectives set out in **Section 5.3.2**, will be developed in the TA. Regard will be made to the HCC Highway Design Guide as a starting point, along with Manual for Streets I and II and wider best practice. A key design principle will be to manage vehicle speed through a progressive approach to carriageway width, forward visibility and design detail for junctions. A Road Danger Reduction approach will be adopted, with active travel prioritised and properly catered for throughout.

9.3 Audits and Ancillary Assessments

It is proposed that Stage 1 Road Safety Audits (RSA) be prepared for the intersection of proposed vehicular access points proposed from the Growing Baldock development sites onto the public highway.

In view of the fact that the proposals do not include any direct points of access onto the Strategic Road Network operated by NH, the currently proposed scope of transport work in support of the planning submission does not include preparation of a Walking Cycling and Horse-Riding (WCHAR) assessment. Similarly, it is not considered that Equality Impact Assessment (EqIA) screening process will be required.

9.4 Development Option Interventions

The overall package of interventions for all development options will have commonalities that will be explored through the design development and assessment processes. The anticipated variations in interventions relating to the various Development Options presented at **Section 5**, are outlined below.

Development Option 1 - Interventions

Option 1 will have the greatest impacts on the South Road, Wallington Road and Clothall Road corridors and create the greatest demand for the active travel link crossing the railway. It is likely therefore that in this option the interventions in this area will require further enhancement, in comparison to Options 2 and 3.

Therefore, greater detail will be provided as part of the OPA for the interventions proposed along this corridor, with the scale and scope of interventions, as well as the level of detail required, determined by strategic modelling and supported by local modelling (as needed). The timing of delivery of the active travel railway crossing to BA1 will be influenced by the phasing of housing on BA1, as well as by the new school on BA3, with clear triggers set out in TA.

Development Option 2 - Interventions

Option 2 will have the greatest impacts on Icknield Way, Norton Road, Weston Way, via North Road / Station Road and the junctions of Norton Road and Weston Way with Letchworth Road / Hitchin Street. This option may also generate additional demand via Mansfield Road and Park Street. In all options, demand for 2FE will be created to the existing KTS, and therefore interventions will be required to some degree in all options, and this will be determined in the TA. The scale of interventions required, as well as the level of detail required, will be determined by strategic modelling and supported by local modelling as necessary. Given our understanding of the existing context of Knights Templar School, additional feasibility work would be provided to demonstrate deliverable interventions for access to an enlarged school and the associated sports centre, incorporating likely changes on Weston Way and Letchworth Road. A separate TA would subsequently be required to support any standalone application for expansion of Knights Templar School in the future. Therefore, the indicative proposals set out in the TA for the OPA, and other supporting documents, would be provided solely to demonstrate broad option feasibility.

Development Option 3 - Interventions

Options 1 and Options 2 will have assessed ‘worst case’ impacts in relation to the school options presented. Lower trip generating schools will be present on the KTS and BA3 sites in Option 3. Moreover, the two schools will have more contained catchments than the larger schools in Options 1 and 2. In combination this means that the trip generation at each school will be lower (reflecting lower pupils numbers), as will the movements across the town (reflecting more contained catchments). Local modelling will be used to identify whether the interventions developed in Options 1 and 2 are triggered by Option 3 along the corridors identified above.

9.5 Phasing and Delivery of Interventions

As set out at **Section 8,** the delivery of planned interventions will be informed by the modelling assessment work and the programme of the intervention packages will be presented in the TA in respect of the phasing of the proposed development. The trigger points for delivery of intervention will respond to, but not be solely influenced by, capacity impacts and will be developed in further discussion with NHC and HCC.

10 Monitor and Manage Framework

10.1 Overview

Given the scale of the Growing Baldock proposals and associated interventions, a Monitor and Manage Framework (MMF) will be set out as part of the TA in support of the vision-led transport strategy. The MMF will incorporate the travel planning proposals discussed in the FTP and set a framework against which the mode shift aspirations of Growing Baldock will be assessed.

10.2 Governance

The MMF will identify the governance (e.g. review bodies), processes and data required (including from the new school) to continually monitor transport impacts across the town (drawing on U&C's experience at Waterbeach) from first occupation through to a defined future point.

10.3 Targets and Monitoring

The initial mode share targets and intervention triggers used to inform the MMF (and S106) will be drawn from the TA analysis. The MMF will set out how progress will be monitored against the targets, and the process for adjusting the scope and timing of interventions, as necessary to respond to monitored outcomes.

10.4 Measures and Obligations

The MMF will allow for measures to be brought forward or amended if targets are not met. It will link to the S106 and identify how funds will be held and accessed for the above, as well as the period that monitoring will take place for.

11 Summary and Way Forward

11.1 Summary

This Transport Scoping Report (TSR) has been prepared by ITP on behalf of Urban & Civic (U&C) in association with a developing outline planning application for the proposed 'Growing Baldock' development. This TSR sets out the assessment principles for the proposed Growing Baldock development for the agreement of North Hertfordshire Council (NHC), Hertfordshire County Council (HCC) and National Highways (NH). Any changes to this document after review by these parties will be incorporated and resubmitted for approval.

Our assessment and proposed measures of mitigation will be based on the methodology contained in the TSR, once this has been agreed 'in principle' by all parties. With consideration of the relative influence of strategic modelling on assessment parameters and design development, the following table provides a summary of key parameters that ITP request in-principle agreement/confirmation of, to allow critical assessment to progress.

Table 11-1: Summary of Parameters and Principles to be Agreed

Topic / Parameter	Principle to be agreed	TSR Reference
Scope of Baseline Analysis	Agreement of scope of baseline analysis and suitability of presented surveys	Sections 3 and 4
	Highway Safety Study Area proposed for approval	Insert 4.4
Transport Strategy	The range of strategies and their content relates sufficiently to the baseline analysis and provides a robust basis for the package of interventions and the subsequent analysis.	Section 6
Trip Generation	'Business as Usual' trip rates	Tables 7.4, 7.5 and 7.9 for residential, commercial and education uses respectively
	'Decide and Provide' reduction to total people trip rates	Table 7.18 and 7.19
	'Vision-led' Mode Shift Model mode split approach and suggested trip rates	Tables 7.20, 7.21 and 7.22 for residential, commercial and education uses respectively
	Application of trip internalisation (containment) rates based on refinement of average observations and benchmarking	Table 7.3

	Use of COMET Model and local modelling	
Transport Impact	Modelling Scenarios • Existing Model • Opening Year Model (with and without development) • Interim Phase Model (with and without development) – utilising Vision-led MSM trip rates • Full Development Model (with and without development) – utilising Vision-led MSM trip rates All scenarios to be run for AM, PM and Saturday peak hours	Section 8.2.7
	Proposed use of COMET for Public Transport Impact	Section 8.3.2
Audits and Ancillary Assessments	Stage 1 Road Safety Audits (RSA) be prepared for the intersection of proposed vehicular access points proposed from the Growing Baldock development sites onto the public highway	Section 9.3
	No direction junction with Motorways and Trunk Roads, as such, no Walking Cycling and Horse-Riding (WCHAR) assessments are proposed. Similarly, it is not considered that Equality Impact Assessment (EqIA) screening process will be required	Section 9.3
Monitor and Manage Framework	The initial mode share targets and intervention triggers used to inform the MMF (and S106) will be drawn from the TA analysis.	Section 10.3

11.2 Next Steps

NHC, HCC and NH are requested to comment on this scoping report to guide the preparation of the Transport Assessment and other associated documents which will accompany the planning application.

Following approval of this TSR by NHC, HCC and NH, ITP will submit a full Transport Assessment to identify the travel demand, and associated impacts, of the Growing Baldock development.

Please forward comments on this Scoping Study to:

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Annex A: Scoping Meeting Minutes

a company of Royal HaskoningDHV

Minutes

HaskoningDHV UK Ltd.
Mobility & Infrastructure

Present:	Geoff Burrage (GB), Amin Fouladi (AMF), Juliet James (JJ), Roger Flowerday (RF), Dan Tan (DT)
Apologies:	Anthony Collier, James Dale
From:	Juliet James
Date:	3 September 2024
Location:	Microsoft Teams meeting
Copy:	U&C, DLA
Our reference:	TP1035-ITP-MI-01
Classification:	Project related
Enclosures:	-

Subject: **Growing Baldock – Transport Scoping Meeting**

Number	Details	Action
1a	**Initial Scoping Meeting Recap** An initial meeting was held between Anthony Collier of Hertfordshire County Council (HCC) and ITP on 15/08/2024 regarding the Scoping Note submitted by ITP, and it is understood that HCC require a proposed parking ratio to be able to agree trip generation rates. RF is also keen for the type of parking provision (off / on-plot, allocated / unallocated, parking courts etc) to be set out at this stage. GB has an upcoming meeting with the client to agree position and will come back with a response.	ITP to finalise parking offer with client
1b	Highway Safety – GB explained that further to the 15/08/2024 meeting, the study area for the highway safety review is to be to be extended, and the data is to be updated to most recent year available.	ITP to extend highway safety study area
2a	**Scheme Overview and Land Use** GB provided a summary of the current development proposals and explained that BA2 is no longer part of the outline application. RF was keen to know if there would be a cumulative run with this site included. GB confirmed it would be.	-
2b	RF enquired as to whether the land use split between BA1 and BA10 was open to change and suggested that the proposed location of the active travel link provides opportunity for intensification of residential In vicinity of employment uses.	ITP to relay suggested residential intensification at interface between BA1 and BA10 to client and design team

2c	RF noted that the Scoping Note considers no school in BA3 and highlighted that there was a political steer (from HCC) for a school to be included. GB noted that client are aware of this nuance but will consult further. RF suggested that it would be prudent to consider a modelling scenario which does include the school at BA3.	GB will relay to client, and noted that current direction from the client has been to consider without school.
3a	**Baseline, Future Growth and Cumulative Developments** AMF requested HCC's views on what adjustments are suggested to be applied to the existing surveys to facilitate a robust baseline for modelling and how to best ensure that application of TEMPro growth factors would not result in 'double counting' the Local Plan allocated sites. Picked up in modelling discussion below.	-
3b	GB Noted that LG1 and BA2 would be considered as cumulative developments that would be removed from the TEMPro growth and reassigned to the future baseline as cumulative developments.	-
3c	RF and DT recommended use of the existing COMET model for baseline and future traffic modelling. GB referred to general experience that NTF tend to overestimate compared to eventual outcomes. RF said that recent experience indicates that TEMPro 'underplays' growth on certain parts of network. National Highways and HCC have spent time agreeing COMET assumptions, which helps derisk. Further discussion regarding COMET below.	-
4a	**Modelling Approach** RF stated he recommended use of existing COMET model run 7. RF highlighted that this requirement would be supported by NH, as the COMET modelling parameters would be consistent with local assessments and interface with A1 (M). It was further noted that the COMET approach formed part of the Local Plan development and would be familiar for 'members', whereas a bespoke/discrete model may be subject to greater levels of scrutiny.	ITP to consider and confirm with U&C approach to be adopted
4b	GB asked whether it would be best to use the Origin-Destination (OD) data from the old COMET run to build a model or to take the flows from the model and factor up based on recent surveys. RF - has seen both approaches used successfully in other applications.	
4c	RF - The application would need to demonstrate that the wider impact on Hertfordshire has been considered. GB queried as to whether the old COMET model would produce higher trip rates	-

	than current national traffic projections (RTF 18 or NRTP 22?), DT – this does not correlate with their understanding of current data and DT does not anticipate that the application would need to account for this.	
4d	DT - Running the COMET model would take three months total (2 to 3 weeks to tender, 4 to 8 weeks for the model run) and would cost between £15k and £25k.	-
4e	GB queried apparent change in position regarding use of 'old' COMET. RF noted points above. AMF/GB suggests having technical call with DT and team to go through model and all assumptions made at some point, to ensure HCC are happy. Next steps will be to commission COMET model run, once U&C agreed (noting dependency on parking).	ITP to organise separate technical meeting with HCC re: modelling
5	**New COMET Model Status** The surveys for 2023 have been completed and the model is now in validation and calibration stage. It is expected that the base year model would be available in early October, and the future model would be available late January / early February 2025. It is currently envisaged that all Local Plan runs use the old COMET model.	-
6a	**Transport Interventions** RF- timing of transport interventions will need to be considered in terms of the impact of increased trips on the network resulting from the development. The relationship between development generated trips and additional capacity provided by proposed transport interventions should be considered in the application. It was also highlighted that the timing of the vehicle bridge should be considered, and the bridge should be provided at the point where the threshold for requirement is reached. There were concerns that the vehicle bridge opening too early would attract vehicle trips through Baldock, while providing the bridge late would result in congestion through Baldock.	-
6b	RF expressed a willingness to help client find optimum solution regarding delivery and network management, related to delivery of the highway connection through BA1. Development proposals can create 'traffic metering' point for Baldock (eg on North Road site access(es)).	-
6c	RF would like to see a rationale for the timing of the bridge construction included in the TA. This would also determine when the mid-year model run would be. ITP suggested that the proposed improvements (e.g. on Station Road) would encourage a behaviour shift from first occupation and reduce traffic impact on the community resulting from the development. RF noted that the bridge timing may be dictated	-

	by Network Rail as much as development delivery or transport requirements, but transport impacts must be understood.	
7a	**Trip Generation** AMF highlighted that the Business as Usual trip generation approach uses the 2017 WYG TA,. To be considered Business as Usual (BaU), the trips from the 2017 application would need to be considered without any modifications applied.	ITP clarification – the BaU trips were sourced from TRICS Outputs provided at Appendix C of WYG Highway Assessment Report (July 2020) for the withdrawn application.
7b	It would be preferable for only one trip generation scenario to be presented (in addition to BaU) and a preference was expressed for the Mode Shift Model approach, as a more practical approach compared to Decide and Provide (TRICS). RF supported the proposed vision-led approach and use of the MSM.	-
7c	When presenting modal split, RF would like the actual numbers to be presented in addition to the % increase. The mode split looks achievable, and RF thinks there is potential to increase it further, potentially to 60% (reference was made to Gilston as an example). S106 could be used to monitor progress against targets. The targets we include in S106 / Travel Plans may be different (higher) to the mode share assumptions in the TA.	-
8a	**Trip Distribution and Assignment** GB queried whether the COMET model could account for traffic that no longer uses the network as a result of changes to capacity (i.e. capacity reductions and evaporating traffic). RF - COMET has a variable demand module, although this is not precise, which can represent modal shift, but there isn't a function for removing trips from the network completely. RF also highlighted that NH would not support removing trips from the network, as these may be strategic through movements.	-
9a	**Stakeholder Engagements** ITP would like to schedule meeting with NH and HCC. Anthony Collier has suggested in meeting of 15/08/2024 that he would make initial contact with NH to organise a meeting.	Anthony Collier to provide update on contact with NH
9b	GB requested any updates re discussions with National Rail (NR) on improvements in the area. No specific updates, RF suggested changes to network subject to negotiation, based on U&C offer. NR will want to know if the active travel connection is to be proposed as a bridge or a tunnel, and RF suggested NR are likely to be more favourable to a tunnel for the active travel bridge, which could be delivered with less disruption to rail	ITP to relay this to client and design team for consideration

	services. It was noted that Train Operating Companies unlikely to be investing in station towards the end of their franchise.	
9c	RF suggested Rob Hanbury and other contacts would be good points of contact for Intalink/Public Transport consultations.	RF to provide contacts.
10	**Written Scoping Response** ITP are keen to receive a formal written response to the Scoping Note to formulate a clear understanding and position in terms of assessment methodology and planning submission requirements, as well as further pre-application engagement requirements.	HCC to provide written response to Scoping Note

Annex B: HCC Written Response

Growing Baldock transport scope – HCC Comments

Broad agreement with the proposed format/information to be contained within the TA scoping note. Bellow are areas we feel need inclusion or expansion.

1. **The TA will need to set out phasing triggers for key infrastructure**

BA1 - Identification of trigger points for key infrastructure – notably bridges and northern access to station

Firstly – agreement needs to be sought on suitability of any residential development north of the railway prior to the key infrastructure that reduces the severance caused by the railway, that discussion hasn't happened but is needed.

What metrics are then used to identify a trigger point will need agreement, do we go pure capacity or does in need more nuanced approach that aligns to behavior change, background trips etc etc. A wider look at the areas network should be explored here,

Following that, if there is a possibility of any development, a suggested method could be to use capacity (all models) of North Road, with the identification of a resi capacity north of the railway.

Identification of trigger point for the link road to be accessible will be needed

Many factors will need consideration, notably for walking/cycling suitability within Baldock, and also when interventions are needed due to crossroad issues etc

2. **Education Strategy (in transport terms)**

Recognizing the emerging complexities around the Secondary School proposals, a section on how to address the emerging scenarios will be should now be included.

3. **Monitor and manage approach should be taken over a standardized travel plan**,

6.13

What do we think we need as a travel plan to actively monitor and manage, notably controlling the phasing of key infrastructure

We should be utilizing smart tools to monitor the scheme throughout its lifecycle.

Annex C: Baseline Study and Surveys



Urban & Civic

Baldock Sustainable Urban Extension – Transport and Movement Baseline

February 2023

a company of Royal HaskoningDHV

Baldock Sustainable Urban Extension

Transport and Movement Baseline

Version 2-0

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Produced by:



For:

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Appendix A Baldock Survey Data Analysis – Technical Note
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1. Introduction

1.1 This Transport and Movement Baseline document, and the Interim Transport Assessment (ITA) that will follow it, are being undertaken on a 'Vision and Validate' basis. This approach seeks to visualise the type of place Urban & Civic want to create at the Baldock Sustainable Extension and then develops the active and sustainable transport focused measures needed to make that a reality, alongside any residual essential measures that will manage car use. This approach acknowledges that the traditional Predict and Provide approach to transport planning has resulted in unsustainable, car-dependent places and provides an alternative.

1.2 This baseline report recognises that for a Vision and Validate approach to be robust it must be supported by a clear package of transport measures, that are consistent with the vision and with consideration as to how potential uncertainty can be accommodated. This report sets out the baseline conditions on which to form a Mobility Vision and the key principles for the mobility strategy. This will, as the ITA develops, inform supporting mode specific strategies and will provide the conditions and incentives to encourage new and existing residents to travel sustainably.

1.3 The Mobility Vision will continue to be developed as part of the ITA, collaboratively with the wider design team and with input from HCC and NHDC. This will ensure proposals are masterplan led and that wider considerations, such as place and landscape, are properly embedded.

1.4 By combining the key themes and aims of the local policy context and potential for wider off-site transport interventions, this initial Mobility Vision has been established. This reflects the need to deliver growth differently, guided by a clear vision, and in a way that embeds active and sustainable travel.

2. Baseline Conditions

2.1 This section outlines the baseline conditions in the town and includes:

- Policy context
- Existing transport conditions
- Review of existing datasets
- Summary of transport survey data

- Overview of accessibility audit scope and high-level findings

Policy Context/Review

National

National Planning Policy Framework

2.2 The National Planning Policy Framework (NPPF) sets out the government's planning requirements and regulations for England, providing the basis for Local Plans and the necessary tests to ensure new development is suitable.

2.3 The NPPF recognises transport policies have an important role to play in facilitating sustainable development and places emphasis on encouraging developments in areas which are or can be served by high quality passenger transport and walking and cycling links. It further states strategic policy should make sufficient provision for infrastructure and transport, with transport issues to be considered from the earliest stages of development planning and plan-making.

2.4 Paragraph 111 states 'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

2.5 Para. 112a advises that development should prioritise pedestrian and cycle movements, both within the scheme and with neighbouring areas; and secondly, should facilitate access to high quality public transport.

Decarbonising Transport: A better, greener Britain

2.6 This report makes a series of commitments to reduce carbon emissions produced by transport and support healthy communities. These commitments are considered across a variety of modes, including promoting zero emission vehicles and more support to explore alternatives such as car clubs and micro mobility.

2.7 The document highlights that a reduction in overall private car use is also required to reduce carbon emissions. It acknowledges that 'Too many new developments – not just by housebuilders, but by public-sector bodies – are difficult to reach without a car. But if we do development in a greener way, and if we join it to existing places, we can make it lower-carbon, lower-emission and lower-traffic – and more acceptable to local communities.'

2.8 As such, the DfT has made a commitment to embed transport decarbonisation within spatial planning, stating that the need to 'move away from transport planning based on predicting future demand to provide capacity ('predict and provide') to planning that sets an outcome communities want to achieve and provides the transport solutions to deliver those outcomes (sometimes referred to as 'vision and validate').

Gear Change: A bold vision for cycling and walking

2.9 Gear Change is a strategy which outlines measures to facilitate people to walk and cycle more. This involves creating and delivering more continuous cycle routes which are physically separated from other modes and creating school streets which provided safer spaces for school pick-up and drop-off.

2.10 A key deliverable for new housing development is to ensure that developments are 'easily and safely accessible and navigable by foot and bike, and to make existing cycling and walking provision better.' A new statutory consultee, Active Travel England will 'press for adequate cycling and walking provision in all developments of over a certain threshold, and provide expert advice on ways in which such provision can be improved.' This threshold has not yet been established.

Regional

Hertfordshire Local Transport Plan 2018-2031 (LTP4)

2.11 Hertfordshire's Local Transport Plan 4 (LTP4), adopted in 2018, considers the transport network across Hertfordshire. The document seeks to create a more balanced approach for mobility, moving away from car-based networks to encompass walking, cycling and passenger transport and 'tip the balance in favour of non-car modes'. As such it places prominent consideration on sustainable modes when assessing new developments. The document stresses the need for balance and recognises that travel by car will still be required for some journeys.

2.12 Adopted Policy 1: Transport User Hierarchy, states that new built environments must 'encourage greater and safer use of sustainable transport modes'. The hierarchy of priority considerations are as follows:

1) Opportunities to reduce travel demand and the need to travel
2) Vulnerable road user needs (such as pedestrians and cyclists)
3) Passenger transport user needs
4) Powered two-wheeler (mopeds and motorbikes) user needs

5) Other motor vehicle user needs

2.13 Through the LTP4, the county is seeking improvements along eight cross-county corridors, two of which directly affect Baldock:

1) Corridor 3: London-Stevenage-Peterborough seeks to improve the walking and cycling links between Hitchin, Letchworth Garden City and Baldock, combined with improved interurban bus connectivity. Encouragingly, the LTP4 highlights that Baldock has some of the highest rates of walking and cycling in the county.
2) Corridor 7: Stevenage-Cambridge: This scheme seeks to improve rail services and station access to the A2(M) corridor towns to increase mode share.

2.14 A suite of documents supports the LTP4 which include an Active Travel Strategy and North Central Hertfordshire Growth and Transport Plan which are both being finalised. The Rail Strategy, published in 2020, highlights the impact that housing development is likely to have on patronage at Baldock Train Station.

Local Cycling and Walking Infrastructure Plan (LCWIP)

2.15 The Local Cycling and Walking Infrastructure Plan (LCWIP) was published in 2022 and covers the North Herts District. It demonstrates that Hertfordshire County Council (HCC) and North Herts District Council (NHDC) share central government's ambition to make cycling and walking the natural choice for shorter journeys or as part of a longer journey.

2.16 Many of the streets in and around Baldock are categorised as primary or secondary key walking or cycling routes. These are shown in Figure 2-1and Figure 2-2.

Figure 2-1: Key walking routes (extract from LCWIP Appendix F)

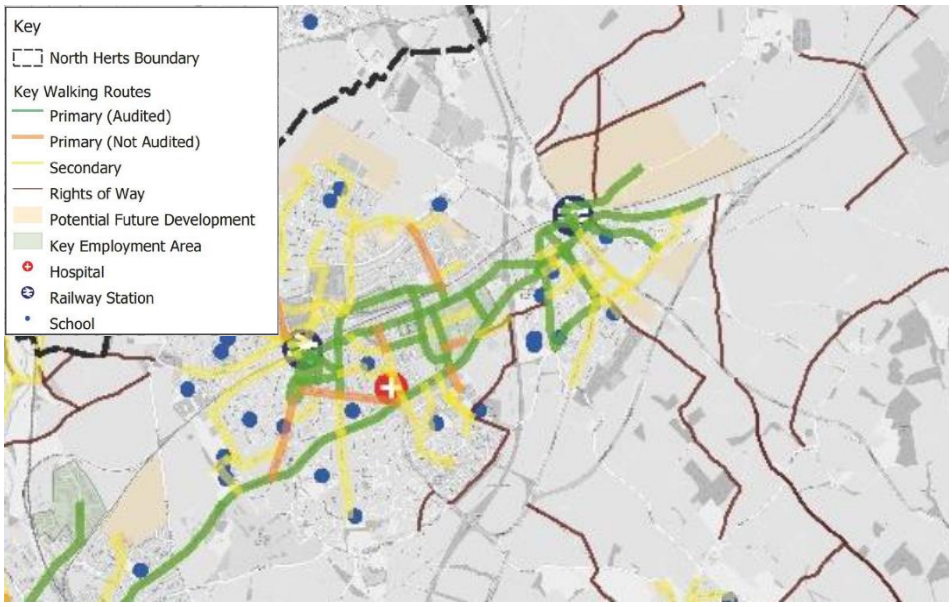
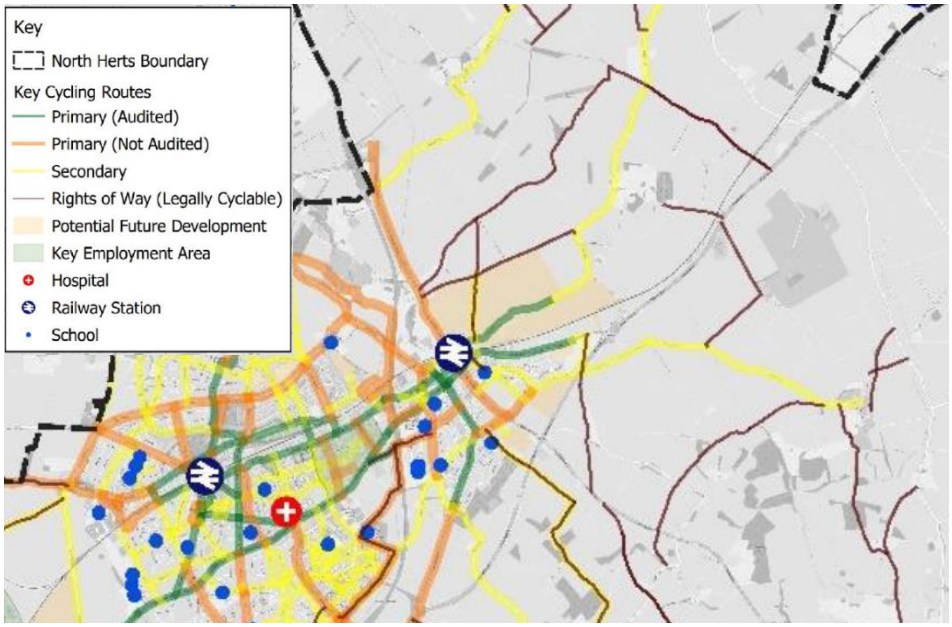


Figure 2-2: Key cycling routes (extract from LCWIP Appendix F)



2.17 LCWIP infrastructure proposals in Baldock centre around the provision of a segregated cycle facility on the High Street and the creation of quiet routes north of the B656. The report suggests that much of north Baldock can be made suitable for utility cycling without a need for segregated infrastructure if contraflow cycling is permitted on Church Street, a crossing over Norton Road is provided and a modal filter is added to Hopewell Road. This would also help connections to Letchworth Garden City via the bridge over the A1(M), for which improvements are also suggested.

2.18 A new crossing is proposed over Royston Road to help connect east Baldock with the rail station via Icknield Way East and it is proposed to redesign several junctions with improvements to walking and cycle facilities.

2.19 The elements relevant to Baldock are the definition of the Core Walking Zone (Figure 2-3) and proposed Infrastructure Interventions (Figure 2-4).

Figure 2-3: Baldock Core Walking Zone

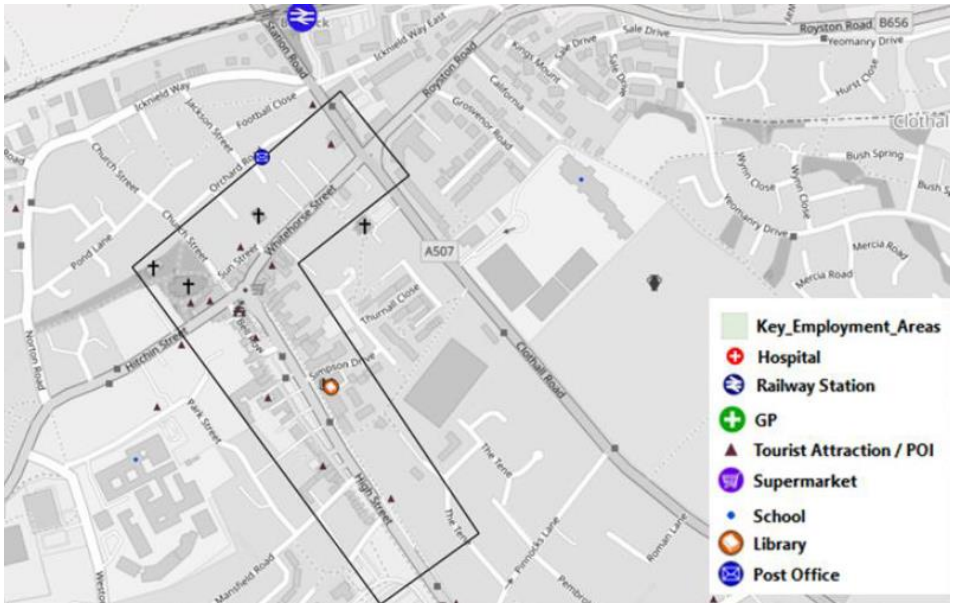
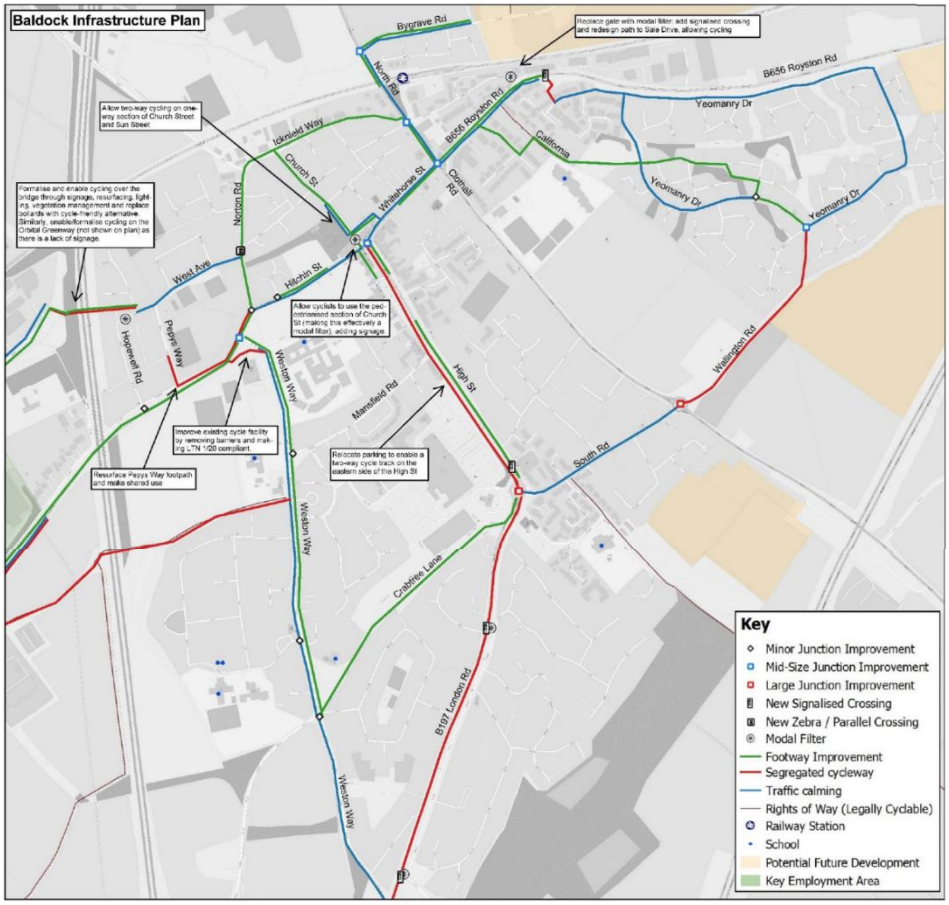


Figure 2-4: Baldock proposed Infrastructure Interventions



Local

North Hertfordshire Local Plan

2.20 The North Hertfordshire Local Plan (NHLP) was recently adopted in November 2022, covering the period 2011-2031, and replaces the saved policies of the District Plan Second Review with Alterations.

2.21 The NHLP has a vision for the district to 'play its part in addressing climate change by improving opportunities for travelling by public transport, walking and cycling…'.

2.22 Policy SP14 outlines the specific site requirements that will be required for the site North of Baldock (termed **Site BA1** in the NHLP, see Figure 2-5). These include the following transport measures[1]:

[1] Polies outlined in the NHLP include additional elements; those listed here focus on the transport related ones (this applies to all site allocations mentioned in this section)

- A new link road connecting the A507 North Road to the A505 Baldock bypass including a new bridge across the railway;
- Sustainable transport measures to include:
    - a secondary rail crossing for pedestrians and cyclists in the vicinity of Ashville Way;
    - safe access routes to / from, and upgrades to, Baldock station;
    - sensitive integration of Bridleway Baldock 034 / Bygrave 002 as a north-south route through the development; and
    - the use of Bygrave Road / Ashwell Road from the south-western edge of the allocated site to the link road as a sustainable transport corridor
    - comprehensive integration into the existing pedestrian and cycle, public transport and road networks
- Built development contained to the south and south-west of the ridgeline that generally extends eastwards from the A507 south of Blackhorse Farm and southwards from Ashwell Road; and
- Sensitive treatment of heritage assets and their settings including an access solution from the A507 North Road which satisfactorily addresses potential impacts

2.23 Each of the other allocated sites in South Baldock (below the railway line) have specific requirements outlined later in the NHLP.

2.24 **Site BA2** (see Figure 2-5) has the following transport interventions, as set out in Policy BA2:

- Creation of appropriate, defensible Green Belt boundary along the south-eastern perimeter of the site;
- Appropriate mitigation measures for noise associated with the A505 to potentially include insulation and orientation of living spaces;

2.25 **Site BA3** (see Figure 2-5) has the following transport interventions, as set out in Policy BA3:

- Deliver a southern link road connecting the B656 Royston Road to Wallington Road or the A507 Clothall Road within the southern bypass;
- Provision of suitable vehicle, cycle and pedestrian links to ensure integration with adjoining site BA4;

- Consideration of the most appropriate routes and movements for all modes between the allocation site, the existing Clothall Common estate, and the wider transport network
- Incorporate alignment of former Wallington Road and Bridleway Clothall 027 as green corridor through the site;

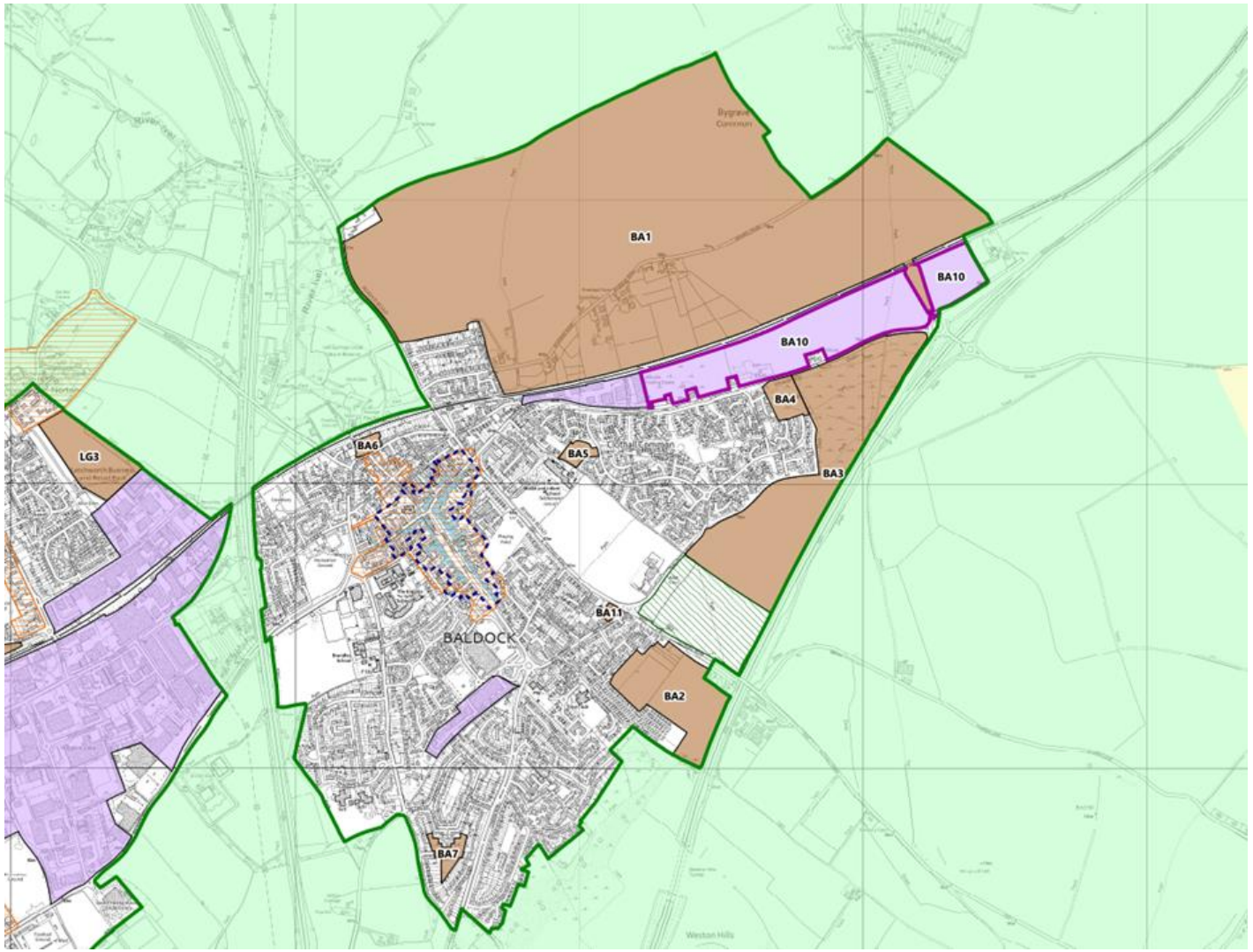
2.26 **Site BA4** (see Figure 2-5) has the following transport interventions, as set out in Policy BA4:

- Provision of suitable vehicle, cycle and pedestrian links to ensure integration with adjoining site BA3
- Consideration of the most appropriate routes and movements for all modes between the allocation site, the existing Clothall Common estate and the wider transport network;

2.27 Meanwhile **Site BA10**, the employment site at Royston Road, is allocated and was identified as a suitable location to encourage further growth due to the proximity to A505 and that access arrangement must 'control HGV movements to direct vehicles towards the A505 rather than through Baldock'.

2.28 These site-specific policies and a suite of other sustainable travel-based policies make it clear that the NHLP has an outlook which is both supportive and encouraging of development which supports a sustainable travel approach.

Figure 2-5: Site Allocations in the NHLP



Inspectors' Comments on the Local Plan

2.29 The Inspectors' comments on the Local Plan have been reviewed to understand the background for the contents and wording in the Local Plan (as presented above). Key elements included:

- *357. At the intersection of the A507/B656 in Baldock town centre there is a signal-controlled junction ('Baldock junction'). Much of the traffic through it at peak periods is through traffic, and it is a known bottleneck.*
- *359.Baldock junction is identified in the technical note[2] as a 'problem location' in both the morning and evening peak periods. The junction is at capacity during those times, causing queuing on all approach arms… It concludes that without intervention, the junction would not be able to accommodate the growth expected in Baldock.*
- *360.As I understand it, the Council plans for three separate measures to tackle this. The most direct of these is a signal optimisation scheme – 'clever traffic lights' which reduce signal stages and adjust to traffic conditions. Policy SP14 requires the provision of a link road through Site BA1 connecting the A507 to the A505. This, in effect, would provide a route for traffic from the north and east avoiding Baldock junction. Similarly, Policies BA3 and BA4 require that these two sites provide a link road through them connecting the B656 with Wallington Road to the south. This would offer drivers from the east and south an alternative to continuing through Baldock junction. The combination of these two link roads would offer an option for north or southbound traffic on the A507 to circumvent the junction, albeit a somewhat convoluted one.*
- *361.To secure the most appropriate solution for the link road, Policy BA3 should allow it to connect directly with the A507 as an alternative to Wallington Road. Moreover, Policies BA3 and BA4 should require suitable vehicle, cycle and pedestrian links between the two sites, and seek to ensure that appropriate routes for all modes of transport are provided between them, Clothall Common estate and the wider transport network. On a different point, to facilitate the most efficient use of Site BA3, the policy should allow for some limited reprofiling of the bund to the east of it, and no new housing should be allowed on or beyond its revised alignment.*
- *363.I recognise that the link roads required by the Plan would be used by both residents of the new housing to access their homes and by through traffic. But that is the point, and I see no reason why they should be hazardous or especially unfriendly*

[2] 'Local Plan Model Testing Technical Note' (September 2016)

routes for pedestrians. That depends entirely on their detailed design, and the Council will retain control of that through the planning application process.

Baldock Bygrave and Clothall Neighbourhood Plan

2.30 Neighbourhood Plans allow communities to shape the future of the places they live and work. Baldock, Bygrave and Clothall Neighbourhood Plan was adopted in 2021 and establishes several considerations for development.

2.31 The Plan provides an insight into the viewpoints of local residents in relation to the development, including the permeability to countryside, ability to park at Baldock Railway Station, congestion issues and reduced air quality as a result of more vehicles on the local road network. As a result, emphasis in policies is placed on ensuring good bus services to the north of the BA1 site, as well as making Royston Road a sustainable travel corridor.

2.32 Policy E5 outlines that development north of the railway line (Site BA1) should support the following transport provisions:

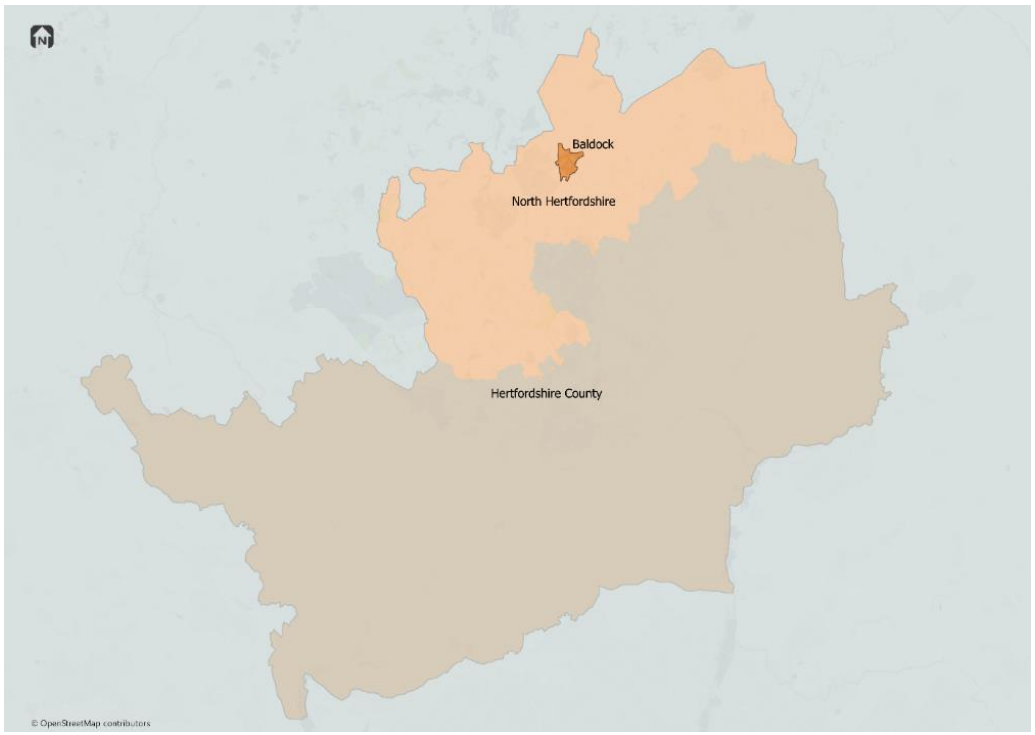
- make provision for improved pedestrian and cycle access between Bygrave and Baldock, through a new footpath and cycleway using the route of Bygrave Road/Ashwell Road, designed in a way that maintains as much as possible of its rural character and habitat value;
- minimise the potential for increased traffic flows through Lower and Upper Bygrave, by providing for an appropriate package of measures such as: suitable access arrangements (including restrictions on heavy vehicles); physical features such as gateways and appropriate road surfaces; speed limits and signage);

Mobility and Transport Context

Geographic Context

2.33 Baldock is situated within the North Hertfordshire District, which is a Local Authority in the most northerly section of Hertfordshire (see Figure 2-6). The town consists of two wards, Baldock East and Baldock Town, with a population between them of approximately 10,000 people. To the west the town borders Letchworth, and several small villages surround the remaining sides including Bygrave to the north. Other neighbouring towns include Stevenage, Hitchin and Royston.

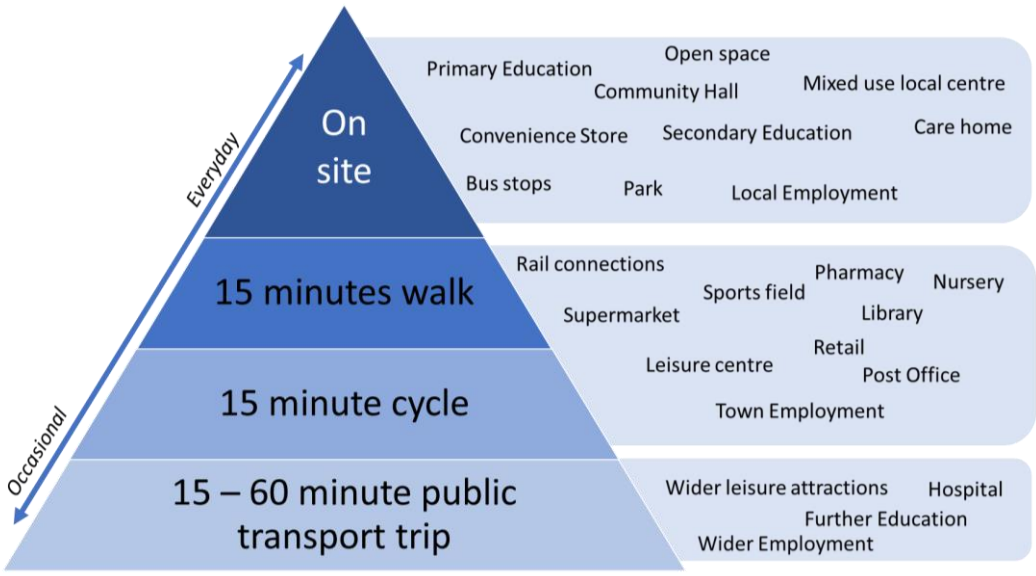
Figure 2-6: Baldock's geographic context



Facilities and the 15 Minute Neighbourhood

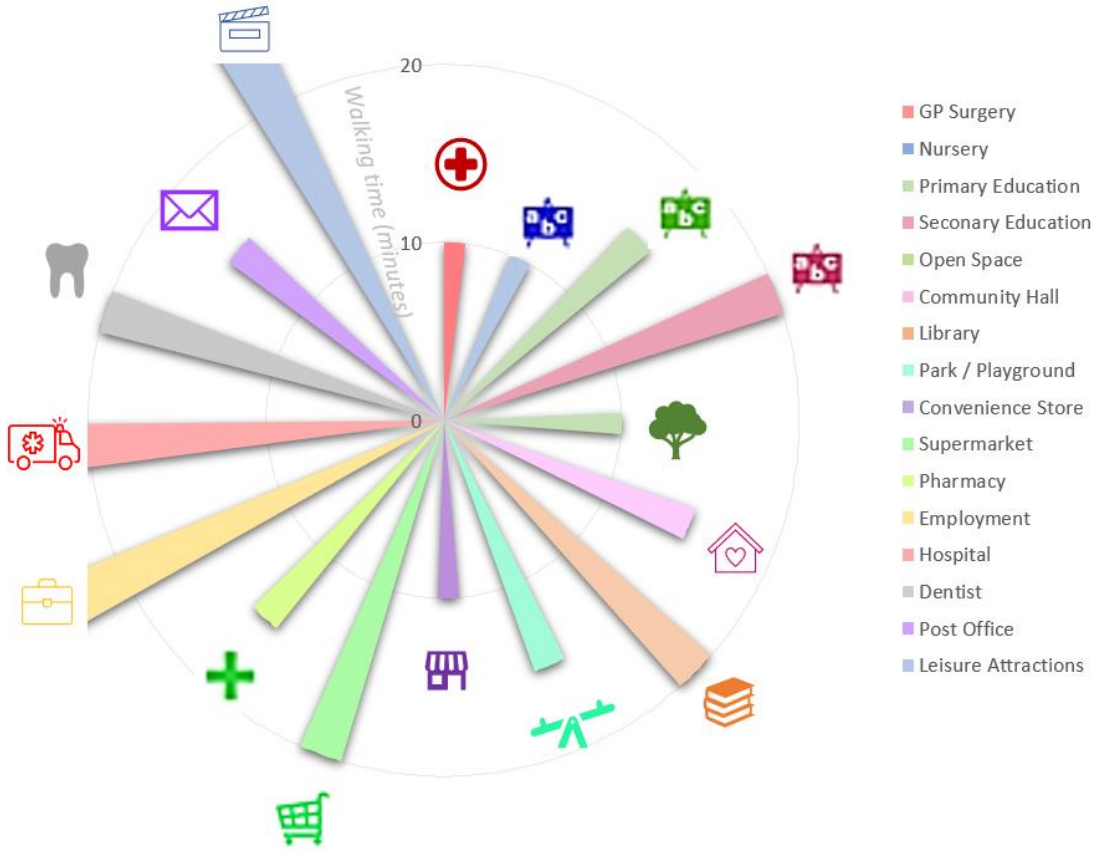
2.34 By locating facilities and services within 15-minutes of homes, with those that are accessed more frequently closer, a neighbourhood can be created that encourages sustainable modes of travel. This forms the basis of the 15-minute neighbourhood concept. Figure 2-7 sets out our interpretation of what the everyday and occasional facilities needed to create a 15-minute neighbourhood in Baldock. While many of the everyday facilities should be provided on site, many of the occasional facilities will be provided off-site. Access to these will be a key factor in determining the off-site connections needed to encourage walking, cycling and public transport.

Figure 2-7: Illustrative approach to reviewing future accessible facilities



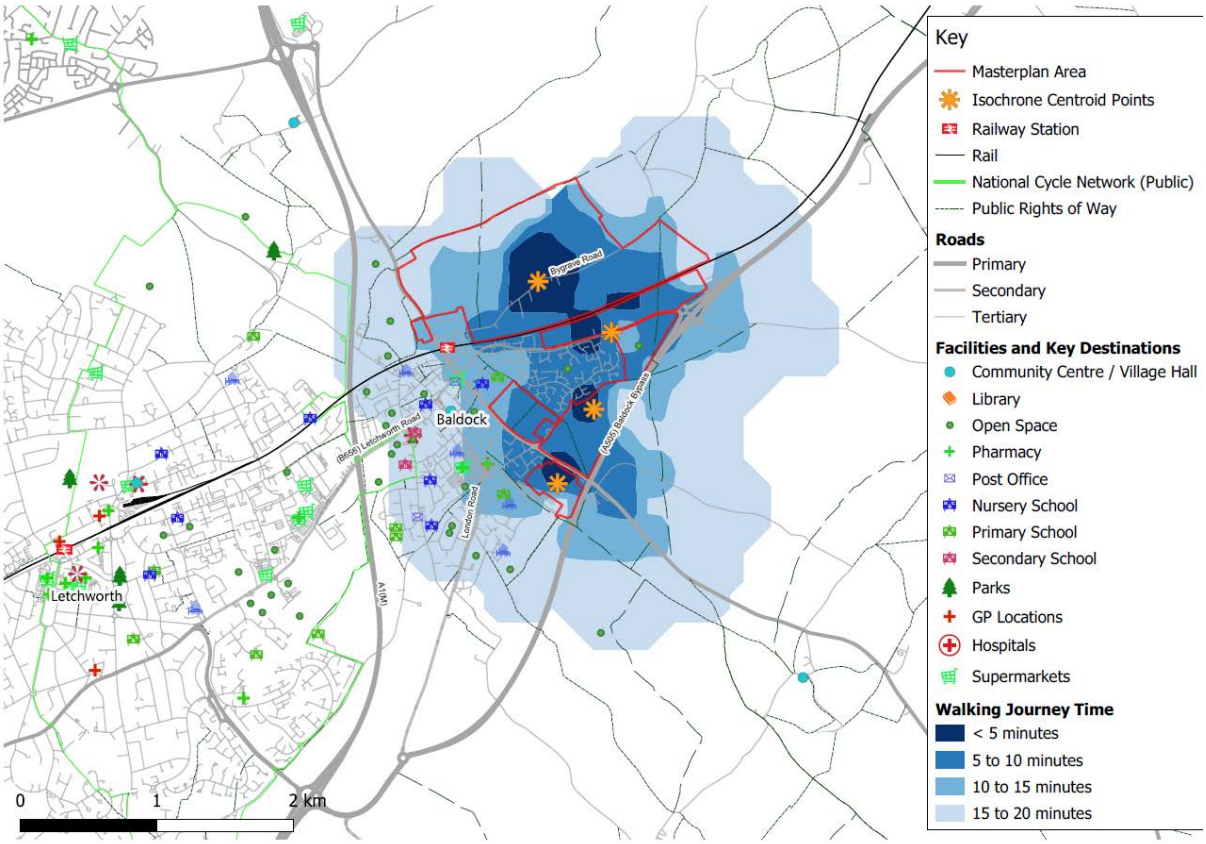
2.35 Figure 2-8 considers facilities in terms of their 'ideal' travel time to access, derived from general frequency of use, willingness to travel, and 15-minute neighbourhood ideals.

Figure 2-8: Indicative aspirational travel time by facility type



2.36 Applying these principles, and mapping the facilities in and around Baldock, we can illustrate the levels of existing accessibility by walking and cycling. Figure 2-9 shows where a 15-minute walk from the centre of the development could take you and the facilities available.

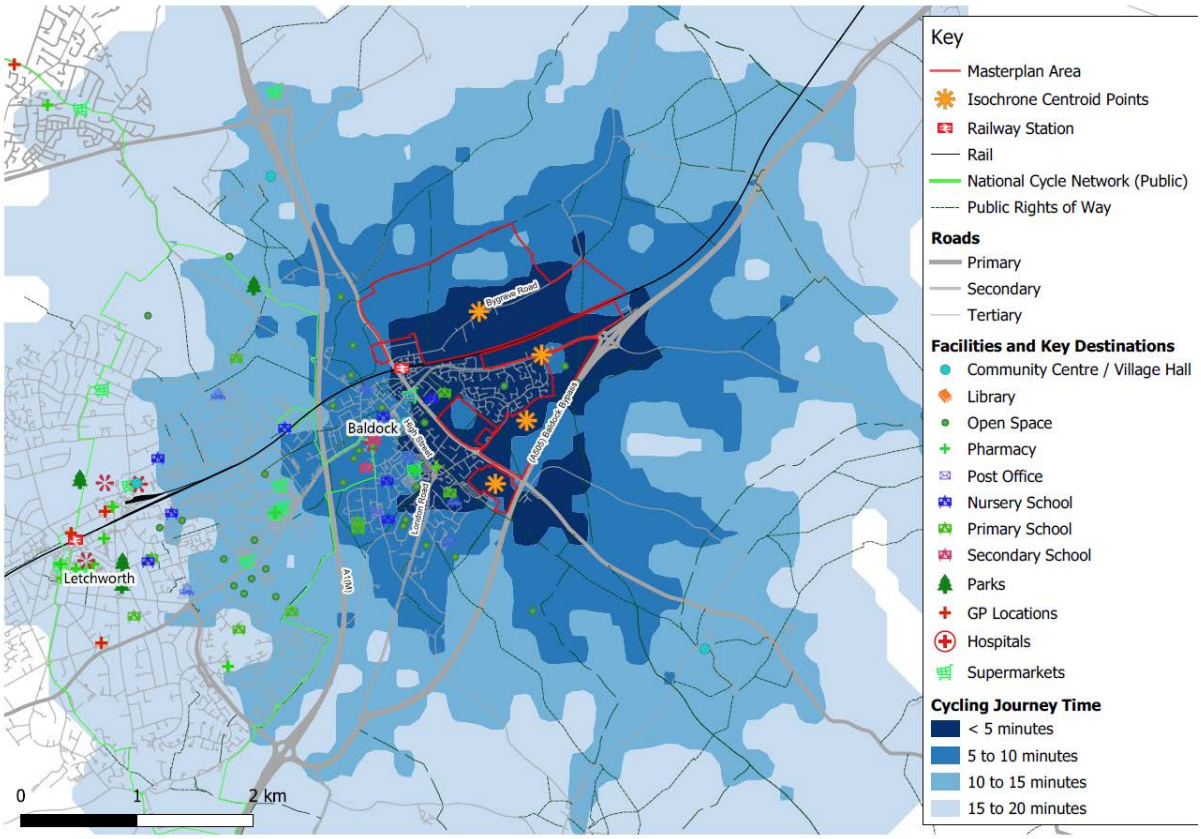
Figure 2-9: Existing walk access



2.37 A similar analysis has been done for cycling. Figure 2-10 shows the scope of a 15-minute journey from the site and the facilities that could be accessed currently.

2.38 For cycling the route quality is important to making the mode an attractive prospect for users, supporting safety and confidence along the route. The accessibility audit set out later in this report reviews the quality of both walking and cycling access as well as healthy streets.

Figure 2-10: Existing cycle access



2.39 This analysis highlights that, additional facilities will be required on site to meet day to day needs and contribute to a reduction in external trips. Additional connections, for example over the railway, may also help reduce walk and cycle times to off-site facilities. It is likely there will be significant residual trips accessing external employment and other day to day facilities that are not provided on-site.

Active Travel

2.40 Baldock is in close proximity to farmland and rural villages and surrounding Public Rights of Way (PRoW) are dominated by Bridleways. The National Cycle Network does not run directly through Baldock, but Route 12 does reach the western extent of the town with an off-road, unlit cycle path (see Figure 2-11). There is no dedicated cycle infrastructure within the existing town.

2.41 When assessing the travel to work data, Baldock has higher figures for walking than using public transport. Based on the 2011 Census, approximately 10% of residents walked to work, while 2% cycled. The 2021 Census results showed that this dropped for

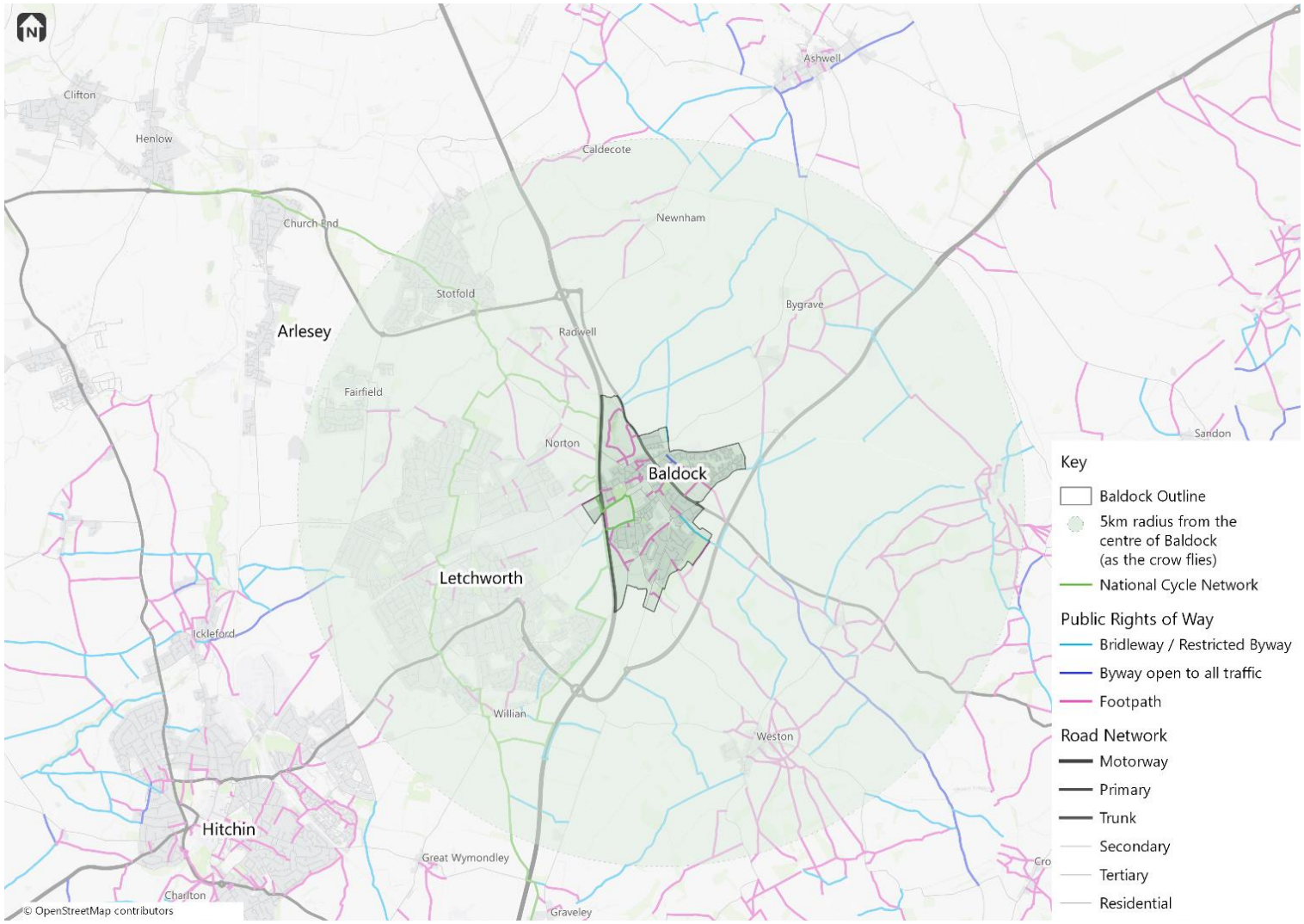
both modes, with 8% walking and 1% cycling[3]. The majority of these trips remain within Baldock, with some trips to the employment uses in east Letchworth Garden City.

Table 2-1: Walking and cycling commute mode share comparison (census)[4]

Mode	2011	2021
On foot	10%	7.8%
Cycling	2.2%	1.4%

[3] Results are likely to be influenced by the pandemic (https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/traveltoworkqualityinformationforcensus2021)
[4] Of commuting residents (not including those working from home)

Figure 2-11: PROW and National Cycle Network surrounding Baldock



Bus

2.42 Baldock is served by multiple bus services, predominantly operated by A2B Bus and Coach, Galleon Travel and Arriva.

2.43 Figure 2-12 demonstrates the frequency of buses serving Baldock during Monday morning peak hours. The most frequent services connect the Town Centre, Knights Templar School and South Baldock into Letchworth Garden City. Services to the east of the town are more infrequent, with the most regular services operating hourly.

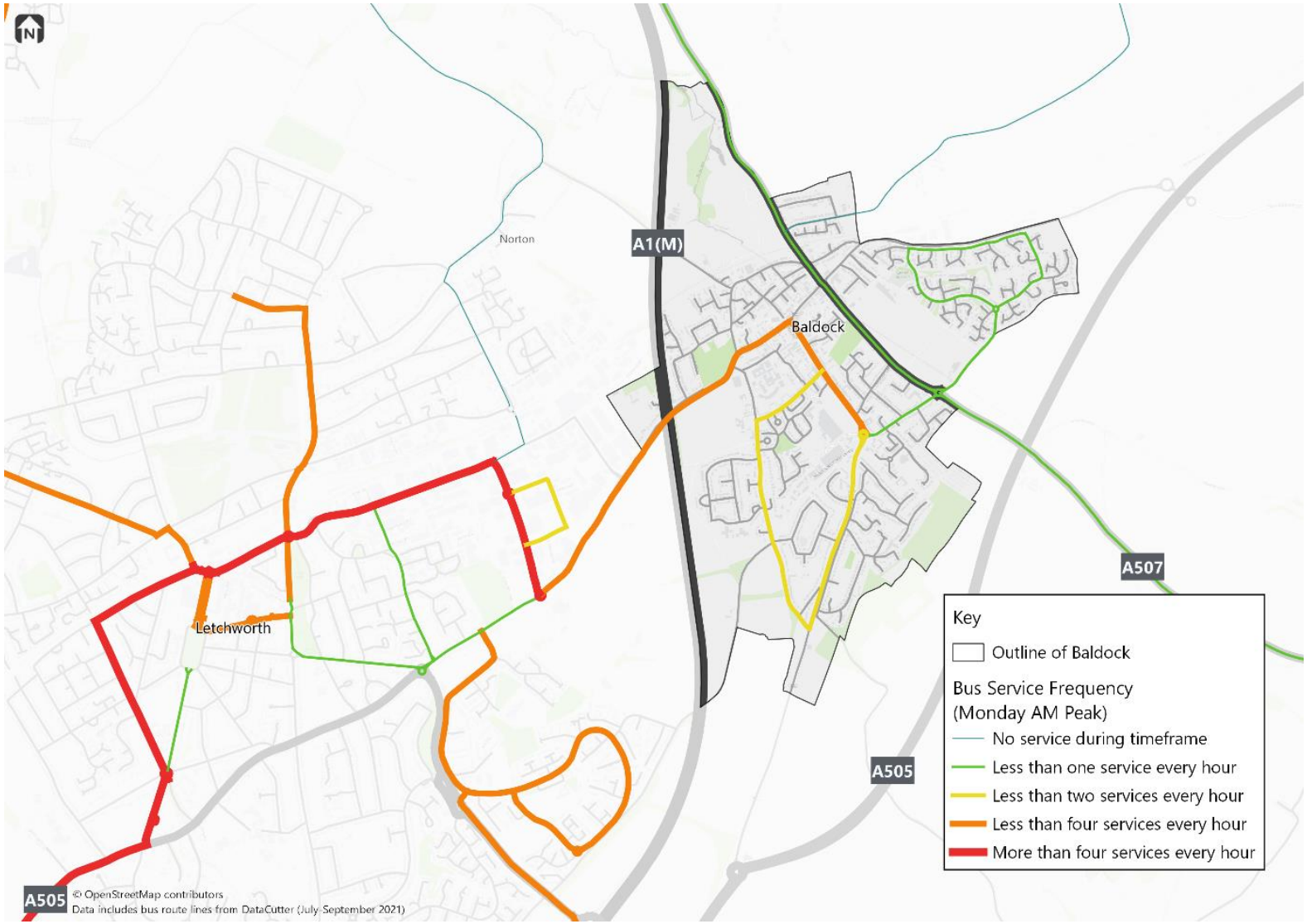
2.44 The low frequency of these services during peak hours is reflected in the low mode share of travel to work data. Based on the 2021 Census, shared modes such as bus, minibus or coach had some of the lowest mode share at 0.3% across Baldock (this compared to 0.9% in 2011).

Table 2-2: Bus commute mode share comparison (census)[5]

Mode	2011	2021
Bus to work	0.9%	0.3%

[5] Of commuting residents (not including those working from home)

Figure 2-12: Bus service frequencies in Baldock during Monday AM peak period



Rail

2.45 Baldock Railway Station is on the Hitchin to Cambridge Line and served by the Thameslink and Great Northern franchises. Services provide connections to Cambridge, London and the South East.

2.46 Figure 2-13 demonstrates that the number of people using Baldock Station has been increasing over the last 20 years, although with a marked drop in 2020/2021 reflecting the impact of the pandemic.

2.47 However, Baldock Station is not the most frequented station when compared to the local rail network (as seen in Figure 2-14), with Stevenage and Hitchin serving significantly more people, due to their location on the East Coast Mainline. There are also some services to London King's Cross from Letchworth (non-stop at peak times) that do not call at Baldock. Therefore, some Baldock residents who can drive, cycle or be dropped off are likely to be choosing to take the train from Letchworth, where more frequent and faster services exist.

2.48 Based on the 2021 Census rail provides a method of travel to work for 6.5% of Baldock's working population. This compares to an 11% share in 2011 where the majority of the trips were into central London, with a smaller percentage commuting to Stevenage[6].

Table 2-3: Train commute mode share comparison (census)[7]

Mode	2011	2021
Train to work	11%	6.5%

[6] Origin – destination data from the 2021 Census is not yet released
[7] Of commuting residents (not including those working from home)

Figure 2-13: Annual Passenger Entries and Exits at Baldock Train Station

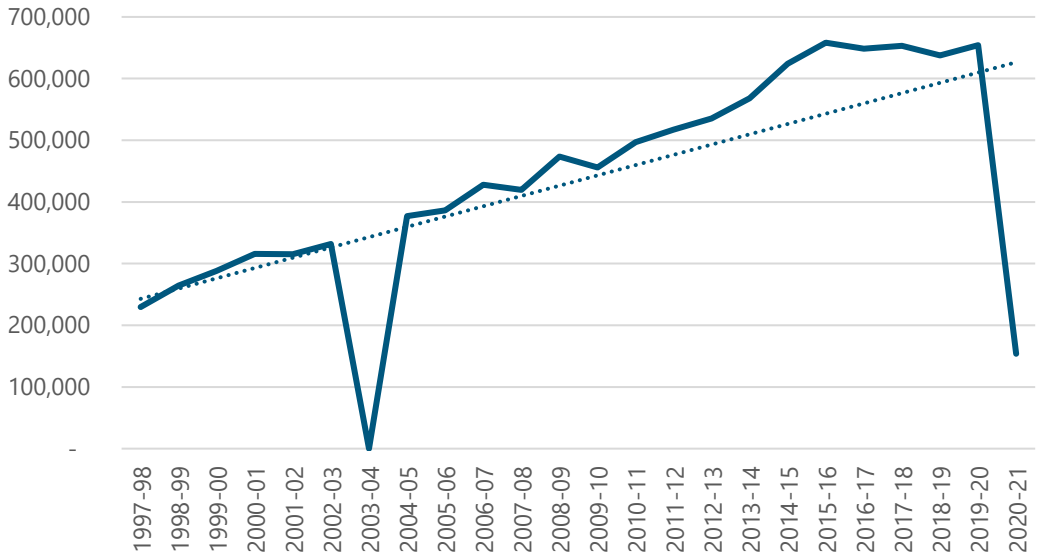


Figure 2-14: Annual Passenger Entries and Exits by Station across the Local Rail Network (2020/21)



Road

2.49 The A1(M), A507 and A505 connect in the area surrounding Baldock, with Junctions 9 and 10 providing regional connections to the A1(M) (Figure 2-15). This provides connections to London, Cambridge and into the Midlands.

2.50 The existing road network is congested, particularly at peak periods with the network providing important links across the county, and with many longer-distance journeys being made through the town.

2.51 According to both the 2011 and 2021 Census, travelling by private vehicle is the predominate method residents of Baldock use to travel to work. A significant proportion of these trips remain within Baldock, or the neighbouring employment area in the east of Letchworth Garden City. The trips are then centred around Letchworth Town Centre, Stevenage and Hitchin[8].

Table 2-4: Driving mode share comparison (census)[9]

Mode	2011	2021
Driving to work	69%	71%
Passenger	5%	5%

[8] Considers origin-destination data from 2011 only (as 2021 not released at time of writing)
[9] Of commuting residents (not including those working from home)

Figure 2-15: Road Network



3. Collision Analysis

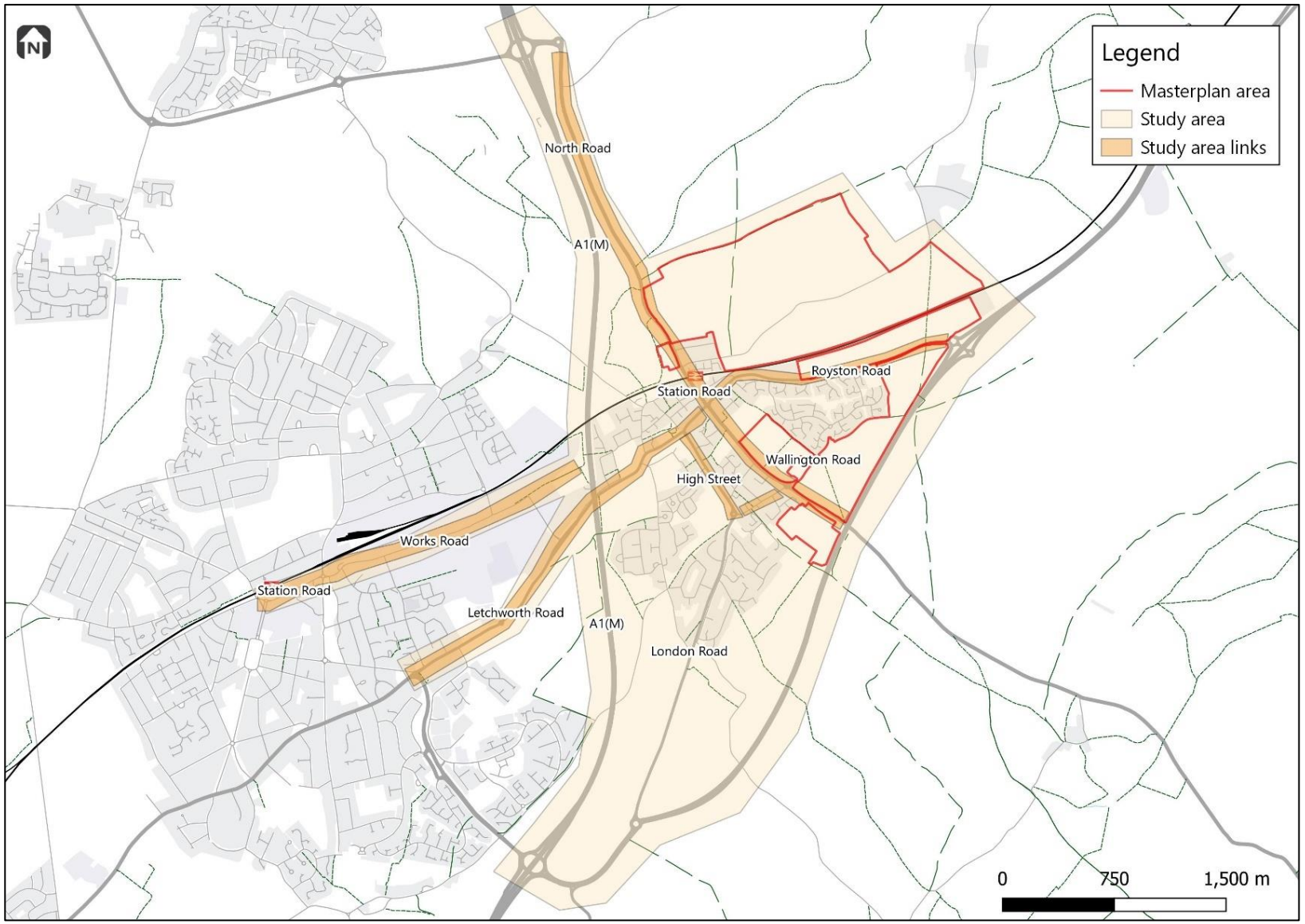
3.1 The chapter summarises a review of Personal Injury Collisions (PICs) recorded in Baldock in the period 2017 to 2021. The information has been obtained from the Department for Transport Road Safety Data, and corroborated with CrashMap data. The PIC analysis has been used to inform the Transport and Movement Baseline report prepared by ITP in support of the emerging Strategic Masterplan. It is therefore relatively high level at this stage and is not intended to replicate the detailed analysis provided as part of Transport Assessments – this will be undertaken at the planning application stge.

a. The time period analysed comprises 01/01/2017 to 31/12/2021 (inclusive), reflecting the latest available range of complete data. The data are informed by the STATS19 records collected by UK Police forces, noting that the publicly available data exclude some sensitive information such as causal factors. It is also noted that from March 2020 onwards, changes in the volumes and distribution of people moving around Baldock will have been affected by the Covid-19 pandemic. This could have resulted in changes to trends in collisions, or in fewer collisions occurring overall. This is referenced in the analysis where relevant.

3.2 The study area reviewed is shown on Figure 3-1, with key areas of interest highlighted. This focuses on the transport networks around the Baldock Sustainable Urban Extension (SUE) sites, as well as the links and junctions which have been identified as the potential subject of future transport interventions. These are summarised as follows:

- A507 North Road / Station Road / Clothall Road
- B656 Letchworth Road / Baldock Road
- B656 Royston Road
- High Street
- South Road
- Works Road and Station Road in Letchworth

Figure 3-1: Study area



Context

3.3 To provide context for the figures presented in this Technical Note, the Reported road casualties Great Britain, annual report: 2021 has been reviewed. This allows the data on severity, road users and casualties to be compared to a national reference point. The headline figures are summarised below:

- In 2021, PICs were 11% higher than 2020 but 16% below 2019
- Of all PICs recorded, 21% resulted in killed or seriously injured casualties
- Of all PICs recorded:
  - 13% were pedestrians
  - 13% were pedal cyclists
  - 12% were motorcycle riders
- Of all casualties, 10% were aged 16 and under
- Of all casualties, 6% were aged 70 or over

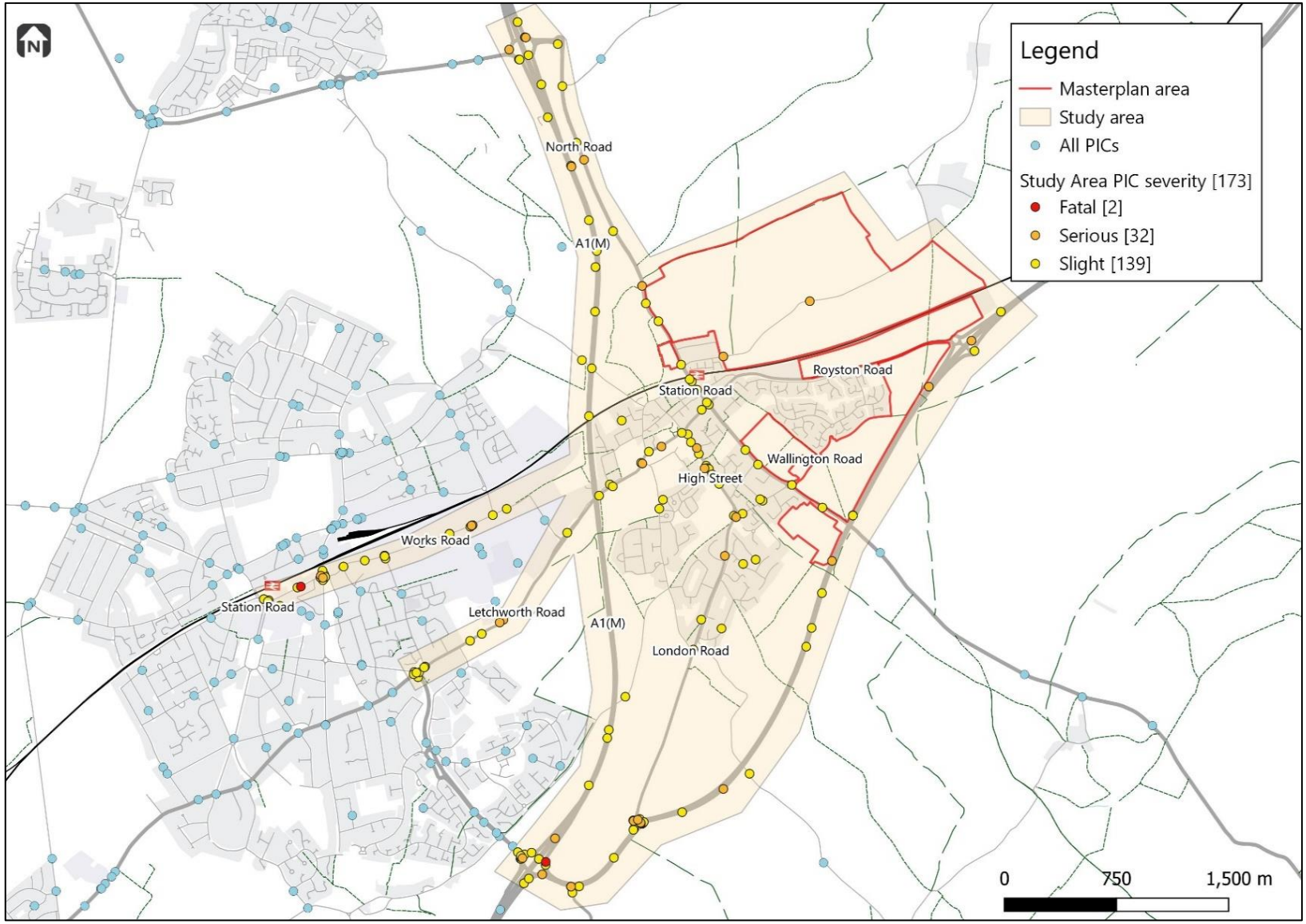
3.4 Whilst the causal factors of PICs in the Baldock study area are not publicly available, for information the three most common causes in the national dataset are: driver error, failing to look properly, and inexperienced driver.

Overview

By severity

3.5 Figure 3-2 summarises all PICs recorded across the study period and area, categorised into PICs resulting in injuries classified as slight, serious or fatal.

Figure 3-2: All PICs by severity



3.6 In total, 172 PICs occurred, of which two resulted in fatal injuries, 32 resulted in injuries classified as serious and 139 resulted in injuries classified as slight. As a result of the 172 PICs, there were 220 casualties; in other words some collisions resulted in more than one person being injured.

3.7 Of the 220 casualties:

- 1% were fatalities
- 15% were seriously injured
- 84% suffered slight injuries

3.8 This results in 16% killed or seriously injured (KSIs) casualties. This is lower than the national data, wherein 21% of casualties were KSIs. It should however be noted that the study area chosen for this analysis could have introduced bias, as it does not include a representative range of road types or contexts, as would be included in the national dataset. This is true for several of the comparisons to national data.

3.9 The distribution of PICs in Figure 3-2 is clearly focussed around the higher volume movement corridors in the study area, such as the A1(M), B656 Letchworth Road, Works Road, North Road / Clothall Road, High Street, South Road and the A507. There are notably fewer PICs within residential areas such as Clothall Common, but also Royston Road shows a notable lack of collisions despite being the primary route accommodating east-west movements through the town.

By year

3.10 Table 3-1 breaks the study area collisions down by year and severity.

Table 3-1: Collisions in study area by year

Year	Slight	Serious	Fatal	Total
2017	34	12	0	**46**
2018	34	5	2	**41**
2019	32	5	0	**37**
2020	14	3	0	**17**
2021	25	7	0	**32**
Total	**139**	**32**	**2**	**173**

3.11 Table 3-1 shows a relatively consistent number of PICs occurring in each year analysed, with the exception of 2020 where significantly fewer were recorded. This may be explained by the reduced volumes of people travelling during 2020 as a result of the pandemic. This is reflected in the national data.

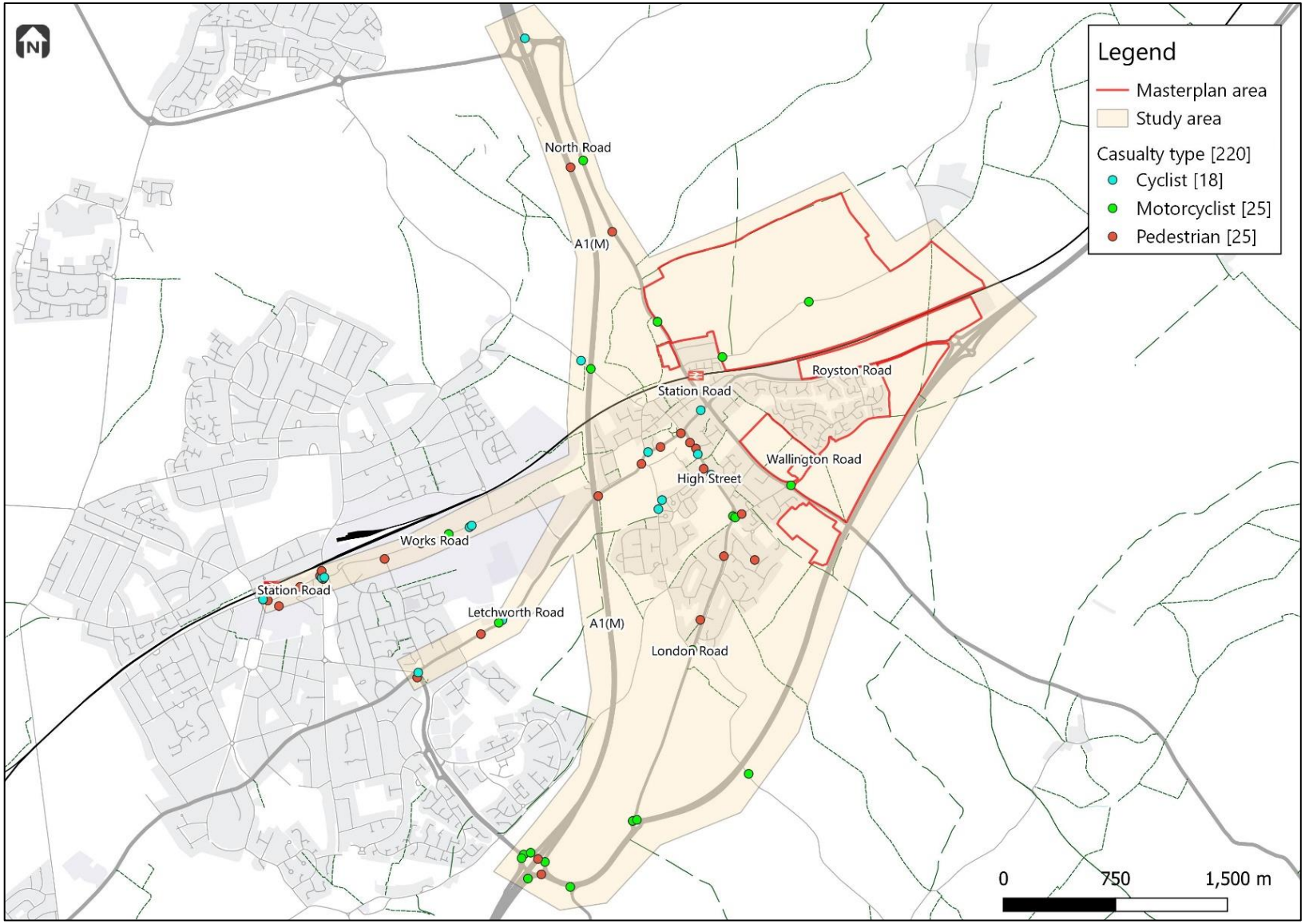
3.12 Both of the fatal collisions occurred in 2018, however, there is no reason to conclude this was a result of specific characteristics of that year – they occurred on different dates and at different locations. One occurred on Station Road in Letchworth on a Friday evening in September and one occurred at the A1 southbound slip road at Junction 9 on a Sunday afternoon in May.

3.13 The frequency of serious PICs reduces from 2017 onwards, although in relative terms the change is not significant. Serious collisions contributed to around 26% of all PICs in 2017 but to between 12% and 17% between 2018 and 2020. In 2021, this contribution rose again to 21% of all PICs recorded.

By casualty type

3.14 Figure 3-3 shows PICs by casualty type (showing vulnerable modes only). Rather than discrete PICs, the values indicate total casualties by any mode/type, and therefore several casualties could be shown in one location as a result of a single PIC. It should be noted that within the study area, there were no PICs involving horse riders or mobility scooters during the five-year period.

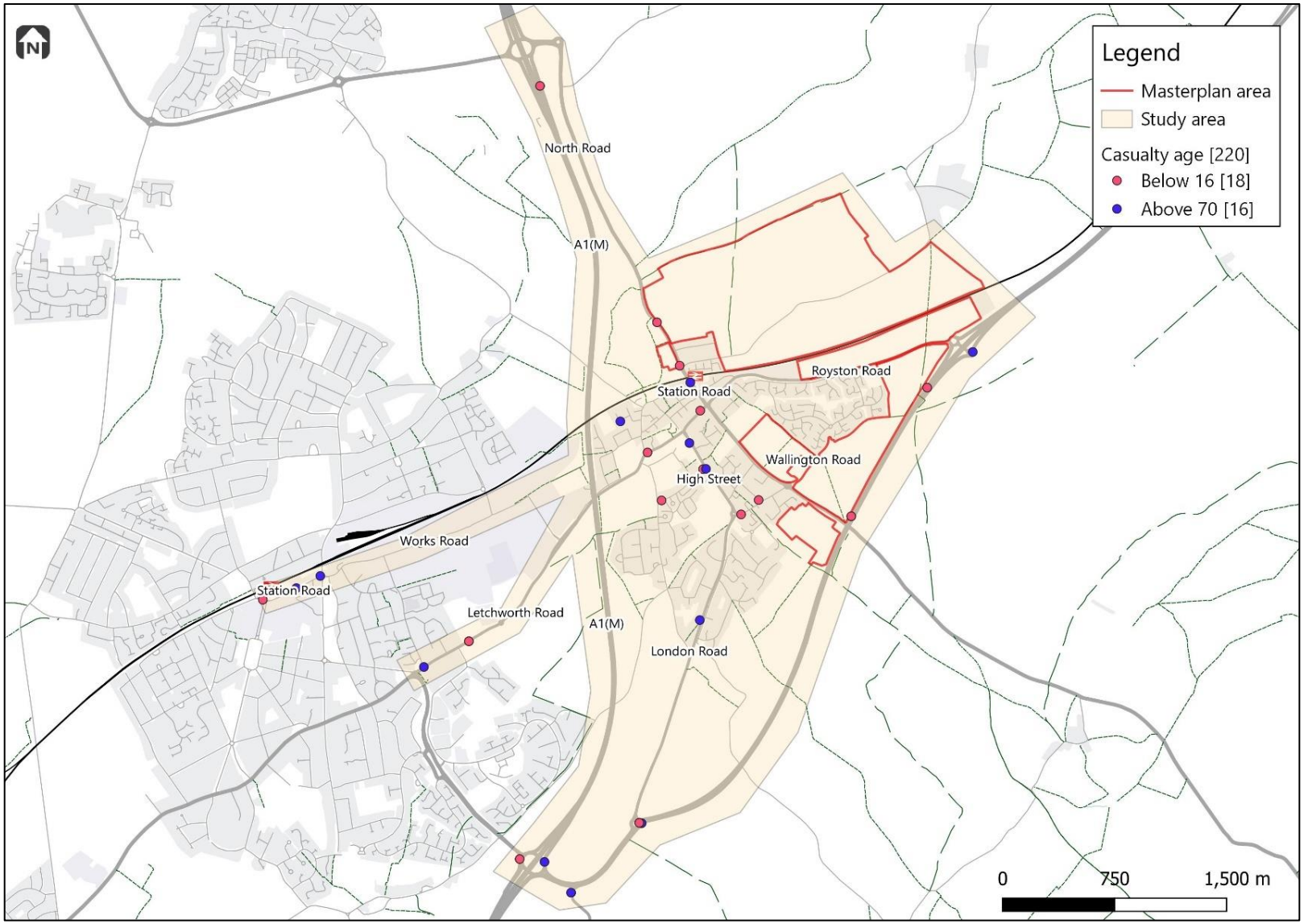
Figure 3-3: Vulnerable road user PICs



3.1 This shows that out of all 220 casualties, 31% were vulnerable road users. This is more positive than the national data, which recorded 38% of all PICs involving pedestrians, cyclists or motorcyclists.

3.2 Figure 3-4 shows PICs by vulnerable age groups – children (16 or younger) and elderly (70 or older). For simplicity, these are shown across all types of PIC, i.e. vehicle-only collisions, pedestrian / cyclist collisions, motorcyclists etc.

Figure 3-4: Vulnerable age PICs



3.3 Of all casualties, 15% were in vulnerable age groups. This is similar to the national road casualties data, wherein 16% of all casualties were older or younger people.

3.4 Comparing these with the pedestrian, cyclist and motorcyclist PICs does not show a particularly strong relationship - 18% of casualties involving pedestrians, cyclists or motorcyclists also involved older or younger people.

Focussed analysis

Links

3.5 PICs occurring at the key links within the study area are shown in Figure 3-5 to Figure 3-7. Royston Road is not shown because no PICs occurred. This may be because, relative to its length, Royston Road features very few junctions or frontage developments.

Figure 3-5: Works Road and Letchworth Road

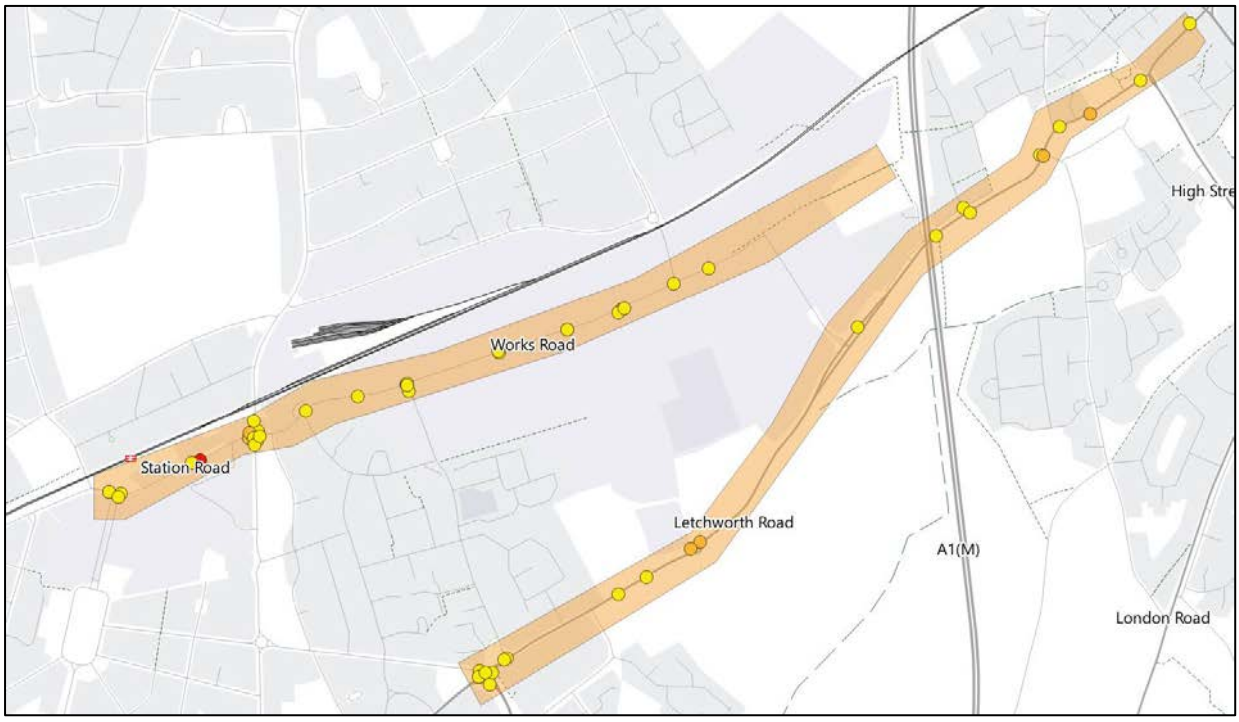


Figure 3-6: High Street and South Road

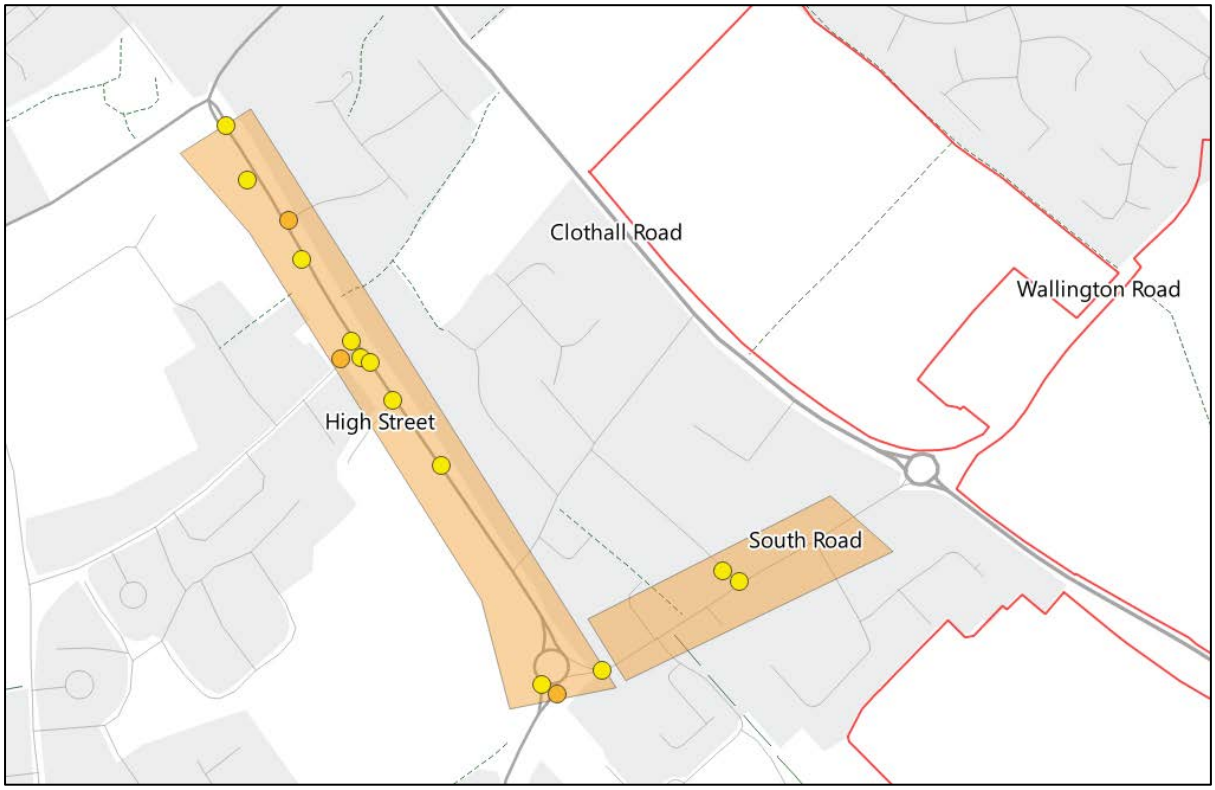
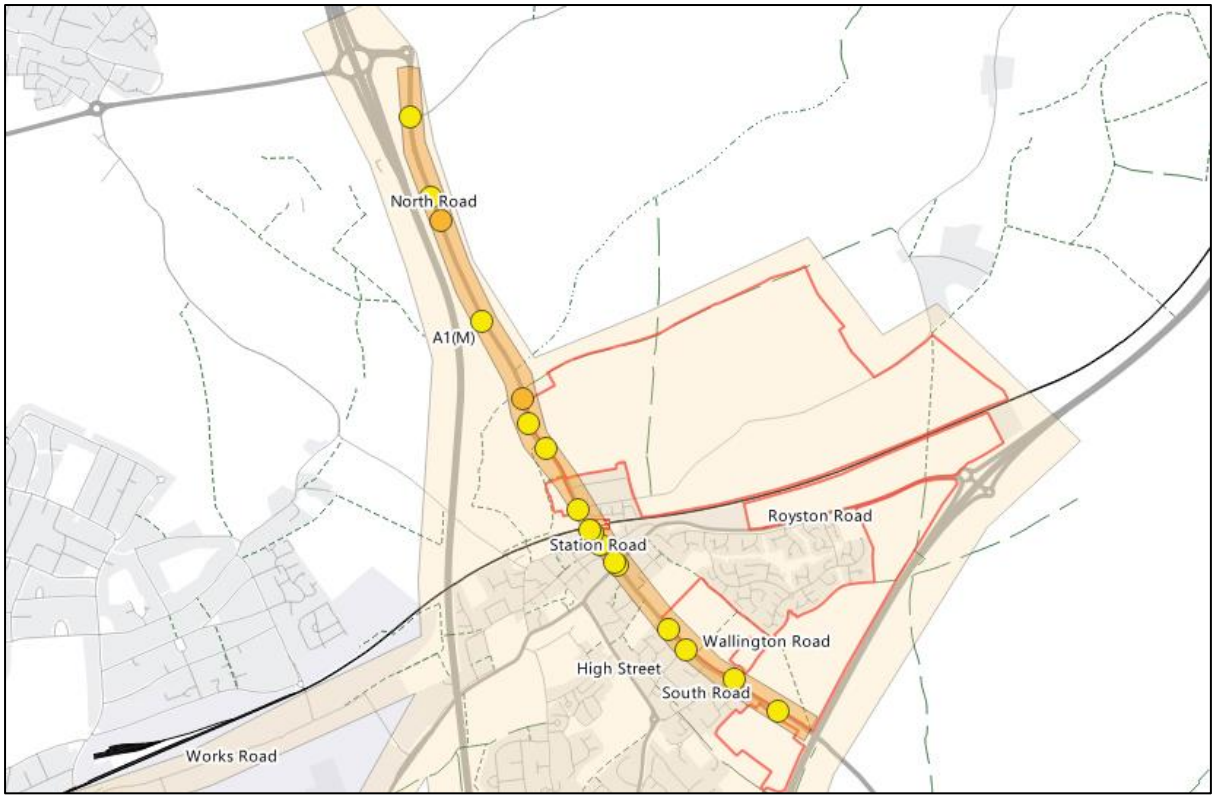


Figure 3-7: A507 North Road / Clothall Road



3.6 Table 3-2 summarises the number of PICs on each link by severity, and by rate per km. This demonstrates that the High Street and Works Road / Station Road in Letchworth had the most PICs per km.

Table 3-2: PICs on key links by severity

Location	Total PICs	Length*	PICs per km	Slight	Serious	Fatal
A507	17	3.8km	4.5	15	2	0
Letchworth Road	21	2.3km	9.1	17	4	0
Royston Road	0	1.8km	0.0	0	0	0
South Road	2	0.3km	6.7	2	0	0
Works Road	32	2.0km	16.0	26	5	1
High Street	13	0.6km	21.7	10	3	0

*approximate, within areas highlighted in Figure 3-1

3.7 Table 3-3 summarises PICs on the links by casualty type.

Table 3-3: Casualties on key links by type

Location	Cyclist	Motorcyclist	Pedestrian	Total
A507	0	4	1	5
Letchworth Road	4	1	6	11
Royston Road	0	0	0	0
South Road	0	0	0	0
Works Road	8	3	7	18
High Street	2	2	4	8

3.8 Considering the overall PIC/km rate, the number of casualties involving vulnerable road users at Royston Road, South Road and the A507 is not considered significant. Letchworth Road, Works Road and High Street are considered in further detail below.

Letchworth Road

3.9 On Letchworth Road, 21 PICs occurred involving 28 casualties. The largest cluster of PICs occurring on the Letchworth Road / Baldock Road corridor is at the roundabout with Letchworth Gate, where five PICs occurred, involving seven casualties. Of these, one involved a pedestrian casualty and one involved a cyclist casualty, both of which suffered slight injuries.

3.10 The PICs at the Letchworth Gate roundabout occurred under a range of situations and were mostly during daylight and fine weather. The detailed data suggests that most occurred on the A505 Baldock Road, though this is not apparent from the easting/northing data and therefore it is difficult to conclude exactly which roads or movements are most commonly involved.

3.11 Elsewhere along Letchworth Road, there are four junctions where two PICs occurred, but the occurrence of two is not considered to reflect a pattern. At the eastern end - broadly speaking between the A1(M) and High Street - five PICs occurred during the hours of darkness, generally when streetlights were lit. Based on the data available, there is no clear underlying cause for the 11 PICs involving vulnerable road users occurring on Letchworth Road, though some of these were on the easternmost section.

Works Road

3.12 On Works Road, 32 PICs occurred involving 38 casualties. More than three PICs occurred at the following locations:

- Station Road / Broadway roundabout – four slight PICs; one pedestrian casualty and one cyclist casualty.
- Station Road / Birds Hill / Norton Way roundabout – nine PICs, six of which were slight and three of which were serious. Two pedestrian casualties and three cyclist casualties.
- Birds Hill / Works Road / Pixmore Avenue priority junction – three slight PICs.
- Works Road / Avenue One roundabout – two slight PICs and two serious PICs; Two cyclist casualties and one motorcyclist casualty.

3.13 One of the two fatal casualties within the study area occurred on Station Road near to The Arcade. This involved a pedestrian in the hours of darkness (with streetlights lit) and no specific hazards were recorded, although it appears the pedestrian was not at a formal crossing point. This does necessarily mean that they were attempting to cross the road – they may have been hit by a vehicle whilst walking along the footway.

3.14 There are relatively few PICs occurring away from junctions along Works Road and Station Road, though it is noted that the corridor has a proliferation of junctions in general (which in itself could be a causal factor). Whilst Works Road features many employment and industrial land uses, none of the PICs involved vans or heavy goods vehicles.

3.15 Of the 32 PICs, nine occurred in the hours of darkness (with streetlights lit) and all of these were between Norton Way and Broadway on Station Road.

High Street

3.16 On High Street, 13 PICs occurred involving 13 casualties. It has the highest proportion of all casualties that are vulnerable road users (62%). It might be expected that the High Street accommodates higher volumes of pedestrians overall, compared with other links in the study area, and therefore the risk of conflict with pedestrians is greater.

3.17 Four occurred within 50 metres of the junction with Mansfield Road, one of which was serious, and three occurred within 50 metres of the South Road / London Road roundabout, one of which was serious.

3.18 Three of the pedestrian casualties along High Street involved vulnerable age groups – two children and one 74-year-old. One was during the hours of darkness with street lighting but otherwise there are no clear contributing factors from the data available.

3.19 Two PICs involving motorcyclists occurred on London Road at the approach/exit from the roundabout with South Road and High Street, and one of these resulted in injuries classified as serious. The available data does not indicate any common causal factors.

Junctions

3.20 Table 3-4 summarises PICs occurring at junctions in the study area which are either not included in the above analysis, or are of particular interest to the Baldock SUE proposals.

Table 3-4: Collisions in study area at key junctions* by severity

Location	Slight	Serious	Fatal	Collisions total
A507 Station Road / Icknield Way / Football Close	1	0	0	1
A507 Station Road / B656 / Clothall Road	2	0	0	2
B656 / High Street	2 (1 pedestrian)	0	0	2
Clothall Road / South Road / Wallington Road	1 (1 motorcyclist)	0	0	1

*within 50m of junction

3.21 Whilst not the focus of this analysis (as this is intended to inform sustainable transport focussed interventions more so than highway mitigation), it noted that higher numbers

of PICs occurred at the A1M junctions. At Junction 9 and its slip roads, 19 PICs occurred and at Junction 10 and its slip roads, nine PICs occurred. These are heavily trafficked junctions and therefore the risk of conflict is increased.

3.22 The occurrence of PICs at the junctions of interest is relatively low. This is contrary to some anecdotal perceptions, particularly around the A507 Station Road junctions with Icknield Way and Clothall Road. The A507 is also a particularly highly trafficked route compared to others within Baldock.

3.23 The cause for this may be that PICs are only recorded when an injury is sustained, and therefore 'near misses' or even some collisions that did not result in any injuries are not recorded. The prevalence of traffic in itself on the A507 may also result in perceptions of an unsafe and unattractive environment and deter pedestrians and cyclists.

Summary

3.24 The key findings and their potential implications for further work, particularly the Active and Sustainable Modes Strategy, are outlined below:

Findings

- The study area follows the national trend over the last five years in terms of a reduction of PICs recorded during the pandemic; it is not yet clear whether there is an overall downward trend but the recorded collisions seem to have reduced since 2017.
- The study area has 16% killed or seriously injured (KSI) casualties over the five-year period, which is lower than the national data. There may be bias introduced in the study area which excludes the type of road / area where more KSIs typically occur.
- Within the study area and time period, 31% of all casualties were pedestrians, cyclists or motorcyclists, which is slightly lower than the national figure of 38%. None recorded in the study area involved horse riders or mobility scooter riders.
- Within the study area and time period, 15% of all casualties were below 16 or above 70, which is similar to national data.
- Of all pedestrian, cyclist and motorcycle PICs, 18% involved children or people aged over 70.
- In terms of rate of PICs per kilometre of road, Works Road and High Street were the two key links analysed with the highest rates of PICs. Letchworth Road also had relatively high rates.
- No PICs were recorded along Royston Road in the five-year period.

- Regards specific links:
  - There may be an underlying road safety problem at the Baldock Road / Letchworth Gate / Pixmore Way roundabout, where five slight PICs occurred, two of which involved vulnerable road users.
  - There may be a relationship between hours of darkness / street lighting and PICs at the eastern end of Letchworth Road, east of the A1(m).
  - Works Road has a relatively high number of junctions and frontage developments (e.g. compared with Royston Road). Most PICs occurred at junctions on Works Road, and involved cars.
  - A notable number of PICs occurred on Station Road during the hours of darkness, although street lighting was present and lit.
  - High Steet has the highest proportion of vulnerable road users out of all casualties, and several of these involved pedestrians below 16 or over 70. This may be expected as more people are likely to walk along the high street.
- The frequency of PICs at junctions of interest in the study area is relatively low.

3.25 The findings of this review will be used to inform the development of the active and sustainable mode and link road strategies, as part of the ITA.

4. Assessment of Existing Transport and Movement Data

4.1 To build an understanding of existing travel patterns and be able to assess the impact of any proposed transport interventions, a range of data sources have been collated and analysed within this section, with further information in Appendix A. This includes:

- Census 2021 data – for car ownership and commuting data
- Strava Data – for local cycling and walking movements
- Public Right of Way (PRoW) usage survey
- Teralytics mobile phone data
- An Automatic Number Plate Recognition (ANPR) cordon survey – for vehicles, including HGVs
- Junction turning movements and queue length surveys
- Baldock Rail Station survey – reviewing parking usage, drop-off and pick-up

Population profile (Census 2021)

4.2 A profile of Baldock[10] from the Census tool has been generated (shown in Figure 4-1), with relevant data for transport. Key findings for Baldock include:

- Approximately 10,600 people live in Baldock
- 34% live in single person households (above England average)
- Lower than England average levels of deprivation
- About average levels of disability in the population (17%)
- 25% are economically active (above the England average)
- Above average levels of working mainly at or from home (40%) – this compares to 4% of the working population working from home in 2011 as the 2021 census was heavily influenced by changing travel behaviours as a result of the pandemic
- 42.5% drive a car or van to work
- 28% travel less than 10km to work
- Higher than England average profile population of 40 – 60-year-olds
- A lower than England average proportion of households with no access to a car
- A higher than England average proportion of one or more car households

[10] Baldock Built up area (comprising Baldock Town and Baldock East)

Figure 4-1: Baldock Census 2021 profile



Source: Office for National Statistics - Census 2021

Strava Data

4.3 Strava Metro data gives a good indication of the walking and cycling patterns of an area and has been found to have the potential to be used to identify travel patterns, estimate travel demand and analyse route choices. Particularly it can be useful in predicting relative walking or cycling rates of an area, with Strava counts estimated to be generally within 5% of real time traffic counts[11]. However, it should be noted that the data does include biases towards certain demographics of the population with males in the age range of 25-44 the most common demographic within the dataset. Therefore to increase its reliability and usefulness it should be used in combination with other data sources.[11]

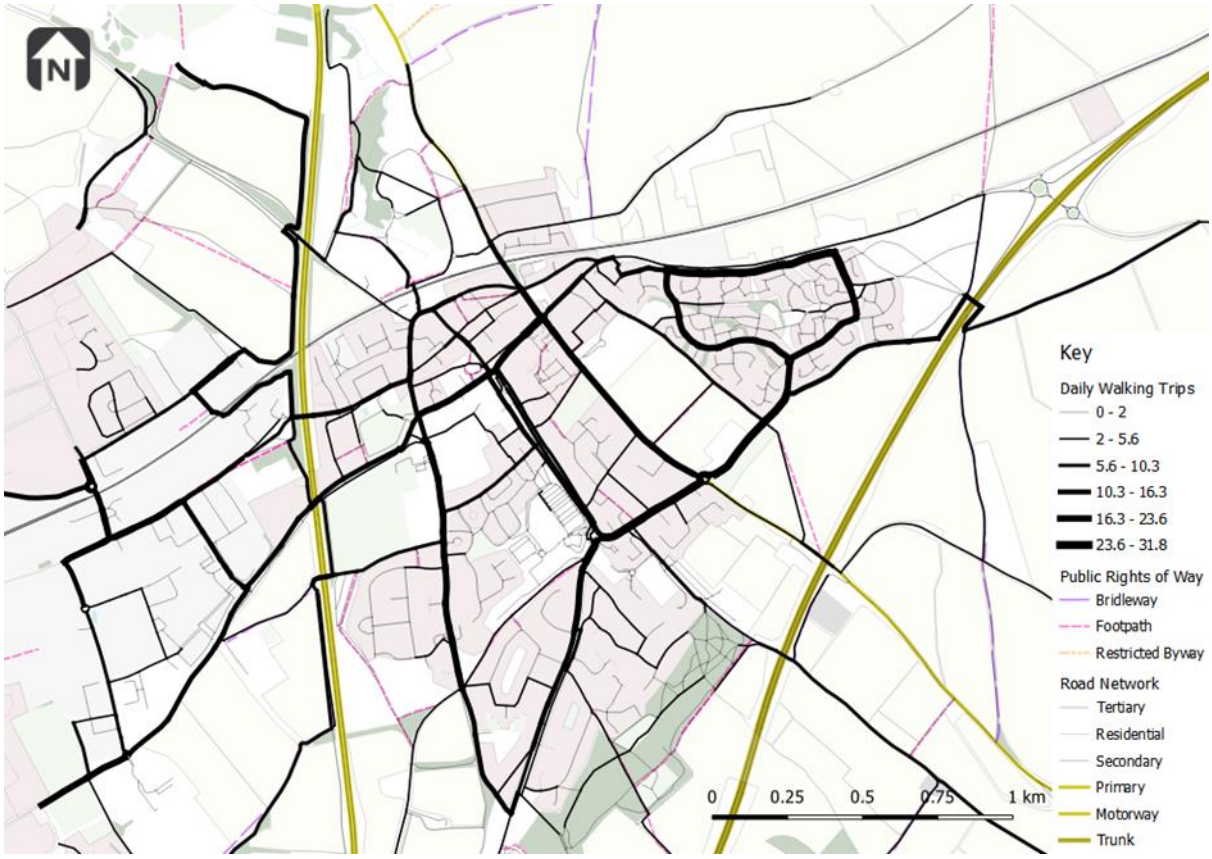
Strava Metro walking trends

4.4 Walking trends in Baldock see high volumes of pedestrians around Clothall Common and the town centre as seen in Figure 4-2. Around these areas, up to 30 daily trips are recorded on the app which could be equivalent to 600-3,000 walking trips in total.

4.5 Figure 4-2 also shows walking levels near the proposed development site and indicates that the PRoWs around the development are used less frequently. This could be due to low levels of demand and / or attractiveness of the routes. There are opportunities with the new development to deliver high quality and attractive pedestrian routes to induce walking demand to the town centre and other attractions such as the country park to be delivered within the site.

[11] Lee, K. and Sener, I.N., 2021. Strava Metro data for bicycle monitoring: a literature review. Transport reviews, 41(1), pp.27-47.

Figure 4-2: Daily walking trips around Baldock (2021)



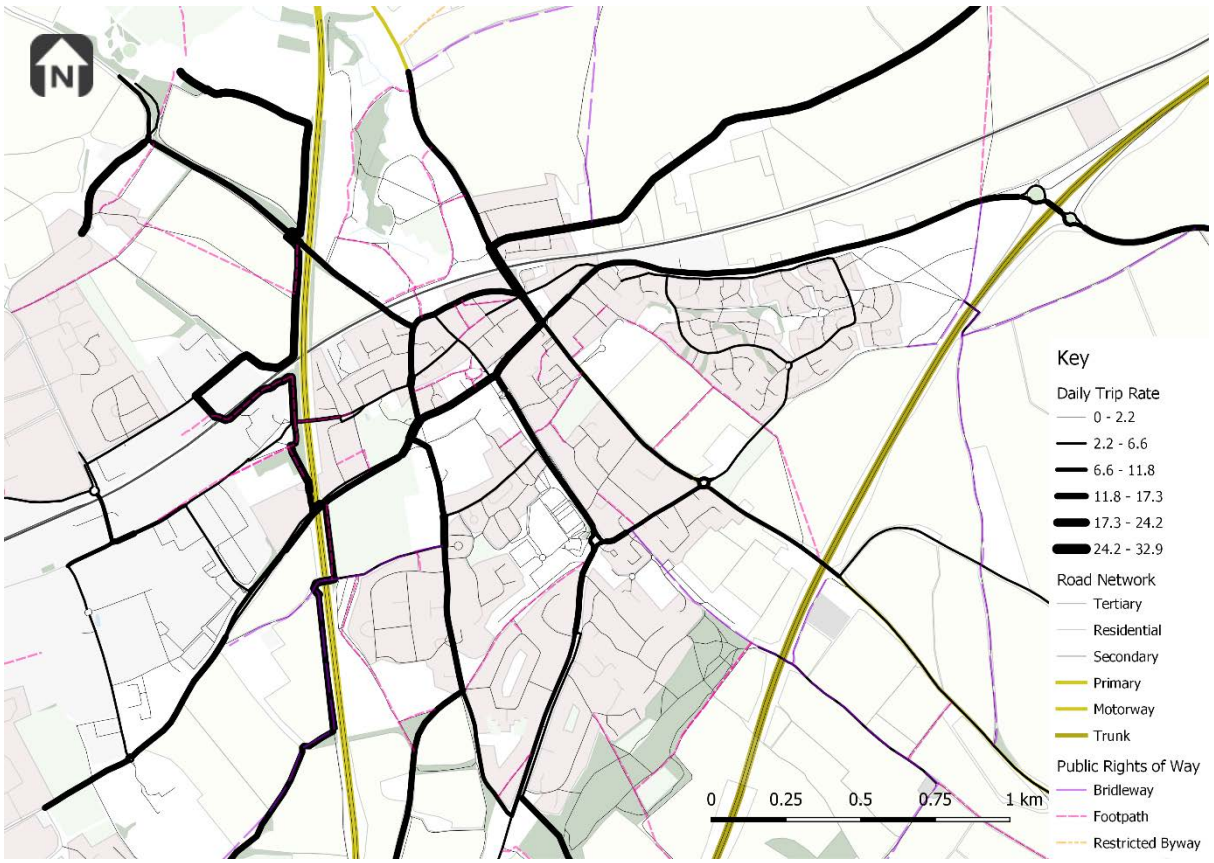
Strava Metro cycling trends

4.6 Cycling data (2021) shows that cyclists tend to use the radial routes into and out of Baldock as well as the roads around the town centre (Figure 4-3). Flows are highest on Bygrave Road and Ashwell Road through the proposed development site. The peaks of 30 trips are similar to the walking rates that were calculated, which could aggregate up to between 600-3000 trips based on how representative Strava currently is.

4.7 The proposed development and the forthcoming link road will therefore have to be able to accommodate these levels of cycling and ensure that cycling is not discouraged in the area due to diversion or disruption.

4.8 When comparing the walking and cycling data, it is evident that walking trips occur in more residential areas with thicker black lines shown in Figure 4-2. This suggests that cyclists tend to stick to the more direct radial routes and arrive from locations outside of Baldock.

Figure 4-3: Daily cycling trips around Baldock (2021)



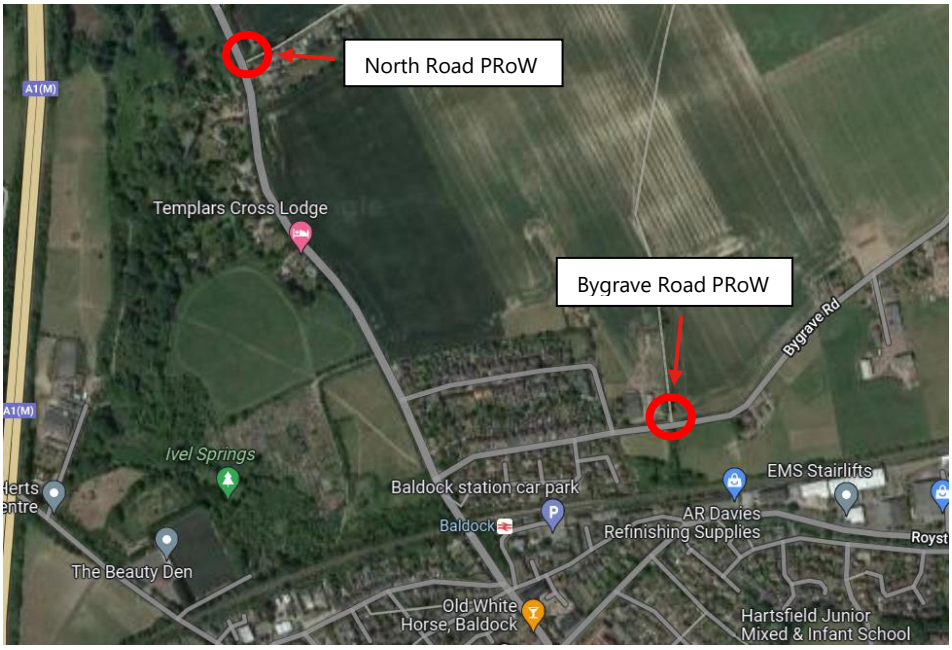
Pedestrian routes

PRoWs

4.9 Movements in and out of the PRoWs around the proposed development site at North Road and Bygrave Road were monitored, with locations shown in Figure 4-4. Reflecting the Strava Metro data analysis, pedestrian and cycle movements around North Road are relatively low, perhaps expected given it leads out onto the busy A507. Average daily pedestrian trips entering or leaving the PRoW at the North Road site are nine, with no significant difference between weekends and weekdays. A total of nine cyclists were recorded using the PRoW over the two-week survey.

4.10 The PRoW located off Bygrave Road experiences slightly more active travel movements with an average of 26 entering or leaving the site. This demand can be supported and enhanced through the proposed development and sustainable transport interventions along Bygrave Road.

Figure 4-4: PRoW access locations



Pedestrian and cycle use of Station Road / Clothall Road junction

4.11 Additional active travel analysis was undertaken at the Station Road / B656 / Clothall Road junction. This junction provides valuable insights as it links Baldock train station to the high street and surrounding areas of Baldock.

- B656 (W) to Station Road saw the main movement of pedestrians as it connects the town centre/high street and train station, representing 28% of the total junction pedestrian movement in the PM peak
- Station Road to B656 (W), the reverse of the trip above, represented 25% of the total junction pedestrian movement in the PM peak
- These are also the highest movements in the weekend peak
- All other movements were lower than 10% of the total in the PM peak
- The next biggest movement was between B656 (W) and Clothall Road, with 8% going either to or from either arm.
- The cyclist only movements represent around 6% of total active movements for the junction but the flows are similar in terms of direction.
- The weekend directional flow remains similar to the weekday
- On the weekend cyclists make up 4% of total movements

4.12 There are also long signal cycle times at this junction. Those using active travel to cross are likely to experience delay at this junction.

Regional origin and destination movement analysis

4.13 The Teralytics platform has been used, which provides origin to destination information, logging the start and end points of a journey using mobile phone data. The data is from 2021 and post pandemic related lockdowns, which provides a more up to date view on movement patterns than the 2011 Census. The data also covers all journeys, rather than just journey to work as is the case for Census. The data is able to provide very granular data as trips can be split out by Lower Super Output Areas (LSOAs) which usually contain around 2,000 people each.

4.14 The limitation of this dataset however is that all trips either start or end in Baldock and so an interpretation cannot be made on external journeys using Baldock as a through trip. The ANPR data analysis (paragraph 4.64) helps to give a clearer understanding of the amount of through traffic in Baldock. This used with a combination of data sources allows a better understanding of the wider movements around Baldock.

4.15 Figure 4-5 shows net outgoing and incoming trips from an area. It shows that in the morning that there is a flow of people leaving Baldock and a net gain in trips arriving in the centre of Letchworth. In the evening, much the opposite occurs.

4.16 Analysis of local movements found that:

- Significant movements between Baldock and Letchworth – this aligns with understanding of the Census data
- 23% of trips leaving/entering Baldock are below 5km
- Bus travel potential between these locations

4.17 Similar data can be viewed on a wider scale, reviewing the regional movement patterns. Figure 4-6 highlights that:

- There are significant movements into Hitchin and Stevenage
- From this we can derive that 55% of trips are shorter than 10km
- Car remains main mode of travel for trips between these towns

Figure 4-5: Local origin-destination movements (weekday AM Peak)

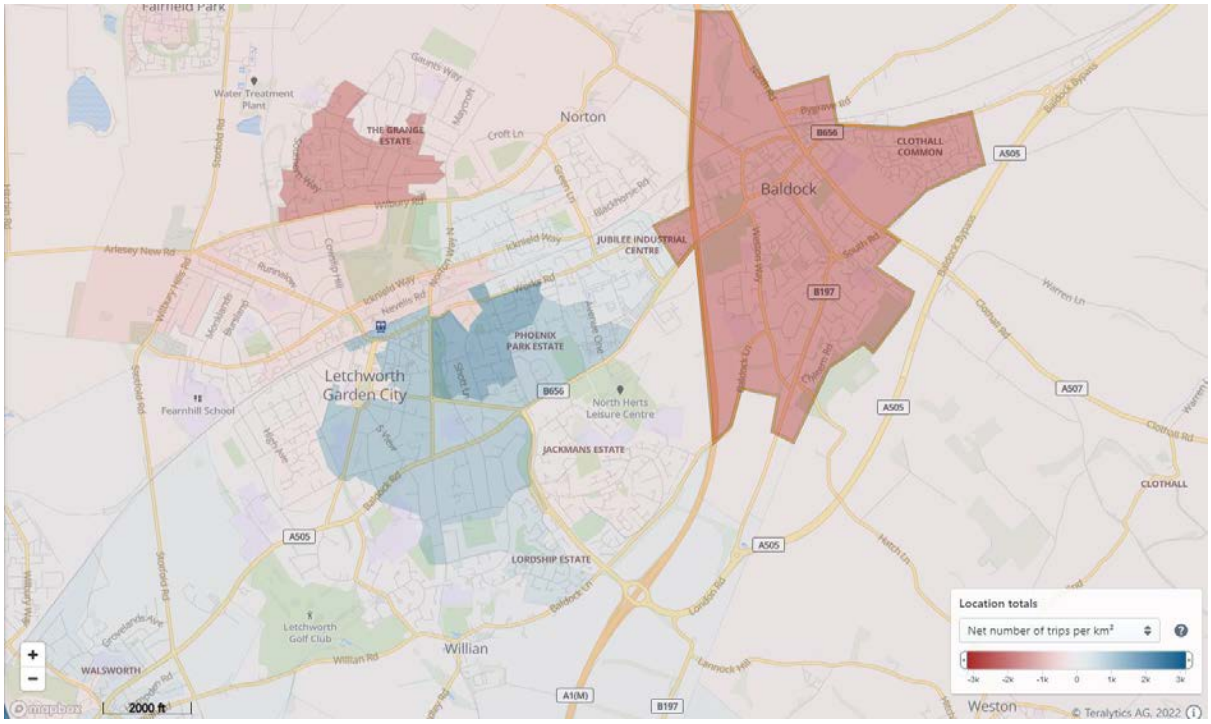
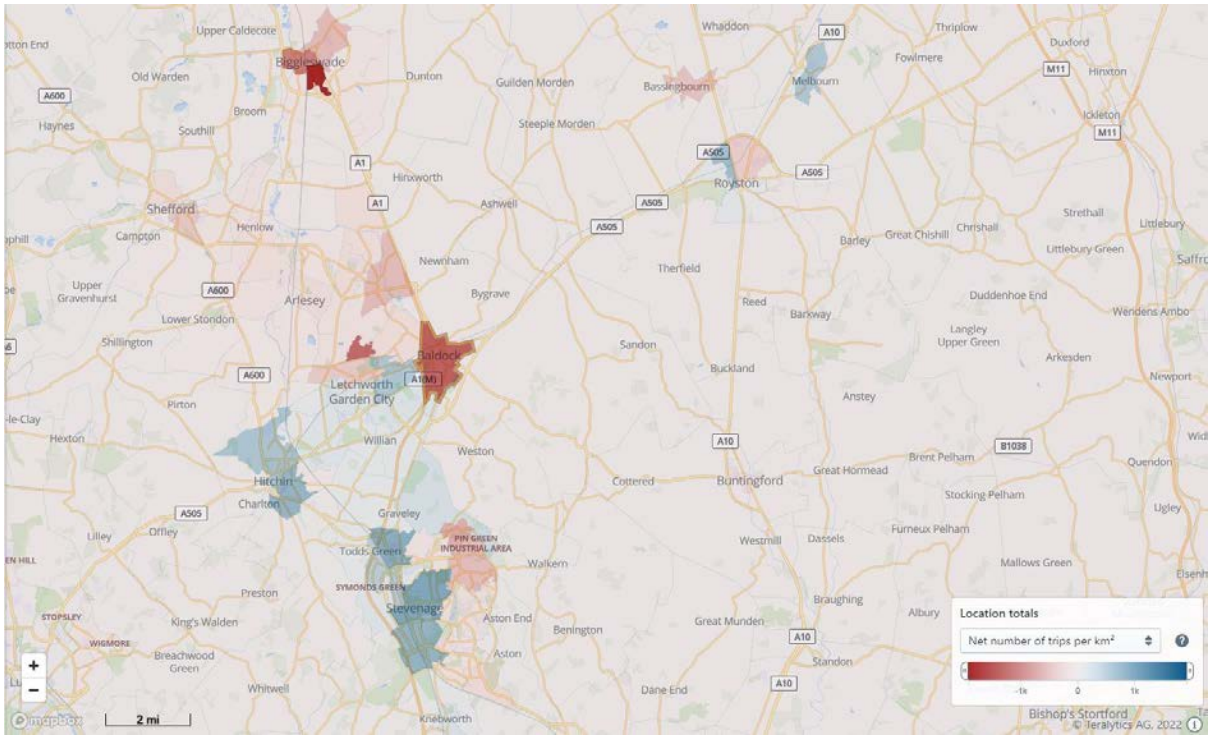


Figure 4-6: Regional origin-destination movements (weekday AM Peak)



Vehicle Survey Data Analysis

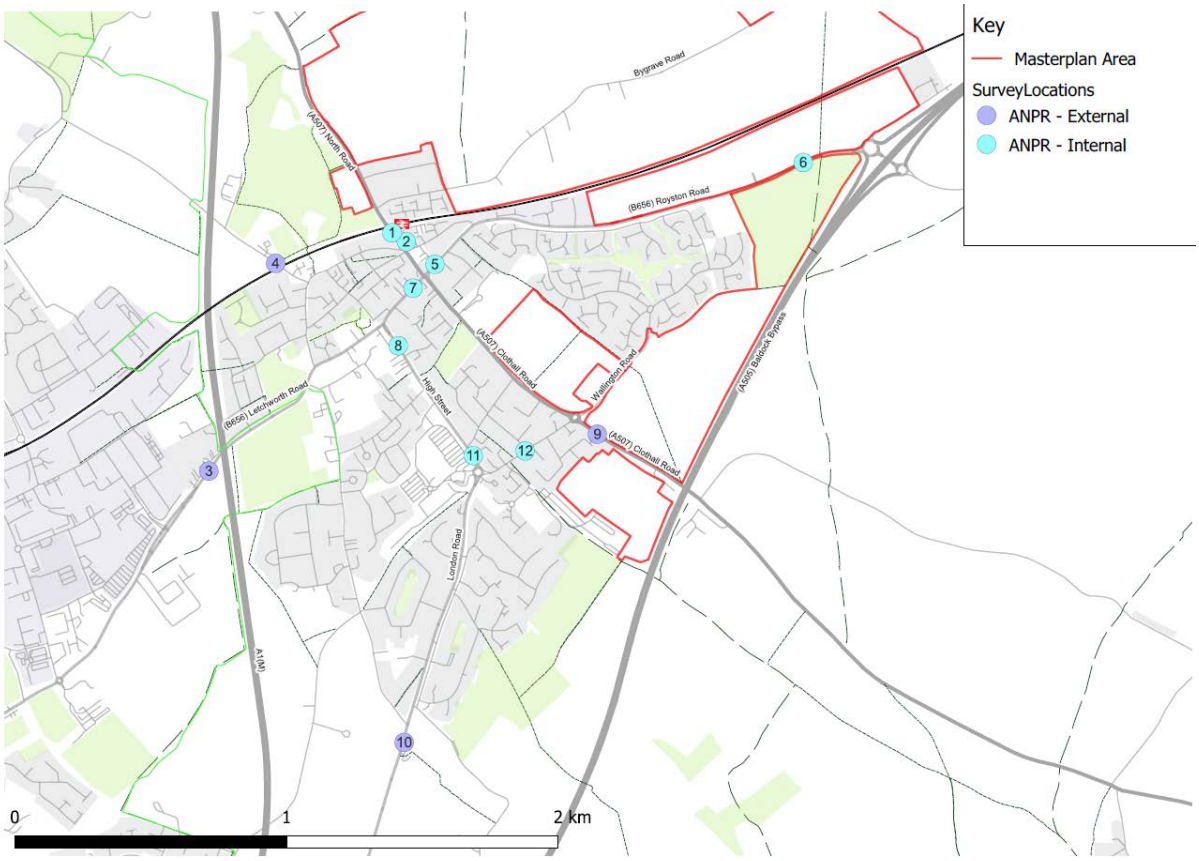
4.18 An Automatic Number Plate Recognition (ANPR) cordon survey was undertaken to allow a more detailed understanding of traffic movements across the town. The location of the cordon cameras for Baldock are shown in Figure 4-7. The ANPR cameras recorded the vehicle class and direction of travel for each camera, as well as the point and time the vehicle entered and left the cordon.

4.19 ANPR sites are either assumed to be 'External' or 'Internal'. This affects the way in which the origin-destination matching process works in relation to each site. The differences between the two types are as follows:

- External - these are sites which are assumed to be on the periphery of the study area and hence vehicles passing through these sites will be starting or ending their trip. Directions at these sites are set to Inbound and Outbound, and for sites that have vehicles travelling into the study area (i.e. they are not purely a one-way Outbound site).
- Internal - these are sites that are considered to be possible through movement sites for longer distance origin-destination movements - i.e. they may be an intermediate capture point for vehicles seen entering and exiting the study area elsewhere. In this instance, the origin-destination movement is assigned to the initial and final capture locations. Internal sites can be the origin of a trip (if it is not captured elsewhere before) or the destination of a trip (if it is not captured again after).

4.20 This allows an analysis to be undertaken of traffic movements through the town, as well as information such as HGV volumes and movements and proportion of through traffic. A full breakdown of the movements in both the AM and PM peaks is provided in Appendix A.

Figure 4-7: ANPR cordon camera locations



Weekday AM + PM cumulative ANPR movements

AM + PM: Two-way

4.21 Figure 4-8 below shows the aggregated total flow from the AM and PM peak periods between 07:00 – 10:00 and 16:00 – 19:00 – all motorised vehicles. The 'top five' two-way movements are (blue arrows in diagram):

- 1219 trips between North Road (1) and Clothall Road (9) – 9% of all trips
- 907 trips between North Road (1) and Royston Road (6) – 7% of all trips
- 830 trips between Letchworth Road (3) and Royston Road (6) – 6% of all trips
- 763 trips between Clothall Road (9) and London Road (10) – 6% of all trips
- 568 trips between Letchworth Road (3) and Clothall Road (9) – 4% of all trips

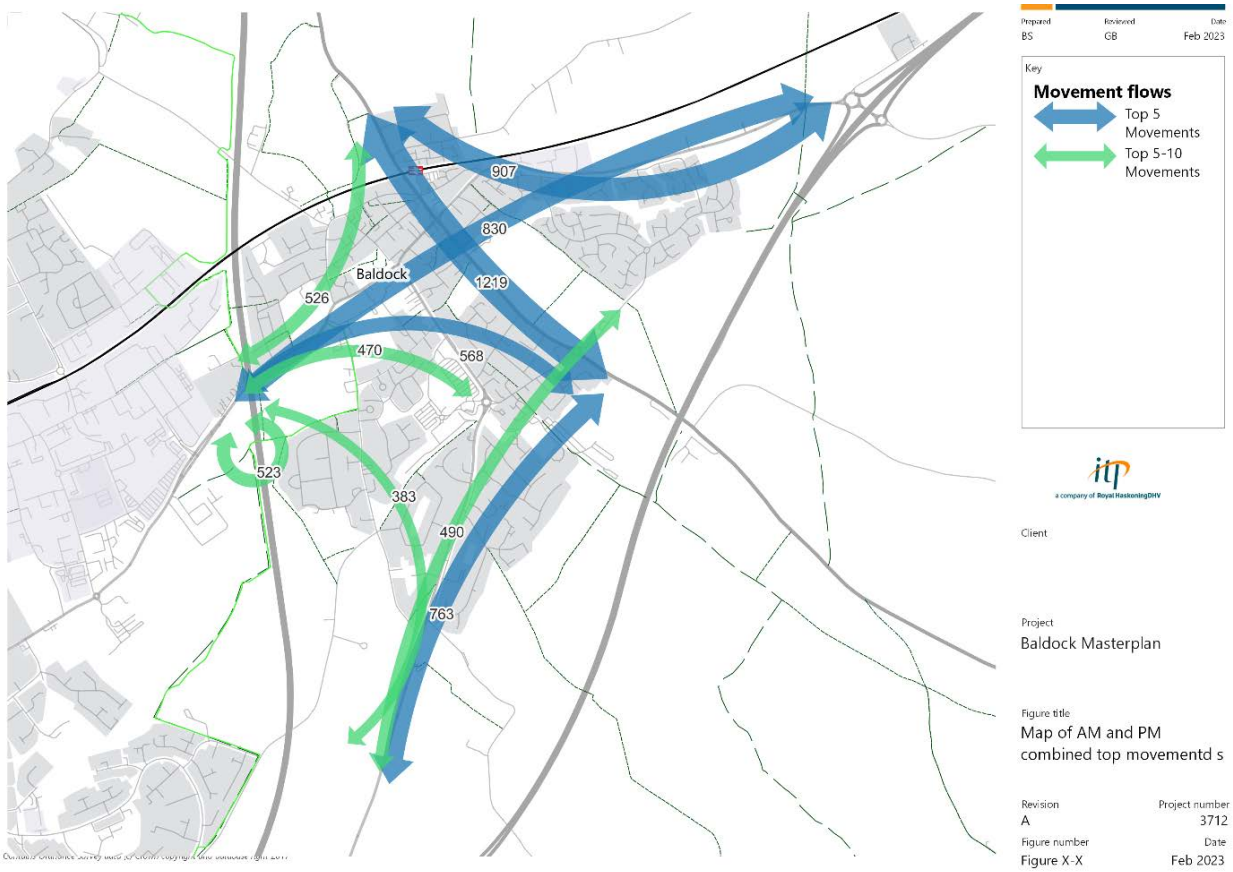
4.22 These represent a total of 33% of all trips. The remaining 'top ten' two-way movements (green arrows in diagram):

- 526 trips between North Road (1) and Letchworth Road (3) – 4% of all trips

- 523 trips between Letchworth Road (3) and Letchworth Road (3) – 4% of all trips
- 490 trips between London Road (10) and Wallington Road (12) – 4% of all trips
- 470 trips between Letchworth Road (3) and High Street (11) – 4% of all trips
- 383 trips between Letchworth Road (3) and London Road (10) – 3% of all trips

4.23 The top ten movements represent 52% of all trips.

Figure 4-8: Aggregated AM and PM weekday movements



AM + PM: Uni-Directional

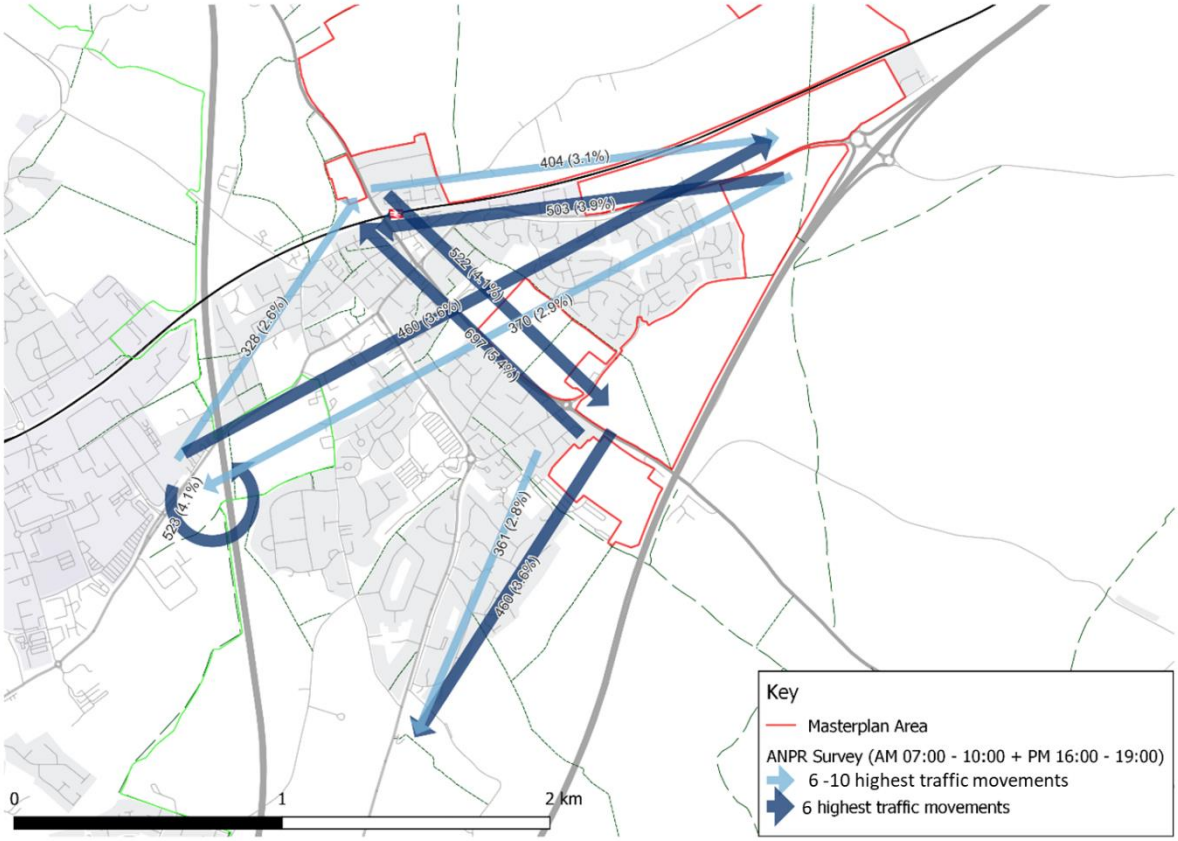
4.24 Figure 4-9 breaks the aggregated total traffic flows (AM + PM peak) down by direction. The top 10 movements are shown, along with the total vehicles recorded on that movement and the proportion of total movements this represents. In this diagram the top six movements are shown in dark blue as two movements have an equal number of movements recorded.

4.25 The 'top six' one-way movements are (dark blue arrows in diagram):

- 697 trips travelling from Clothall Road (9) to North Road (1) – 5% of AM and PM trips
- 523 trips travelling to and from Letchworth Road (3) – 4% of AM and PM trips
- 522 trips travelling from North Road (1) to Clothall Road (9) – 4% of AM and PM trips

- 199 trips travelling from Royston Road (6) to North Road (1) – 4% of AM and PM trips
- 460 trips travelling from Letchworth Road (3) to Royston Road (6) – 4% of AM and PM trips
- 460 trips travelling from Clothall Road (9) to London Road (10) – 4% of AM and PM trips

Figure 4-9: Aggregated AM and PM weekday movements (by direction)



Weekday AM Peak movements

AM Peak: Two-way

4.26 Figure 4-10 below shows the weekday AM (07:00-10:00) peak movements – all motorised vehicles. To help identify any tidal differences between AM and PM peaks, the blue arrows represent movements with broadly equal directional flow and are as follows:

- 527 trips between North Road (1) and Clothall Road (9) – 9% of AM trips
- 444 trips between North Road (1) and Royston Road (6) – 7% of AM trips
- 399 trips between Letchworth Road (3) and Royston Road (6) – 7% of AM trips
- 371 trips between Clothall road (9) and London Road (10) – 6% of AM trips

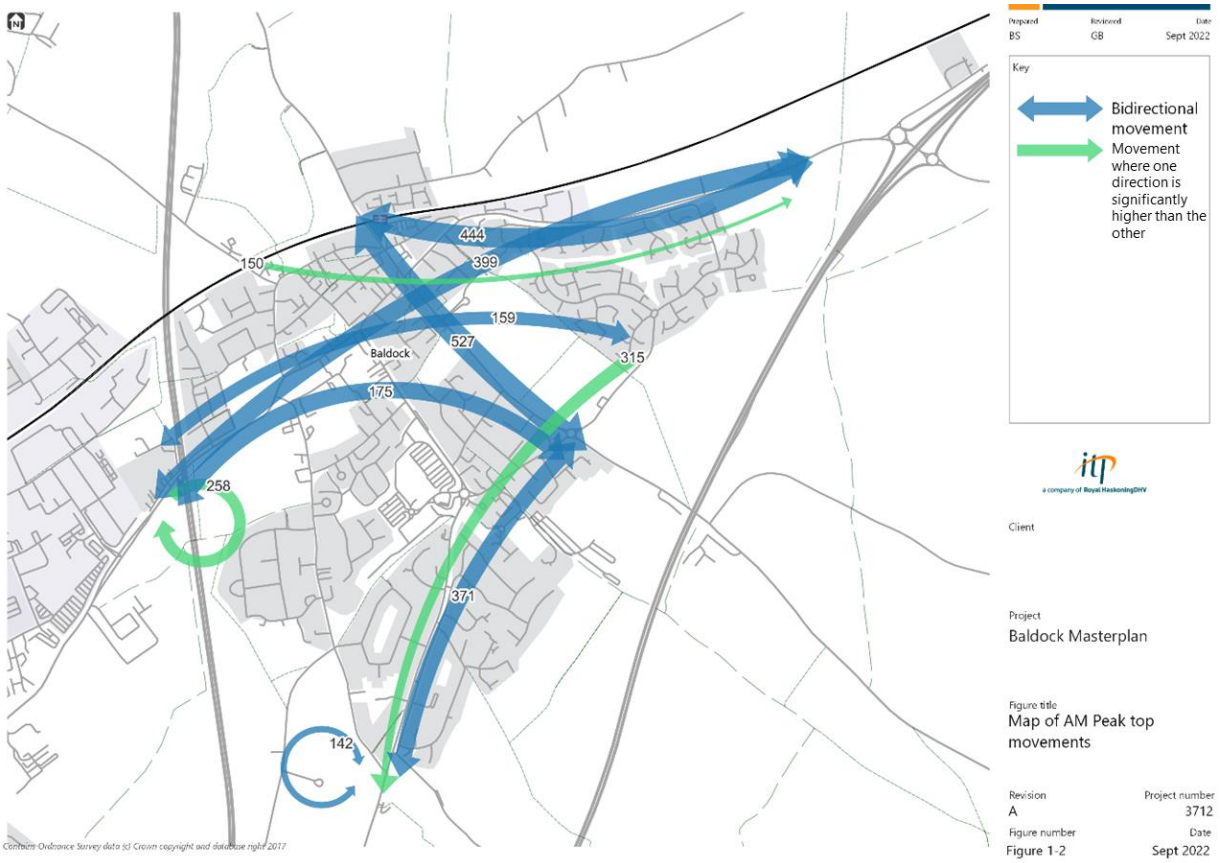
- 286 trips between Letchworth Road (3) and Clothall Road (9) – 5% of AM trips
- 258 trips between Letchworth Road (3) and Letchworth Road (3) – 4% of AM trips
- 159 trips between Letchworth Road (3) and Wallington Road (12) – 3% of AM trips
- 142 trips between London Road (10) and London Road (10) – 2% of AM trips

4.27 The green arrows represent movements where more than two thirds of trips are in one direction for a singular movement and are as follows:

- 315 trips between Wallington Road (12) and London Road (10) – 5% of AM trips
- 150 trips between Norton Road (4) and Royston Road (6) – 2% of AM trips

4.28 The top five trips represent 34% of total movements and the top ten trips represent 50% of total movements.

Figure 4-10: Total AM weekday movements



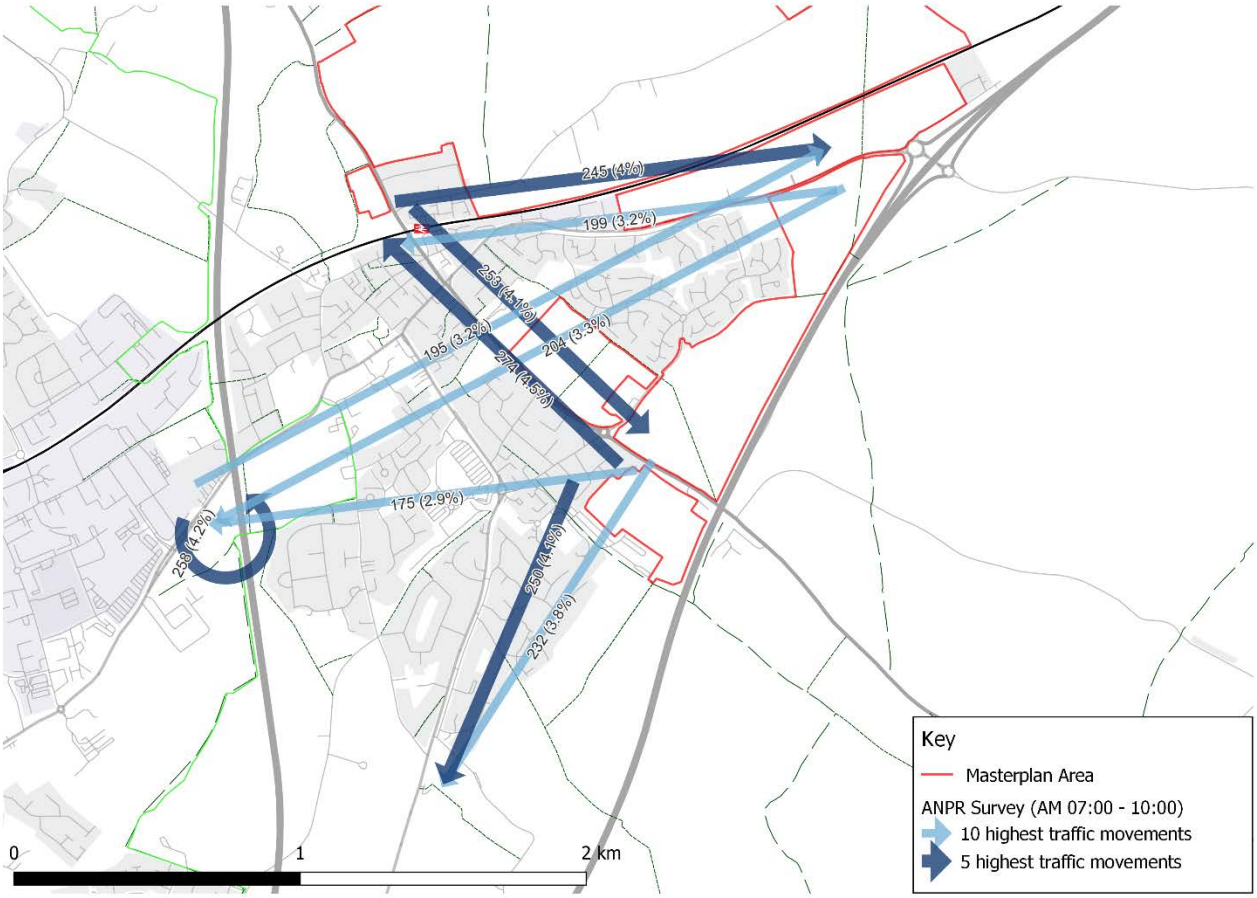
AM Peak: Uni-Directional

4.29 Figure 4-11 breaks the AM peak period traffic flows down by direction. The top 10 movements are shown, along with the total vehicles recorded on that movement and the proportion of total movements this represents.

4.30 The 'top five' one-way movements are (dark blue arrows in diagram):

- 274 trips travelling from Clothall Road (9) to North Road (1) – 5% of AM trips
- 258 trips travelling from and to Letchworth Road (3) – 4% of AM trips
- 253 trips travelling from North Road (1) to Clothall Road (9) – 4% of AM trips
- 250 trips travelling from Wallington Road (12) to London Road (10) – 4% of AM trips
- 245 trips travelling from North Road (1) to Royston Road (6) – 4% of AM trips

Figure 4-11: Total AM weekday movements (by direction)



Weekday PM peak Movements

PM Peak: Two-way

4.31 Figure 4-12 below shows the weekday PM (16:00-19:00) peak movements – all motorised vehicles. As above, the movement have been split, reflecting any tidal characteristics. The blue arrows represent movements with equal directional flow and are as follows:

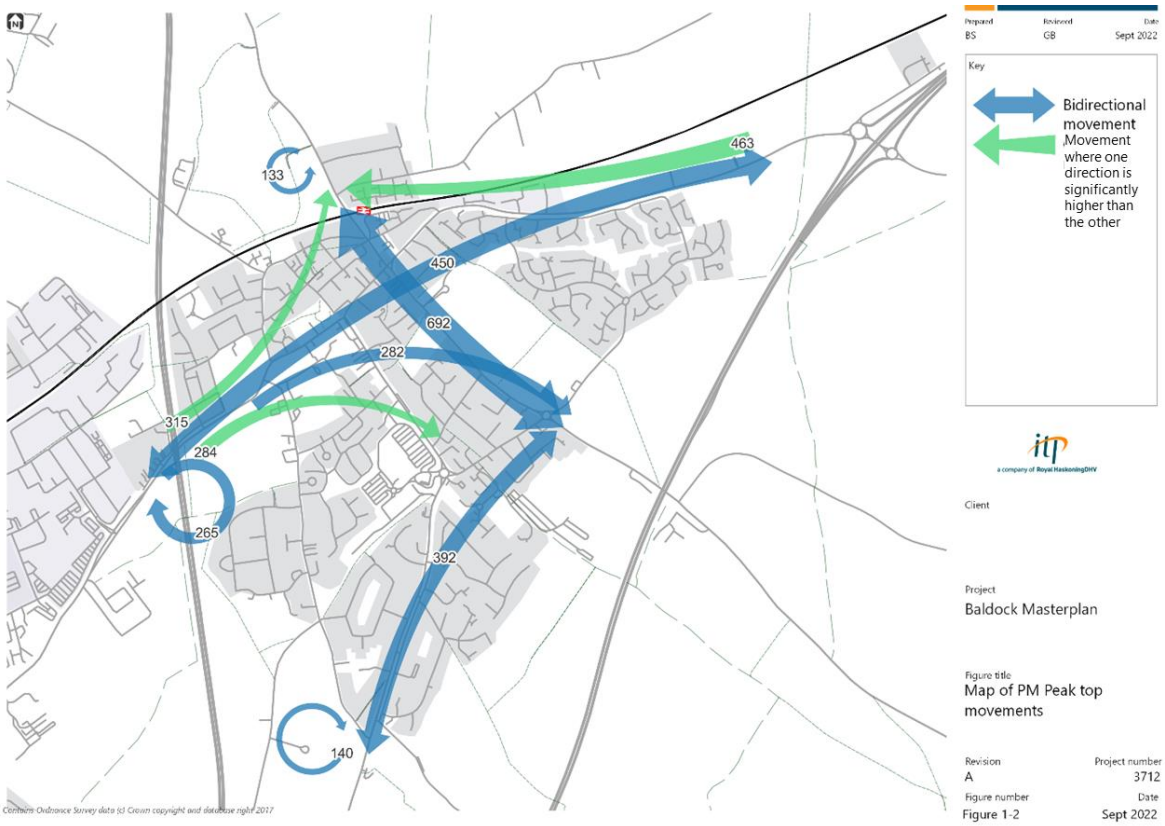
- 692 trips between North Road (1) and Clothall Road (9) – 10% of PM trips
- 450 trips between Letchworth Road (3) and Royston Road (6) – 7% of PM trips
- 392 trips between Clothall Road (9) and London Road (10) – 6% of PM trips
- 282 trips between Letchworth Road (3) and Clothall Road (9) – 4% of PM trips
- 265 trips between Letchworth Road (3) and Letchworth Road (3) – 4% of PM trips
- 140 trips between London Road (10) and London Road (10) – 2% of PM trips
- 133 trips between North Road (1) and North Road (1) – 2% of PM trips

4.32 The green arrows represent movements where more than two thirds of trips are in one direction for a singular movement and are as follows:

- 463 trips between Royston Road (6) and NorthRoad (1) - 7% of PM trips
- 315 trips between Letchworth Road (3) and North Road (1) – 5% of PM trips
- 284 trips between Letchworth Road (3) and High Street (11) – 4% of PM trips

4.33 The top five trips represent 34% of total movements and the top ten trips represent 51% of total movements.

Figure 4-12: Total PM weekday movements



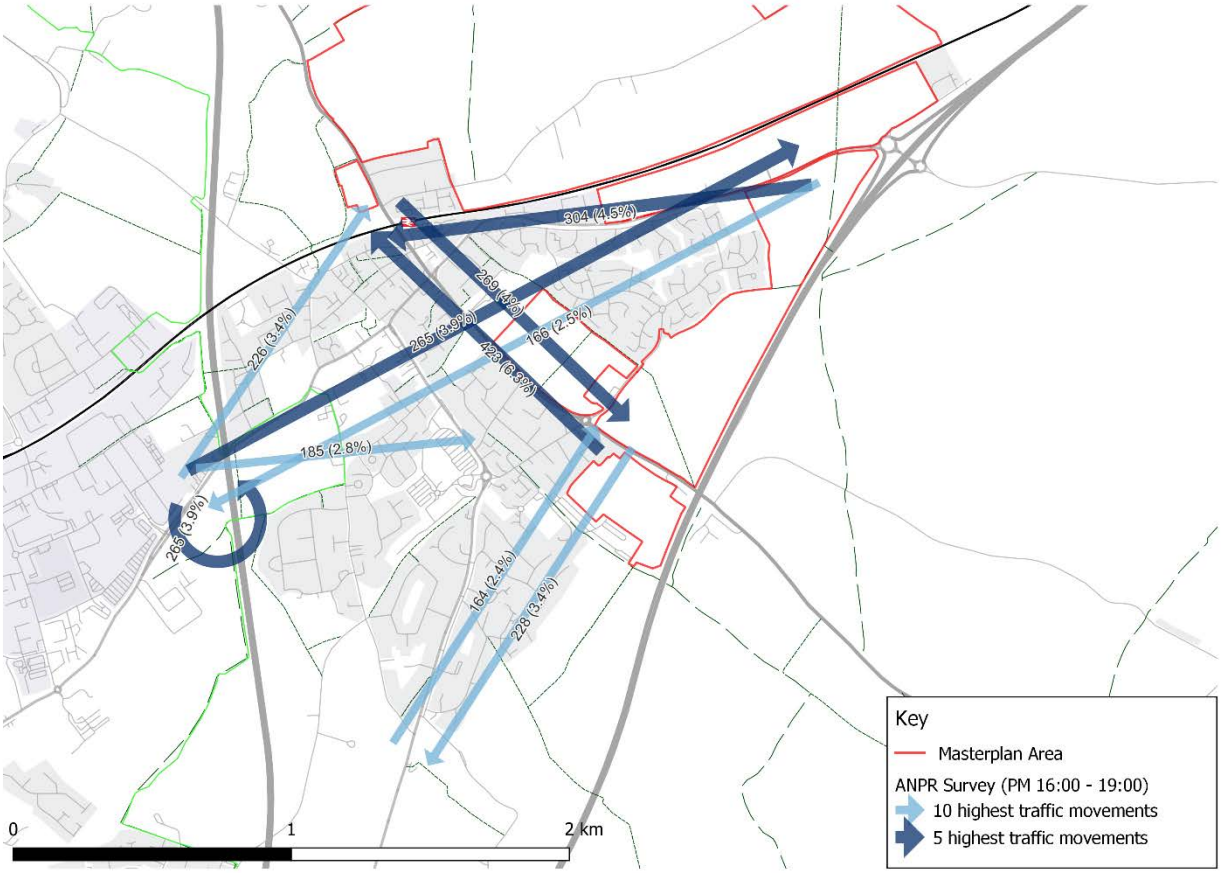
PM Peak: Uni-Directional

4.34 Figure 4-13 breaks the PM peak traffic flows down by direction. The top 10 movements are shown, along with the total vehicles recorded on that movement and the proportion of total movements this represents.

4.35 The 'top five' one-way movements are (dark blue arrows in diagram):

- 423 trips travelling from Clothall Road (9) to North Road (1) – 6% of PM trips
- 304 trips travelling from Royston Road (6) to North Road (1) – 5% of PM trips
- 269 trips travelling from North Road (1) to Clothall Road (9) – 4% of PM trips
- 265 trips travelling from and to Letchworth Road (3) – 4% of PM trips
- 265 trips travelling from Letchworth Road (3) to Royston Road (6) – 4% of PM trips

Figure 4-13: Total PM weekday movements (by direction)



4.36 Similar information is provided for the weekend survey and a HGV breakdown is provided in Appendix A.

Destinations within the cordon

4.37 An analysis has been undertaken of movement patterns within the cordon with a particular focus on identifying the main destinations people travel to within the cordon, and where from. The internal cameras are locations 2, 5, 7, 8, 11 and 12 in Figure 4-7. Further detail around the results of this survey and analysis can be found in Appendix A.

4.38 Movements ending at internal cameras represent 1,074 trips in the AM peak, which is 18% of all moments within the ANPR cordon. In the PM peak this figure is 1,261, which is 19% of all movements.

4.39 In both the AM and PM peaks the most popular destination within the cordon are to camera 11, which is on the High Street towards the junction with Tesco. In the AM this represents 5% of all trips and 30% of all internal trips, with the corresponding figures being 7% and 38% in the PM peak. These are likely to be trips made to Tesco predominately, as well as to the High Street. In both the AM and PM peak the most popular origin for these trips is from Letchworth Road (26% and 38% respectively).

4.40 In the AM peak the next most popular destination is camera 12 (South Road), representing 26% of internal trips and 4% of all trips. It should be noted that trips 'ending' at camera 12 could be accessing a range of commercial and residential destinations including the areas around London Road, including Tesco, Clothall Common and Clothall Road. The most popular origin for these trips is London Road (24%), followed by South Road itself (18%), Clothall Road (16%) and Letchworth Road (16%). The high proportion of trips only passing the South Road camera suggest a number of very local trips being made by car.

4.41 In the AM peak another popular destination is camera 8 (High Street north), representing 22% of internal trips and 4% of all trips. The most popular origin for these trips is Letchworth Road (19%), followed by London Road (12%), Norton Road (11%) and North Road (11%).

4.42 In the PM peak the next most popular destination after the High Street (Tesco end) is camera 8 (High Street north), representing 24% of internal trips and 5% of all trips. The most popular origin for these trips is Letchworth Road (28%), followed by London Road (18%), Norton Road (11%) and High Street (Tesco End) (10%). The proportion of trips only passing a High Street camera suggest a number of very local trips being made by car.

4.43 In the PM peak another popular destination is camera 12 (South Road), representing 20% of internal trips and 4% of all trips. As above, it should be noted that trips 'ending' at camera 12 could be accessing a range of commercial and residential destinations.

The most popular origin for these trips is London Road (25%), followed by Clothall Road (23%) and Letchworth Road (21%).

HGV Movements

4.44 The top five weekday AM (07:00-10:00) peak movements absolute volumes of all Heavy Goods Vehicles>3.5T were recorded between:

- North Road (1) and Clothall Road (9) – with 29 trips in the AM peak
- North Road (1) and Royston Road (6) – with 22 trips in the AM peak
- Letchworth Road (3) and Royston Road (6) – with 20 trips in the AM peak
- Clothall Road (9) and London Road (10) – with 19 trips in the AM peak
- Letchworth Road (3) and North Road (1) – with 17 trips in the AM peak

4.45 The top five trips represent 45% of total movements and the top ten trips represent 66% of total movements. The movements largely reflect the same pattern of all vehicles. HGV movements represent 4% of all movements in the AM peak, although for many movements HGVs represent a higher proportion of total traffic.

- Clothall Road (9) to South Road (12) – HGVs account for 16% of total trips, likely representing HGV movements to Tesco
- North Road (1) to Royston Road (west) (6) – HGV movements account for 14% of total trips likely represents HGV movements to commercial premises at the western end of the road, with HGVs making up 27% of movements in the converse direction (from Royston Road (west) to North Road)
- London Road (10) to Wallington Road (12) – HGV movements account for 14% of total trips

4.46 In the absence of cycle infrastructure proportions of HGV traffic greater than 5% will create a hostile environment for cyclists[12]. Proportions of HGV traffic above this level are seen in many locations, with particular concern where traffic volumes are also high for example between Clothall Road and North Road, Royston Road to North Road, Royston Road to Letchworth Road and between Letchworth Road and North Road (both directions).

4.47 The HGV movements in the PM peak are substantially different to the AM peak, and to the general traffic movements recorded. Overall volumes are substantially lower with only one notable movement being recorded, being the movement between Clothall Road and North Road. Trips shorter than 30 minutes represent 90% of all movements,

[12] Based on guidance provided in LTN 1/20

suggesting most of the HGV movement are through movements. The data suggests that there is more servicing activity taking place within the town in the AM peak, as well as movement to surrounding areas.

Through traffic and pressure points

4.48 The survey data was also able to establish the level of through traffic and points in the network where congestion was particularly high.

4.49 The junctions which were chosen to be surveyed by the cameras and considered points of interest are set out below along with key findings from the analysis (the full set of information is available in Appendix A with a breakdown of peak turning movements and queue length results). As shown in Figure 4-14 the key congestion points are located along the B656, travelling through the centre of Baldock, where the queue lengths are greatest.

- **Station Road/Clothall Road junction (Site 24) –** Located in the centre of Baldock and one of the most congested junctions. The data shows that the longest queue on average occurred on the right-hand lane connecting Royston Road to Station Road. This is the movement most likely to be affected by both the proposed northern development and link road.

  Additional active travel analysis was also undertaken at this junction, showing that the main active movements were between the B656 (S) and Station Road linking to the rail station and high street.
- **Hitchin Street / Whitehorse Street / High Street junction (Site 4) –** This junction also had large peak queue lengths. The high proportion (45%) of movement between Hitchin Street and High Street suggests traffic is seeking to avoid congestion at the Whitehorse Street junction, as well as avoiding congestion at J9 of the A1(M) when accessing Letchworth. The range of services including the Tesco is also likely drawing traffic along the High Street.
- **Letchworth Road / Weston Way junction (Site 22)** – This signal-controlled junction is in west Baldock. Most of the traffic (71%) remains on Letchworth Road whilst 18% travels between Letchworth Road (S) and Weston Way.
- **Bygrave Road / North Road junction (Site 9)** – The junction is close to and will be affected by, the proposed northern development site, with Bygrave Road running through the proposed site to Bygrave. The queue lengths identified were not very large and the main movement at the junction was between North Road and Station Road making up 86% of trips.

- **Clothall Road / Wallington Road junction (Site 12)** – This is an important junction to note as this connects the residential area of Clothall Common, and large queue lengths were observed on South Road. However, overall queue lengths at the junction were low suggesting the roundabout flows smoothly.
- **London Road / South Road / High Street junction (Site 19)** – The main flow identified here is between South Road and London Road (21% of total trips) with the Tesco being a key attractor. Overall, the queue lengths are low, despite having over 9,500 total movements, with most lanes having two to three vehicles on average queuing in them. This indicates that traffic on the junction flows well.
- **A1(M) junction 9** – a grade separated interchange between the A1(M) and the A505[13]. In total 25,766 trips were recorded in the peak periods. During the peak hours the highest hourly flows recorded were 4,551 and 4,874 vehicles in the AM[14] and PM[15] peak hours, respectively. This analysis demonstrates that the main movements at the interchange are to and from the A1(M) (SW) to the A505, with movements between the arms of the A505 also significant. In total these movements represent 87% of all movements. The movement from the A505 (SE) to the A1(M) (NE) are relatively low at 3% of the total for trips from A1(M) (NE) to A505 (SE) and 2% from A505 (SE) to A1(M) (NE). This suggests that if a more convenient link were made between the A1(M) and the A505 at J10, more traffic would be attracted along this link. Furthermore, a significant proportion of the movement between the A1(M) (NE) to the A505 (SW) at J10 are currently being made by HGV – a maximum of 25% in the AM peak and 7% in the PM peak.

[13] The survey captures movements between on the A1(M) slip roads and the A505 only, it does not capture through movements on the main A1(M) running lanes. Arm A includes the A1(M) slips to the north east, Arm B the A505 (SE), Arm C the A1(M) slips to the south west and Arm D the A505 (NW).
[14] 07:45 and 08:45
[15] 17:00 and 18:00

Figure 4-14: Average queue lengths across the AM and PM peaks



4.50 Research suggests that increasing vehicle capacity continues to cause, sometimes significant, induced demand where new vehicle traffic occurs as a result of improvements in the network capacity[16]. Therefore, any strategy to remove through traffic and reduce congestion should manage vehicle access at key junctions to ensure that spare capacity is not filled by latent demand. This should be done through sustainable mode interventions which encourage active travel and promote public transport, rather than increasing car capacity.

4.51 Using a desktop review of likely journey times, using google data and survey information[17], high levels of through traffic in Baldock have been estimated, representing over 50% of total AM and PM peak trips. This shows that a significant amount of vehicles using the roads within Baldock are not using them to access Baldock's services and facilities but instead using them to reach other destinations instead, increasing congestion and worsening conditions for active travel and public transport.

[16] Latest evidence on induced travel demand: an evidence review (publishing.service.gov.uk)
[17] Using Google Maps to establish the maximum 'worst case scenario' journey time in the AM and PM peaks between the perimeter cameras. Following this, when calculating the journey time between the cameras from the ANPR survey method, trips with a duration that exceeded the maximum value established from Google Maps were discarded, as it could be assumed that these trips were stopping in the town. The result of the filtering process gave the number of through trips.

Research on through traffic in comparable towns

4.52 The ANPR cordon data shows 51% of trips within Baldock are through traffic. Directly comparable data for other towns is not easily available. However, Table 4-1 highlights some examples of similar sized towns and data on through trips and HGVs.

Table 4-1: Table of traffic survey data from comparable towns/areas

Town	Data on through trips or HGV movements
Royal Tunbridge Wells A26 and A264	**3%** of all traffic classed as **HGV** Of this **HGV traffic 28%** were identified as **through traffic** Proportion of motorised vehicle **through traffic 14%** (through traffic defined as traffic then entered and exited the cordon within 40 minutes) **AM peak** higher proportion of **HGV traffic** for all junctions assessed **AM peak** slightly higher for all **motorised vehicles** for all junctions assessed
Hertford A414 Hertfordshire Count Council	**20%** of all A414 corridor movements passing the ANPR cordon classed as **'through trips'**
Swaffham A47 and A1065	**43%** of the total observed "inbound trips" are **through traffic** Of these through trips **1%** to **4%** were **HGV trips** Maximum amount of **HGVs** on the network is **15%**. Around **7% - 15%** in the **AM peak** and **4% - 8%** in the **PM peak**
Esher Traffic Survey	Average of **84% through trips** 'taking less than 15 minutes to travel through cordon'. Much smaller cordon area. In the larger cordon area **through trips** were between **45% - 55%** depending on direction of travel

4.53 The through trip percentage of 51% for Baldock puts it above most of the examples highlighted. It is also worth noting that the surveys in these locations were undertaken generally because there was a recognition that through traffic was causing negative impacts on the locations. Therefore, it is reasonable to conclude that through traffic levels would be higher than average in the case studies reviewed.

Origins and destinations of through trips

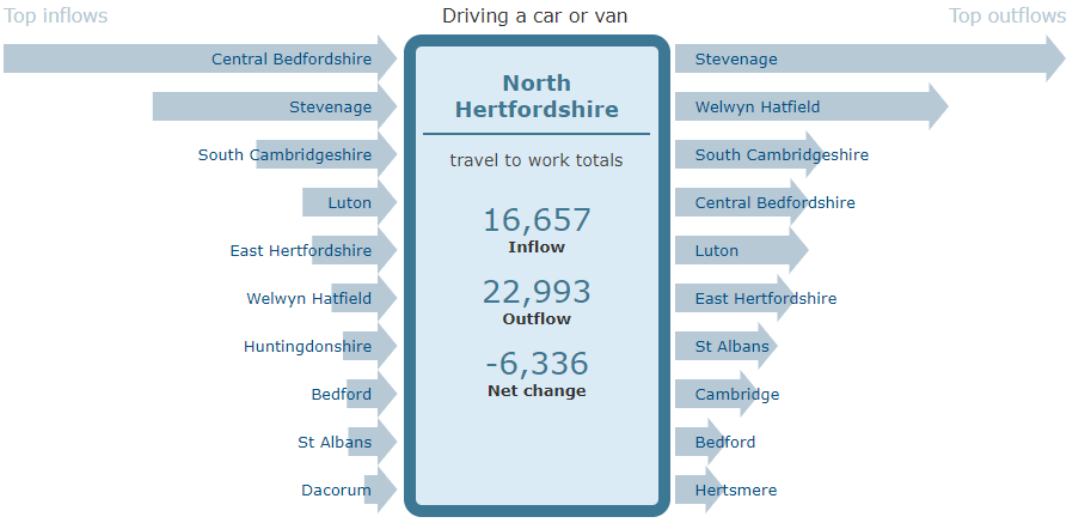
4.54 The ANPR survey only shows the points of entry and exit to the cordon and does not provide any data for the ultimate origins or destinations of the through traffic

recorded. However, a number of inferences can be made when studying the Strategic Road Network (SRN) in the region.

4.55 For locations to the northwest of the town (Biggleswade, Bedford) and potentially further west such as Milton Keynes, trips to the southeast such as to Essex and Stansted are indirectly made via the SRN. Therefore, the connection through Baldock via the A507 is likely to be shorter. Local through trips are also likely to be a factor, for example the villages to the southeast of the town are likely to use the A507 to make trips to access the SRN and locations to the northwest. Many trips are also likely to be made from Letchworth through Baldock to access the SRN, either via North Road (to the A1(M)) or Royston Road (to the A505).

4.56 The Census data (2011) provides some corroboration of the regional movements described above, with large flows into and out of North Hertfordshire from Central Bedfordshire, as well as East Hertfordshire.

Figure 4-15: Census 2011 flow diagram for commuting movements (North Hertfordshire)



Rail station

4.57 Baldock Train Station had around 650,000 yearly passenger entry and exits over 2019/2020, equivalent to around 1,500 per day. Total entries and exists dropped dramatically over the course of the pandemic to 154,000 in 2020/2021. More recent figures, unaffected by lockdowns, are not currently available.

4.58 The total number of pick-ups and drop-offs, taken on a particular weekday, appeared relatively low (25 in the AM peak and 37 in the PM peak), suggesting a significant proportion of station users walk to the station or are dropped off elsewhere. There are

also a greater number of weekend peak pick-ups and drop-offs per hour than in the weekday peak, indicating a significant amount of leisure trips taking place to and from the station. More detail on these numbers and the other rail station survey analysis can be found within Appendix A.

4.59 Regarding car parking accumulation, the survey data indicated that the weekday peak occupancy is 61% (occurring at 4pm), with an average occupancy of 33% in the AM peak and 48% in the PM peak, suggesting that the car park fills up during the day rather than being filled with vehicles early. Over the weekend peak, the occupancy rate is lower at 20%, an interesting comparison with the higher number of weekend peak pick-ups and drop-offs than in the weekday. This suggests that day visitors to Baldock at the weekend are perhaps getting taxis to the station but not parking in it, or people are travelling from Baldock to other destinations and getting friends or family to drop them off.

4.60 Cycle parking survey data shows a greater number of cycles during the weekdays than the weekend, although the total numbers are low given the overall use of the station. This also suggests that most people parking their bikes are commuters, as there are more cycle arrivals in the weekday AM peak and more departures in the PM peak.

4.61 The low usage of car and cycle parking suggest that the rail station serves a local catchment, and this should be strengthened and enhanced, through which a focus should be on prioritising accessibility for public transport and active modes. This is especially pertinent given the congestion issues at the junctions surrounding the station, particularly the Station Road/Clothall Road junction.

Data Summary

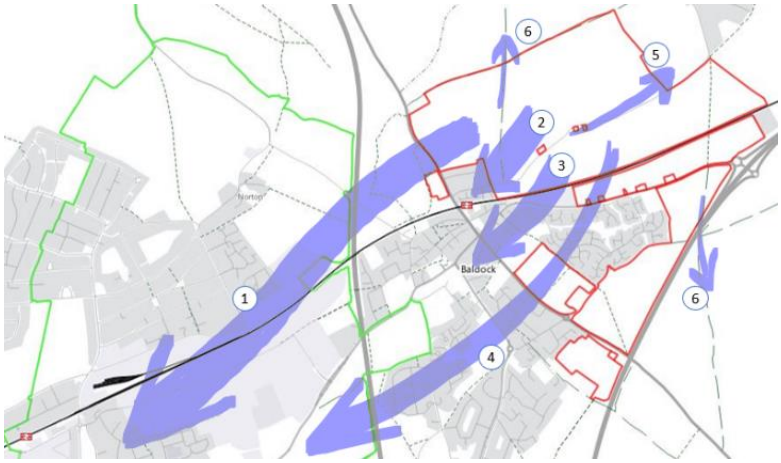
Key Movements

4.62 Overall the research presented above suggests that a significant proportion of trips are relatively local, with 23% less than 5km and 55% less than 10km. Shorter trips have high potential to be effectively facilitated by sustainable modes, particularly where they are concentrated to a few key movements. Reviewing these existing key movement patterns can help to identify the most likely destinations residents of the site, as they seek to access the same work / education / healthcare / leisure opportunities.

4.63 Data analysis of existing destination movements from Baldock has incorporated a number of datasets and qualitatively identified six local key movements (shown in Figure 4-16), with larger volumes indicated with the wider arrows, that could originate from the site. These will form the focus of an active and sustainable travel strategy, and include:

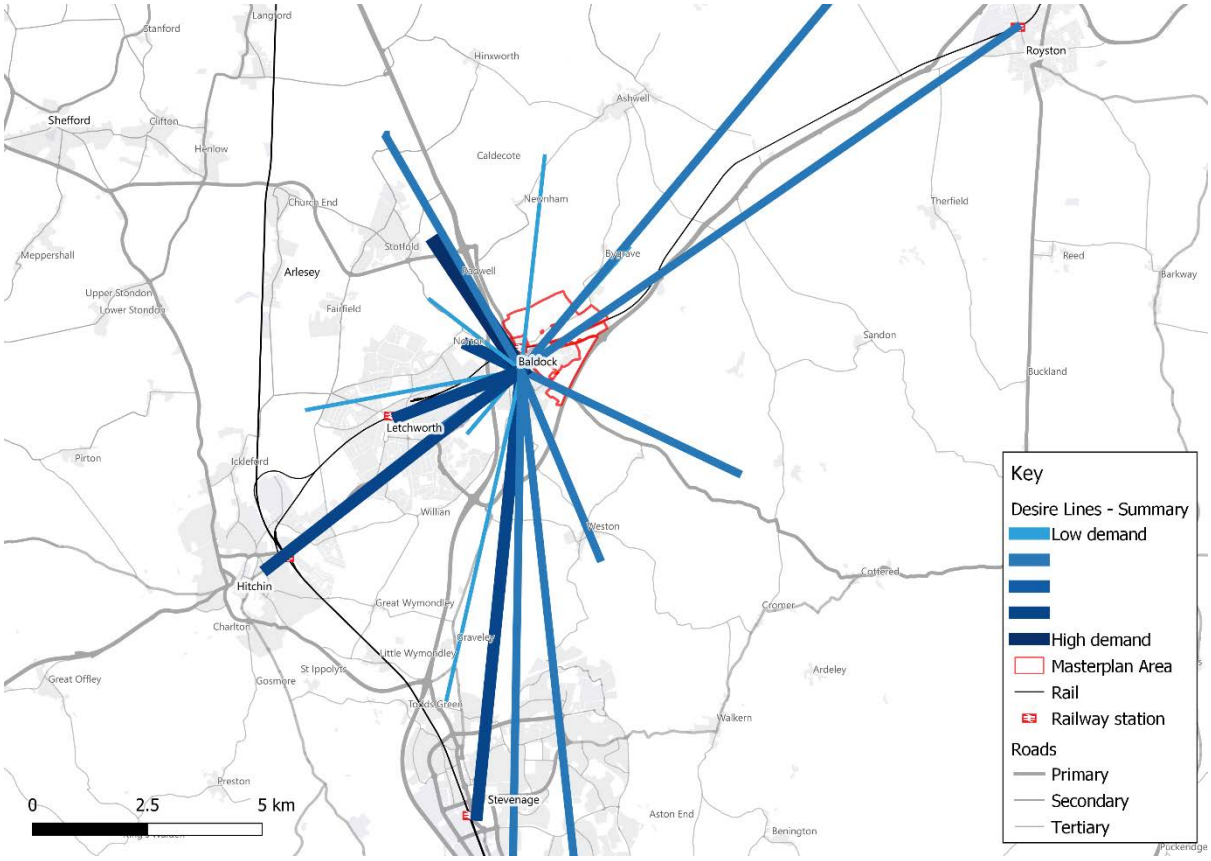
1) Letchworth town centre via business park
2) To station
3) To Baldock
4) To Hitchin and Stevenage
5) To Bygrave
6) Connecting to ROWs

Figure 4-16: Key local movements



4.64 Figure 4-17: also includes wider distance key movements from / to Baldock itself. These destinations are also accessible by existing public transport connections and highlight the importance of high-quality provision and access to key transport hubs. Key locations include wider region trips to Cambridge and London.

Figure 4-17: Key Movements Summary



Key findings

4.65 From the extensive primary data collection exercise as well as review of existing data sources summarised above (and more fully in Appendix A), several key findings have been identified:

- A significant proportion of trips are relatively local (23% less than 5km, 55% less than 10km)
- The main area of pedestrian activity is around the High Street and around Clothall Common / Wallington Road / South Road, with more limited numbers travelling in the area north of the railway station
- Cyclists use some of the more direct radial routes, including Bygrave Lane and the B656 as well as the A507 to the north and existing NCN route parallel to the A1
- Local bus services have low frequencies, and is reflected in the existing bus journey to work mode share data, particularly to the east of Baldock
- Rail provides a method of travel to work for 7-11% of Baldock's residents

- The low car and cycle parking accumulation suggests that the rail station serves a local catchment and that this should be strengthened and enhanced
- The car is the main mode of travel for regional trips between Baldock, Hitchin and Stevenage
- There are high levels of through movements in the town – around 50% of trips are passing through the town without stopping
- There are a number of very local trips being made by car
- Wider east-west and north-south movements will remain unchanged with a link road through the northern site and therefore a response that manages these movements in a different way is required
- 90% of all HGV movements are shorter than 30 minutes, suggesting most are through movements
- Any strategy that removes through traffic should manage vehicle access to ensure that capacity is not filled by latent demand

5. Accessibility Audit

5.1 Creating sustainable places is not just about being able to access facilities in a reasonable amount of time; route quality is also important to making the mode an attractive prospect for users, supporting safety and confidence along the route.

5.2 The datasets reviewed above have informed understanding of existing travel patterns and key destinations around the masterplan area as well as wider trips to and from the town. Consideration has been given to the catchment of reasonable walking and cycling distance of the proposed development and locations of key facilities in these areas, along with likely routes taken to these places. This has formed the basis for the scope of streets to audit for their walking and cycling quality as well as characteristics to promote better health outcomes, using industry established frameworks.

Methodology

5.3 Three types of audit were carried out, covering walking, cycling and Healthy Streets considerations according to the North Herts District Council Masterplanning Guidance on Transport (section 10.6 on auditing existing links) and in line with Government guidance. These comprised:

- **Healthy Streets**: Design Check UK (Healthy Streets)
- **Walking**: The DfT's Walking Route Audit Tool (WRAT)
- **Cycling**: LTN 1/20 Cycling Level of Service Tool (CLoS). Junctions were assessed using the LTN 1/20 Junction Assessment Tool (JAT)

5.4 These considered several audit specific metrics, which combined to score each link against a number of indicators. These included criteria related to route attractiveness, comfort, directness and safety.

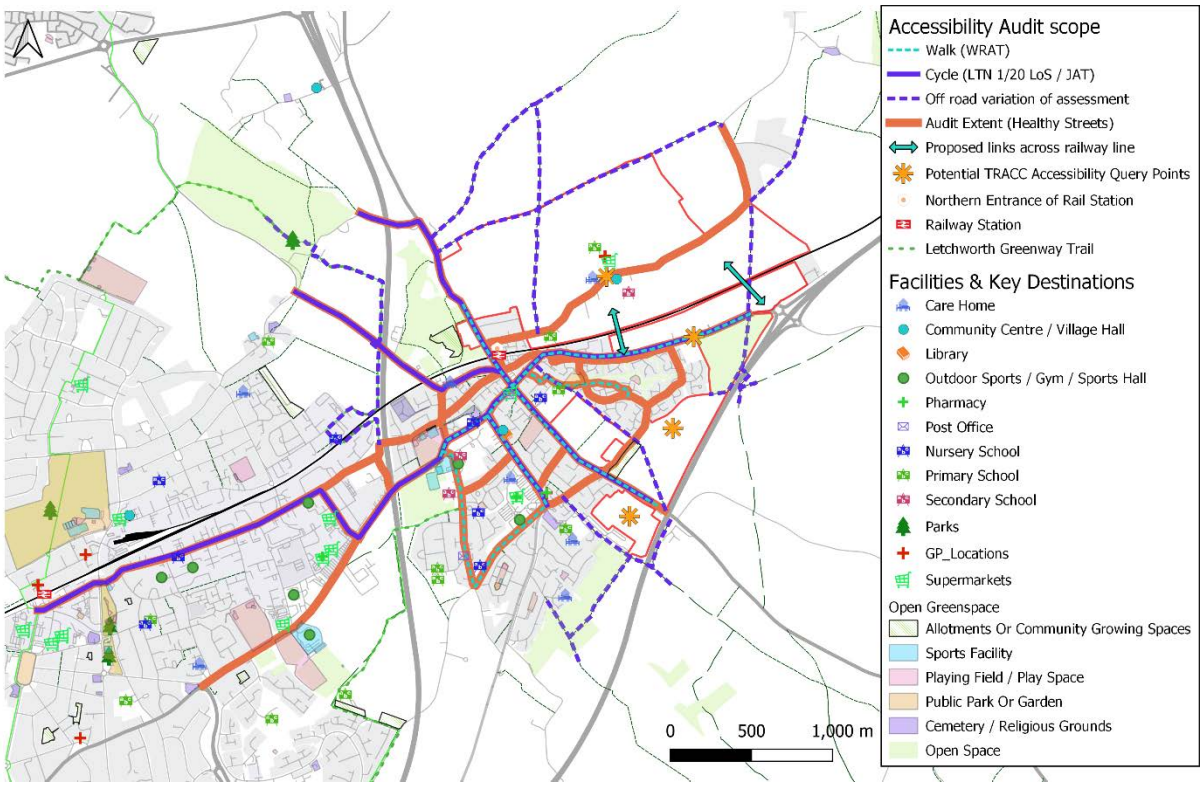
Scope

5.5 The scope of the streets for inclusion were determined through prior desktop research and agreement with stakeholders, with some links having multiple audits. The spatial scope of the audits is shown in Figure 5-1. Streets were spilt into multiple links where the character of the street changed notably and/or where a junction marked the end of a street. All junctions were assessed, unless they were access roads, and were allocated to a link, usually the major arm, to avoid double counting. For questions that could not be determined on-site, such as cycling network density or gradient, desktop research was undertaken.

5.6 Some of the links within the scope are non-vehicular routes and it was considered that some of the metrics on the standard frameworks were not appropriate for application to these off-road routes. An amended methodology was applied to audit these links.

5.7 The full auditing criteria and results can be found in the full Accessibility Audit Report in Appendix B.

Figure 5-1: Accessibility Audit Scope



Key Findings – Healthy Streets

5.8 The Healthy Streets Design Check UK contains ten indicators, measured via a combination of 19 metrics (shown in Figure 5-2), for assessing key elements of the on-street experience to assist designers and engineers to prioritise and balance social, economic and environmental sustainability improvements in an area. Each metric is scored against a four-point scale (0-3), as determined by the Design Check spreadsheet. These feed into scores for each indicator and overall score, measured as a percentage.

5.9 A Healthy Streets audit should be used on streets where people are expected to walk and cycle, measuring how safe, welcoming, and comfortable the design is currently, and providing a starting point for consideration of design changes to improve the experience for these users.

5.10 The ten indicators are as follows:

1) Everyone feels welcome
2) Easy to cross
3) Shade and shelter
4) Places to stop and rest
5) Not too noisy
6) People choose to walk and cycle
7) People feel safe
8) Things to see and do
9) People feel relaxed
10) Clean air

5.11 An overall score out of 100 is generated by averaging the scores from the ten indicators noted above. This method places greater emphasis on some metrics which are included across multiple indicators, such as the motorised vehicle speed metric which is included in seven of the ten indicators, whereas quality of the footway surface only forms part of three of the indicators. Information on how the score is generated can be found on the Healthy Streets website.

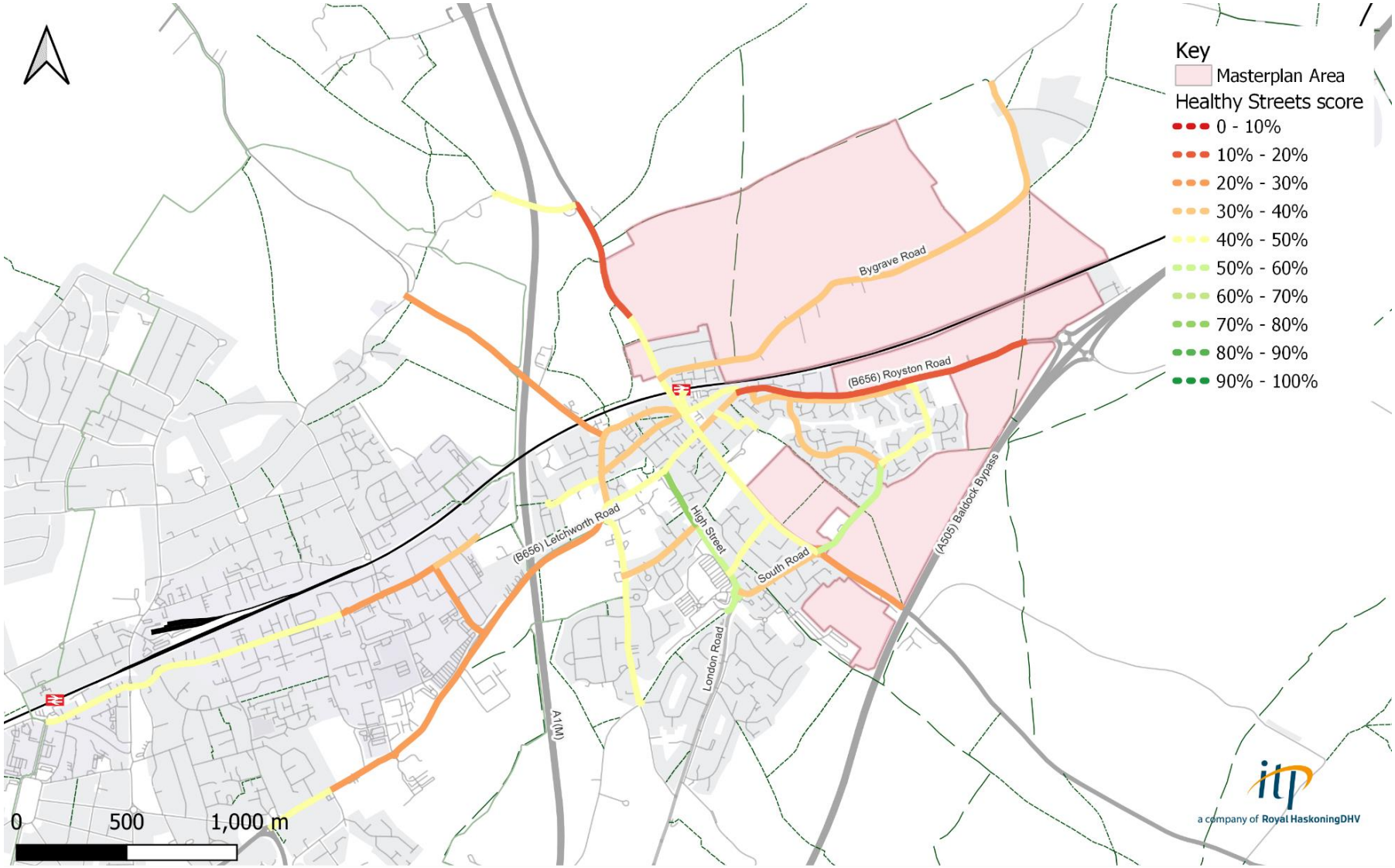
Figure 5-2: Healthy Streets Indicators and Metrics

	Metric	Everyone feels welcome	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk and cycle	People feel safe	Things to see and do	People feel relaxed	Clean air
1	Motorised vehicle speed	●	●			●	●	●		●	●
2	Volume of motorised traffic	●	●			●	●	●		●	●
3	Mix of vehicles	●	●			●	●	●		●	●
4	Cycle safety at junctions	●					●	●		●	
5	Ease of crossing side roads	●	●				●	●		●	
6	Ease of crossing between junctions	●	●				●	●		●	
7	Priority of crossing at junctions	●	●				●	●		●	
8	Navigation of crossings for people with visual impairments	●	●				●	●		●	
9	Quality of the footway surface	●					●			●	
10	Space for walking	●			●		●	●		●	
11	Quality of the carriageway surface	●				●	●	●		●	
12	Space for cycling	●			●		●	●		●	
13	Public seating	●			●		●		●	●	
14	Cycle parking	●			●		●			●	
15	Trees	●		●			●		●	●	
16	Green infrastructure	●					●		●	●	
17	Lighting	●					●	●		●	
18	Reducing convenience of driving short journeys	●	●			●	●	●		●	●
19	Bus stops	●		●	●		●			●	

5.12 For the 42 links audited in Baldock using the Healthy Streets Design Check, the average score was 40%, with a range of 18% to 77%, indicating several metrics where potential improvements could be made to better the experience of all those who are walking or wheeling. The two indicators that scored lowest across the audited links were 'Place to stop and rest' and 'Things to see and do', with an average of below 30%. The function of each street should be considered when looking at potential improvement opportunities, with some streets focusing more on movement than establishing a sense of place. Eighteen of the 42 links had bus stops on them, while many stops provided a high standard of infrastructure provision, some specific locations were identified where provision was more limited.

5.13 A visual summary of the audit results in shown in Figure 5-3, with the full analysis provided in Appendix B.

Figure 5-3: Healthy Streets audit results



Key Results – Walking Route Audit Tool

5.14 Thirty-three links were audited using the Walking Route Audit Tool (WRAT). This tool was developed as part of the Welsh Government Active Travel Design Guidance to assist Local Authorities in auditing walking routes, and is now widely used by the DfT. This follows a methodology targeting the five core design outcomes for pedestrian infrastructure, which are similar to those for cycling and comprise:

- **Attractiveness** – maintenance, fear of crime, traffic noise and pollution and other (including guardrails, bollards, refuse or lighting)
- **Comfort** – condition, width of footways and crossings, parking, gradient and other (including poor drainage, barriers restricting access and temporary obstructions)
- **Directness** – provision of route and crossings in relation to desire lines, gaps in traffic or impact of controlled crossings and other (including routes to/from bus stops, confusing layouts and steps)
- **Safety** – traffic volumes, speeds and visibility
- **Coherence** – provision of dropped kerbs and tactile paving

5.15 The criteria were reviewed on a three-point scale:

- 0 for poor provision
- 1 for provision which is adequate but should be improved if possible
- 2 for good quality provision

5.16 A score of 70% should normally be regarded as a minimum level of provision overall. Further information on the assessment method can be found in Appendix B

5.17 Some links were audited as off-road routes, these included non-vehicular footpaths or bridleways. These were largely undertaken in line with the walking audit set out above, but with some less-applicable questions removed from the assessment framework.

5.18 Metrics that were excluded from the on-road walking assessment:

- 7 - Comfort - Width on staggered crossings / pedestrian islands/refuges
- 14 - Directness - Impact of controlled crossing on journey time
- 15 - Directness - Green man time
- 17 - Safety - Traffic Volume
- 18 - Safety - Traffic Speed

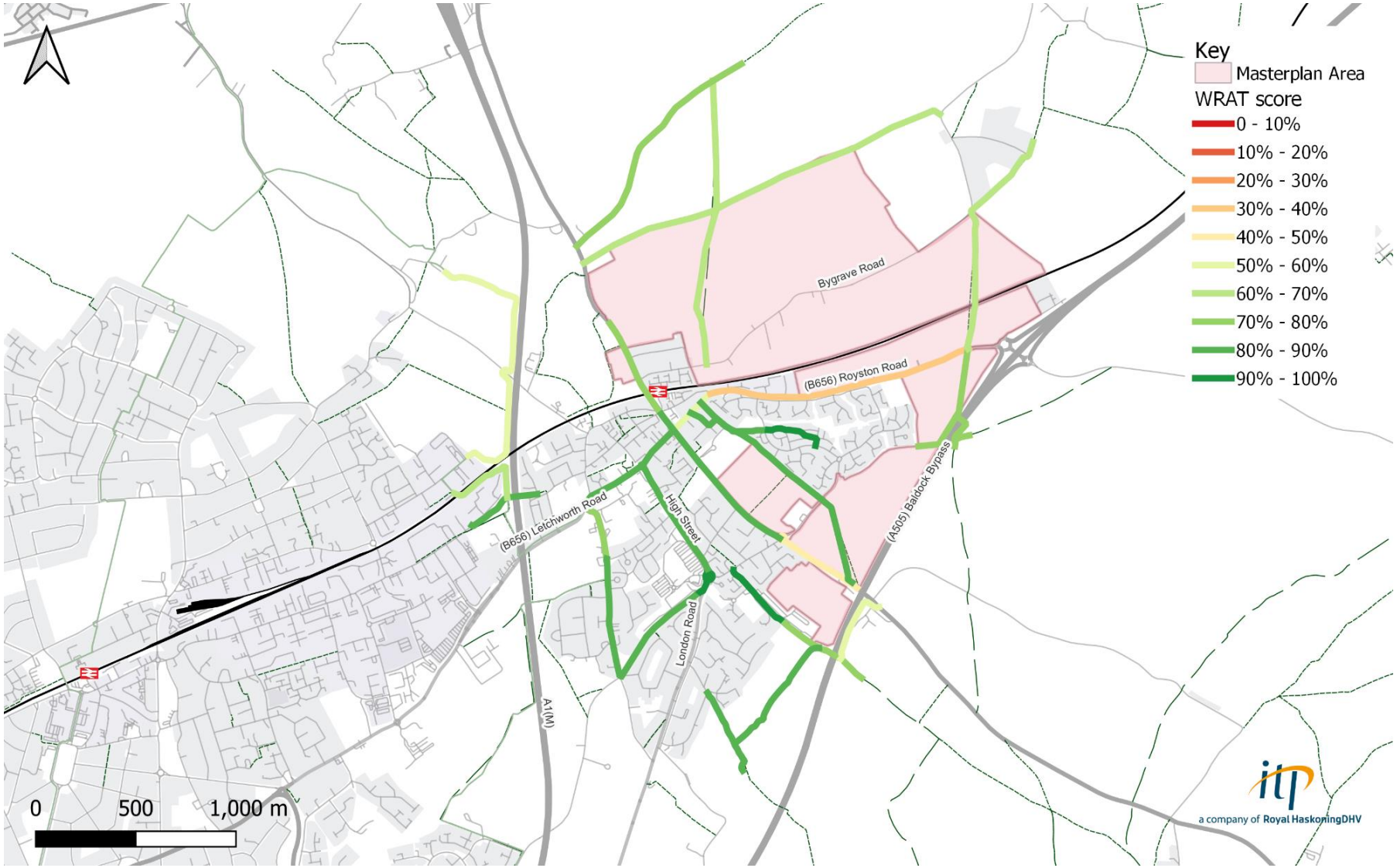
5.19 The results of the off-road assessment are presented alongside the on-road walking audits in Figure 5-4, expressed as a percentage of the maximum potential score, considering the number of metrics counted within this adjusted framework.

5.20 Overall, links scored well, in a range of 40%-98%, with an average of 78%. Coherence, namely dropped kerbs and tactile paving, was the lowest scoring category, with an average of 52%, however this was the only question within this category and so it may be unfairly weighted. Directness and safety were the highest scoring on average (both 88%), although comfort was the metric with the most consistent across all links (range 42%-70%).

5.21 Comfort, particularly width, was a lower scoring category throughout the WRAT, both in terms of width of footways and crossings. This is particularly the case for the weakest link, Royston Road which is discussed in more detail below. A zero score was given when footways were less than 1.5m wide, which over a third (37%) of surveyed links were.

5.22 A visual summary of the audit results in shown in Figure 5-4, with the full analysis provided in Appendix B.

Figure 5-4: WRAT audit results



Key Results – Cycling Level of Service Tool and Junction Assessment Tool

5.23 The Cycling Level of Service Tool (CLoS) and Junction Assessment Tool (JAT), set out within the Cycle Infrastructure Design LTN1/20, offer frameworks to ensure that a scheme conforms to good practice and that it is accessible and safe. They include a simple scoring assessment based on attributes of the five design criteria, which can be used to identify strengths and weaknesses, and therefore what the design needs to address. The CLoS tool includes some factors that are considered to be 'Critical Fails' – results that represent unsafe conditions for cycling which must be addressed (or an alternative route found). Further information is contained within Cycle Infrastructure Design LTN1/20.

5.24 There are five core design principles which represent the essential requirements to achieve more people travelling by cycle or on foot, based on best practice both internationally and across the UK. These design principles form the basis of the audit framework and comprise:

- **Cohesion** – connections, continuity and density of network
- **Directness** – distance, frequency of give ways, delay at junctions and links and gradient
- **Safety** – vehicle speed and volumes, collision risk and severity, junction layout, road marking legibility and kerbside conflict
- **Comfort** – surface type and quality, width and wayfinding
- **Attractiveness** – lighting, isolation, pedestrian impact, street clutter and cycle parking provision

5.25 Baldock scored an average of 57% (with a 33% minimum and 77%) across the 26 links audited. Five of these links had at least one critical fail, within the categories of risk of collision, motor traffic speed and kerbside conflict. The audit scores can be found in Appendix B.

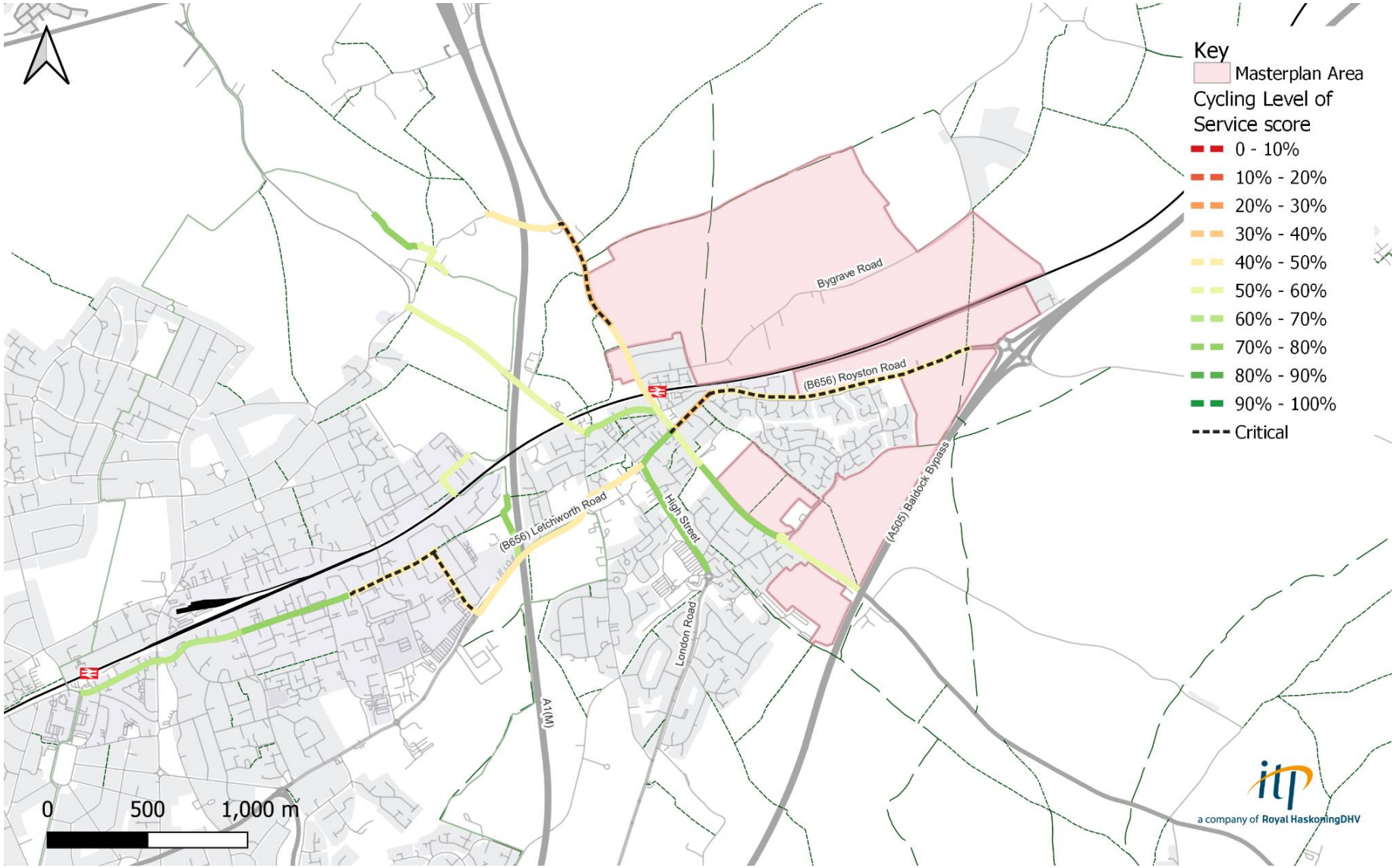
5.26 The audit work suggests that most areas of Baldock could be improved, although road surfaces were of fair quality. Cyclists generally shared the road with vehicles, with a lack of any segregated infrastructure. Aside from cycle parking on the High Street, there was limited dedicated cycle parking provision.

5.27 The JAT, which focused on cycle movements at junctions but does not directly feed into the CLoS, did not result in any scores above a zero (unsafe for cyclists), with only two links surveyed scoring a two (separated traffic streams).

5.28 The weakest category was risk of collision, where all but two links scored a zero, this is due to high traffic volumes with at least 2% being HGVs. This feeds into the general lack of cycle lanes and space for cyclists, with width being a weak category as well.

5.29 A visual summary of the audit results in shown in Figure 5-5, with the full analysis provided in Appendix B.

Figure 5-5: Cycling Level of Service audit results



5.30 A summary of the key findings along the key routes of the A507, B656, High Street and Works Road are provided in the figures below. More detail on these links and other links are provided in Appendix B.

Figure 5-6: A507 key observations



Figure 5-7: B656 key observations

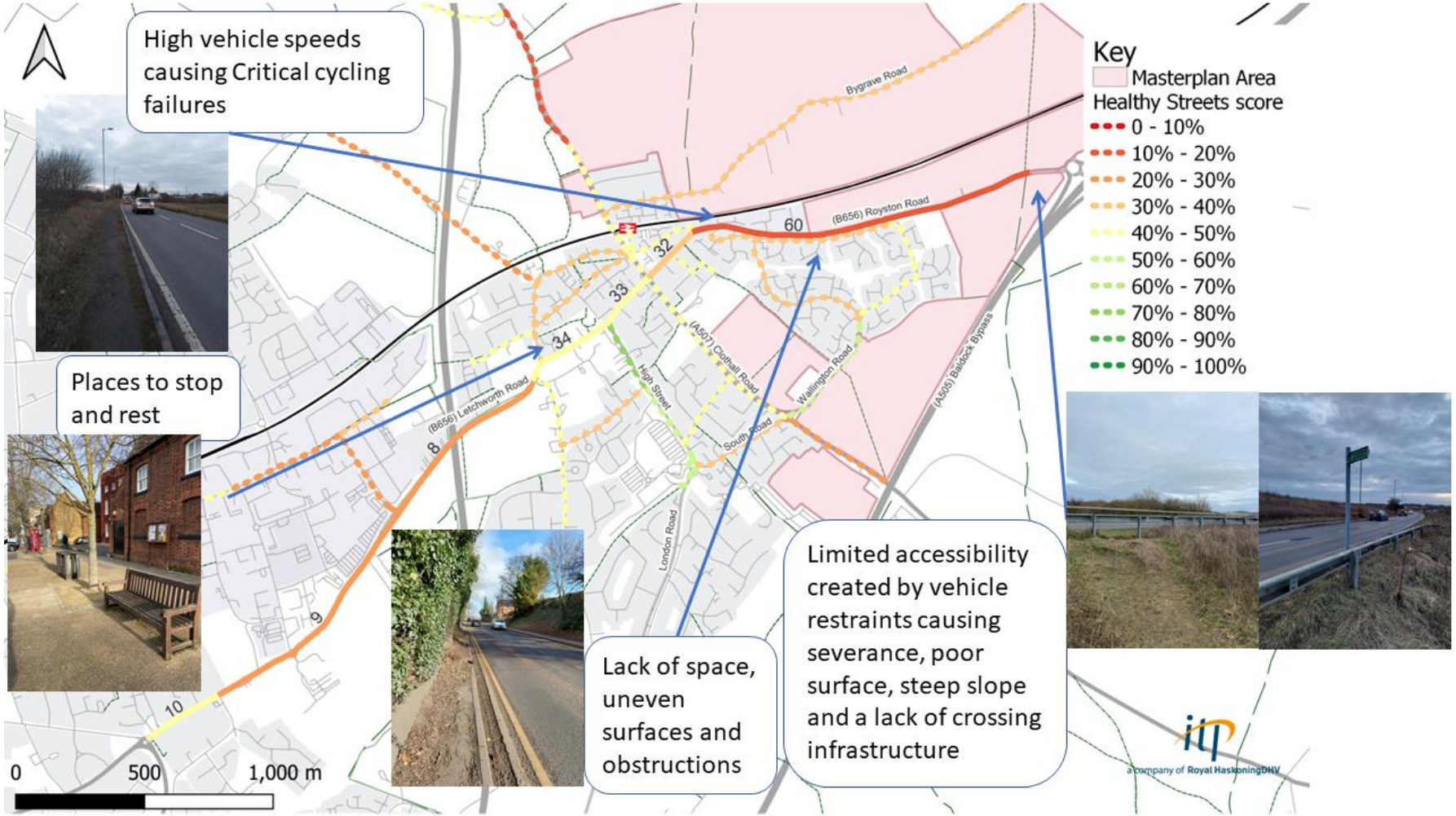


Figure 5-8: High Street key observations



Figure 5-9: Works Road key observations



**Link 17 was audited using the off-road variation of the walking framework; the score presented in the figure above is not healthy streets result*

5.31 Review of the findings generally indicate that there is:

- Significant potential to make movements easier for cyclists on all links due to the significant lack of on street cycle infrastructure.
- Generally a high standard of bus stop infrastructure, but there are specific locations where the good level of provision is not upheld
- A number of the off-road routes are let down by the severance impact of key roads and surface quality
- A general lack of cycle parking beyond the High Street
- High volumes and speeds of traffic on certain routes, including the prevalence of HGVs
- A number of constrained footway space, limiting the attractiveness and ease of use of such routes

5.32 The findings from this Accessibility Audit will be used, in conjunction with baseline understanding from other workstreams such as the collision analysis, to inform opportunities and constraints mapping and ultimately the Active and Sustainable Modes Strategy.

6. Mobility Vision and Key Objectives

6.1 Combining the key themes and aims of the local policy context (set out in Section 2) and potential for wider off-site transport interventions, a Mobility Vision has been established. This reflects the need to deliver growth differently, guided by a clear vision, and in a way that embeds active and sustainable travel first while being place, and masterplan led.

6.2 The Mobility Vision and Key Principles set out above will continue to be refined as the work progresses. The overarching Mobility Vision is set out below.

> The Baldock Sustainable Extension will be a high quality, connected place, designed for people over cars, through actively prioritising walking, cycling and public transport within the site. Connections by these modes to Baldock will be enhanced, benefitting existing communities and businesses in the town. The design of the development, the mix of uses and the new infrastructure provided will reduce the need to travel, providing clear opportunities to make sustainable modes the first choice when travel is required.

6.3 The vision is supported by key masterplan objectives, which are:

- **Reducing traffic dominance in Baldock** will be important to encouraging modal shift and will be achieved through the masterplan proposals and off-site improvements; the development will lead the way in prioritising active and sustainable modes of travel thereby contributing to traffic reduction within the town.
- **Safe, direct and coherent networks for active modes** will be prioritised on-site and will connect new and existing residents to employment, education, retail and leisure facilities by opening up more direct routes for walking, cycling and e-mobility, supported by mobility hubs, and helping reduce severance of existing infrastructure, including the Hitchin – Cambridge rail line, A1(M) and B656.

- **The green infrastructure network** will incorporate and enhance existing walking, cycling and equestrian access, encouraging leisure journeys and connecting to the existing rights of way and greenway network.
- **Prioritising buses above private vehicles** will be achieved by providing routes into the site that maximise catchment, enhancing connectivity for new and existing residents and visitors. New high quality and accessible bus stops and bus priority infrastructure will be delivered to promote public transport as an attractive option, connecting Baldock to key destinations.
- **Excellent rail access** with better facilities and access, will support sustainable travel to wider destinations. These will be delivered alongside enhanced pedestrian and cycling connections to the station, particularly to the north of the rail line, ensuring the first stage of rail trips are made mostly by foot or bike.
- **Managing freight and logistics** within the site through the careful consideration of access, parking, loading bays and integration of mobility hubs will allow for efficient delivery of goods, as well as access by service and emergency vehicles.
- **Reducing reliance on the private car** by positively managing vehicle access, according to the LTP4 modal hierarchy, and applying progressive parking standards will ensure that trips within the site are easier to make on foot, by bike or by public transport. Parking levels will be carefully considered to ensure a balance between under and over provision is reached, with parking levels related to connectivity and with charging facilities in safe, accessible and convenient locations.

6.4 The vision and objectives will inform the identification of interventions within the development area, off-site options and subsequently the development of a masterplan.

7. Implications for Strategic Masterplan

7.1 This section sets out the potential implications of these key principles and initial thinking on what they may mean for the strategic masterplan (SMP). This will be developed through the ITA.

- A wider strategic approach to managing traffic within Baldock, looking beyond the site boundary, has the potential to remove significant volumes of through traffic through Baldock, improving the sense of place in the town and conditions for pedestrians and cyclists
- Significant improvements to connections to Baldock town centre and railway station for walking, cycling and public transport will be critical to reducing car trips from the site, as well as delivering potential mode shift benefits for existing communities
- As well as utility trips, there is a need to connect the site into the PROW network, providing for access to the countryside and leisure trips, and providing opportunities to bring the countryside into the site
- The modal hierarchy should be in line with LTP4 and prioritise walking, cycling and public transport first and this should be embedded in the masterplan, with these networks designed first
- Some reductions in existing on-street parking may be required to facilitate improvements to cycle and bus priority within Baldock
- Improvements delivered as part of the development, and wider town / region transport improvements could reduce the need to travel by car.

8. Conclusions and Next Steps

8.1 This Transport and Movement Baseline report has set out a detailed overview of baseline conditions within and around Baldock, including existing movement patterns and auditing key streets and PROW. The work has developed an interim Mobility Vision and set of supporting objectives.

8.2 A suite of interlinked strategies will be developed to ensure the delivery of this vision. These will consider different elements in more detail, but not be developed in isolation; they will link with wider strategies such as green spaces. These will cover:

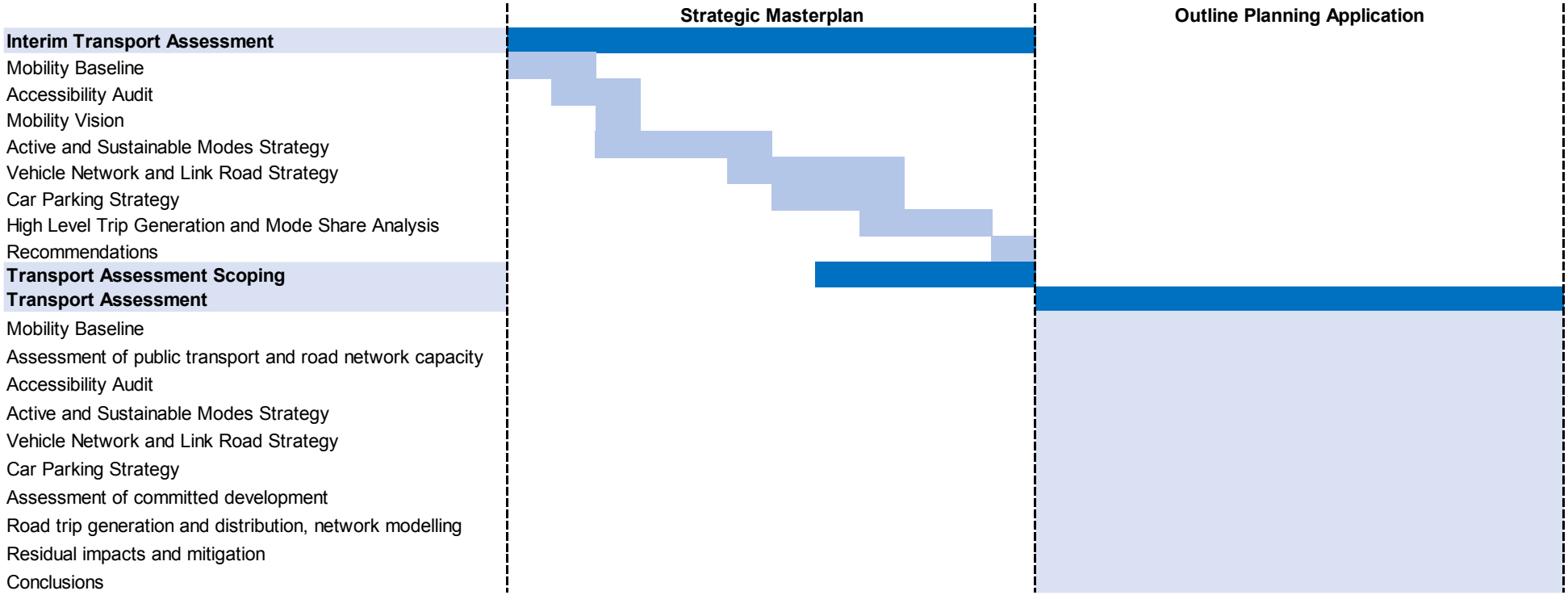
- Active travel – focusing on walking and cycling networks, including e-scooters,
- Sustainable travel – focusing on shared transport modes including bus, rail and shared vehicles / car clubs
- Parking – including car parking, micro-mobility hire and parking and car clubs
- Vehicle network and link road

8.3 These strategies will be developed in more detail as part of the ITA, developed from a clear statement of opportunities and constraints that will flow from the analysis forming this baseline report and will be the first stage of the ITA. Consistent with modal hierarchy enshrined in HCC's LTP4, the first strategy to be developed will be the active and sustainable modes strategy. This will be discussed with HCC and NHDC before developing the vehicle and link road strategy.

Next steps

8.4 A proposed methodology for the ITA has been developed and introduced to HCC and NHDC. Once agreed this will set the scope for the next stages of work, which will lead to the agreement of a preferred strategic masterplan option. It is anticipated that a Transport Assessment Scoping exercise will have been completed by the time the Interim Transport Assessment is concluded, which will allow the quick development of a full Transport Assessment to support the Outline Planning Application. The Transport Assessment will then test the preferred masterplan option.

Figure 8-1: Next steps



Appendix A

Baldock Survey Data Analysis – Technical Note

Title	Baldock Transport Survey Data Analysis
Date	23/02/2023
Author(s)	JP, BS, TMF, GB
Project Code	3712
Version	2

1. ANPR movement analysis

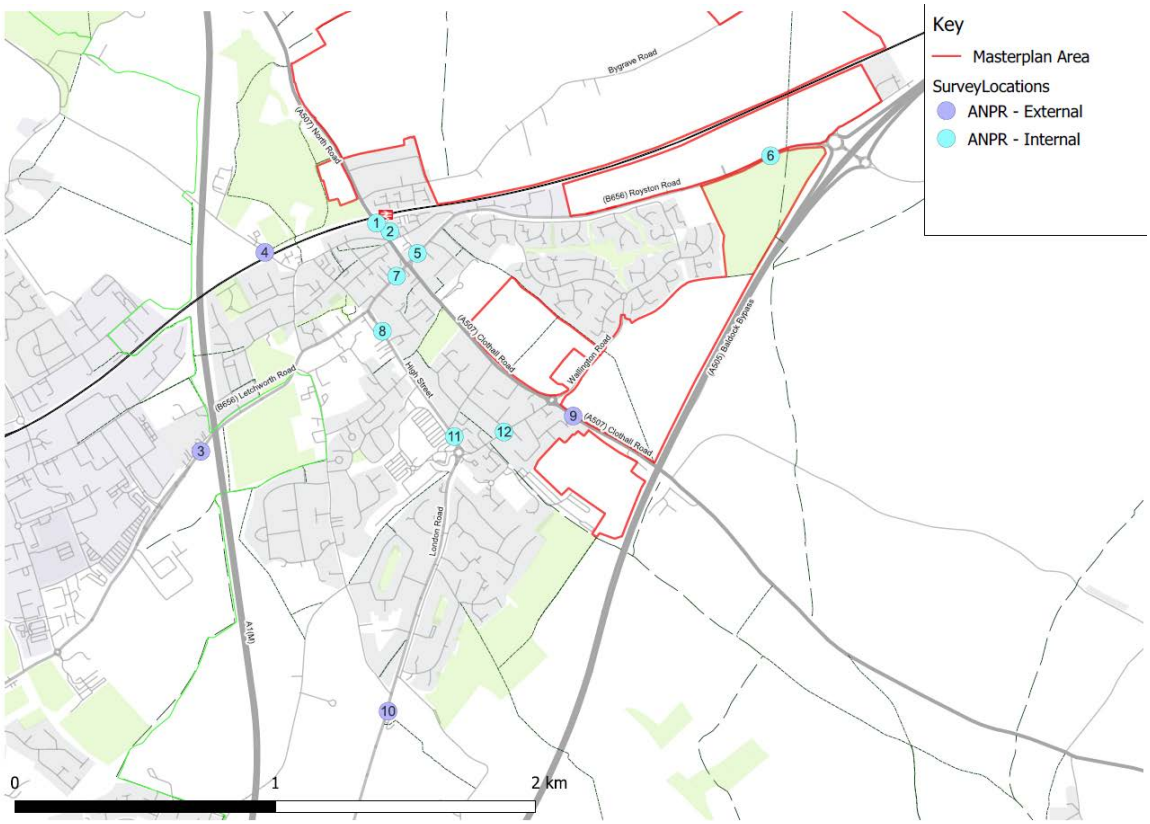
1.1 An Automatic Number Plate Recognition (ANPR) cordon survey was undertaken to allow a more detailed understanding of traffic movements across the town. The location of the cordon cameras for Baldock are shown in Figure 1-1. The ANPR cameras recorded the vehicle class and direction of travel for each camera, as well as the point and time the vehicle entered and left the cordon.

1.2 ANPR sites are either assumed to be 'External' or 'Internal'. This affects the way in which the origin-destination matching process works in relation to each site. The differences between the two types are as follows:

- External - these are sites which are assumed to be on the periphery of the study area and hence vehicles passing through these sites will be starting or ending their trip. Directions at these sites are set to Inbound and Outbound, and for sites that have vehicles travelling into the study area (i.e. they are not purely a one-way Outbound site).
- Internal - these are sites that are considered to be possible through movement sites for longer distance origin-destination movements - i.e. they may be an intermediate capture point for vehicles seen entering and exiting the study area elsewhere. In this instance, the origin-destination movement is assigned to the initial and final capture locations. Internal sites can be the origin of a trip (if it is not captured elsewhere before) or the destination of a trip (if it is not captured again after).

1.3 This allows an analysis to be undertaken of traffic movements through the town, as well as information such as HGV volumes and movements and proportion of through traffic.

Figure 1-1: ANPR cordon camera locations



Weekday AM + PM cumulative ANPR movements

Two-way

1.4 Figure 1-2 below shows the aggregated total flow from the AM and PM peak periods between 07:00 – 10:00 and 16:00 – 19:00 – all motorised vehicles. The 'top five' two-way movements are (blue arrows in diagram):

- 1219 trips between North Road (1) and Clothall Road (9) – 9% of all trips
- 907 trips between North Road (1) and Royston Road (6) – 7% of all trips
- 830 trips between Letchworth Road (3) and Royston Road (6) – 6% of all trips
- 763 trips between Clothall Road (9) and London Road (10) – 6% of all trips
- 568 trips between Letchworth Road (3) and Clothall Road (9) – 4% of all trips

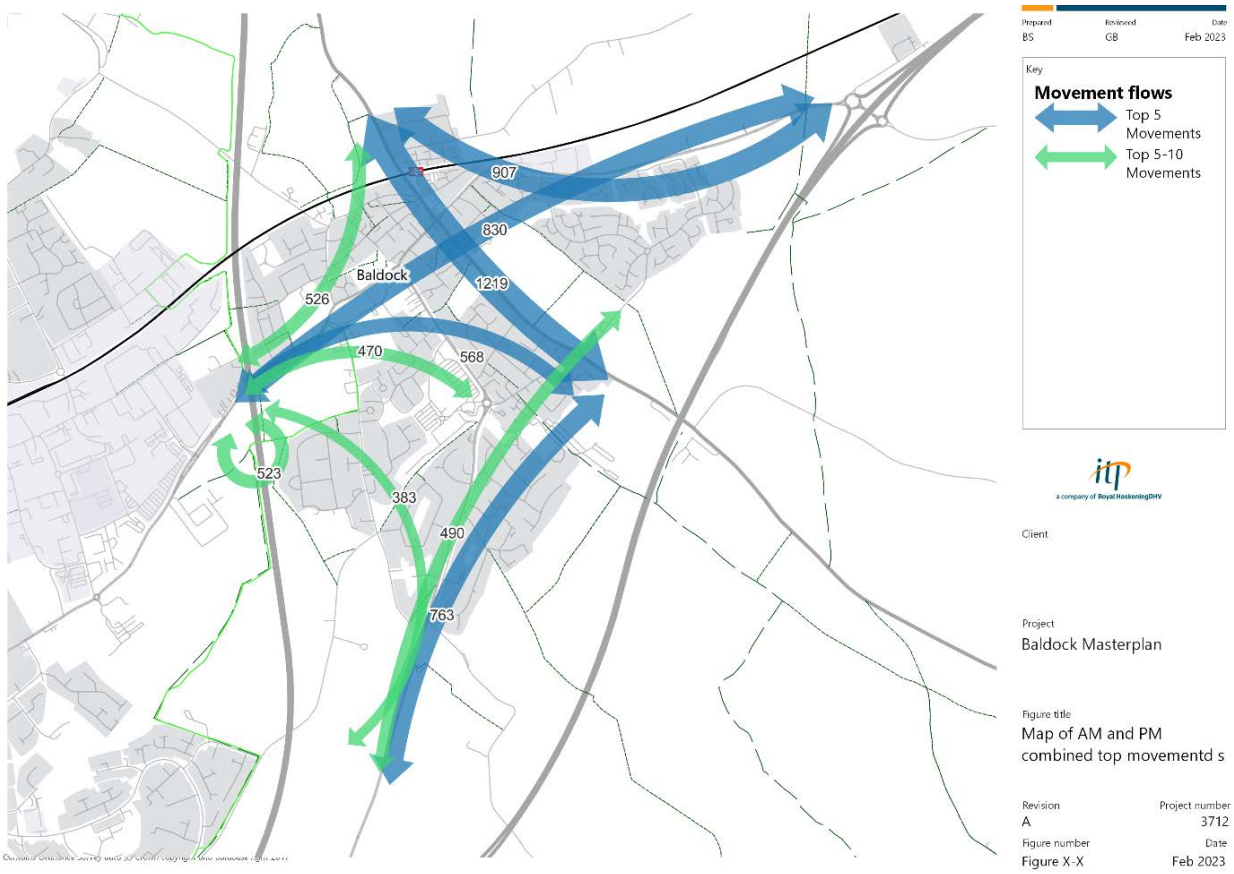
1.5 These represent a total of 33% of all trips. The remaining 'top ten' two-way movements (green arrows in diagram):

- 526 trips between North Road (1) and Letchworth Road (3) – 4% of all trips
- 523 trips between Letchworth Road (3) and Letchworth Road (3) – 4% of all trips
- 490 trips between London Road (10) and Wallington Road (12) – 4% of all trips

- 470 trips between Letchworth Road (3) and High Street (11) – 4% of all trips
- 383 trips between Letchworth Road (3) and London Road (10) – 3% of all trips

1.6 The top ten movements represent 52% of all trips.

Figure 1-2: Aggregated AM and PM weekday movements



Uni-Directional

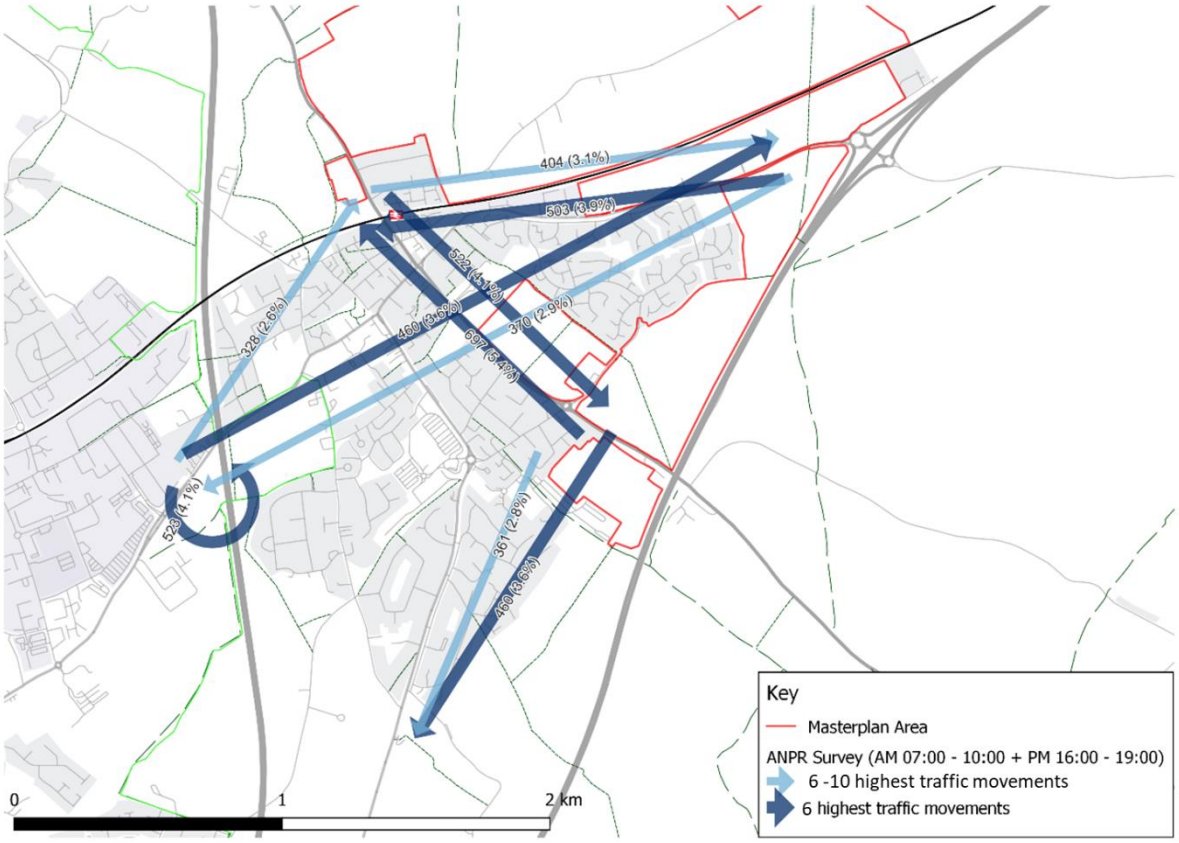
1.7 Figure 1-3 breaks the aggregated traffic flows (AM + PM peak) down by direction. The top 10 movements are shown, along with the total vehicles recorded on that movement and the proportion of total movements this represents. In this diagram the top six movements are shown in dark blue as two movements have an equal number of movements recorded.

1.8 The 'top six' one-way movements are (dark blue arrows in diagram):

- 697 trips travelling from Clothall Road (9) to North Road (1) – 5% of AM and PM trips
- 523 trips travelling to and from Letchworth Road (3) – 4% of AM and PM trips
- 522 trips travelling from North Road (1) to Clothall Road (9) – 4% of AM and PM trips
- 199 trips travelling from Royston Road (6) to North Road (1) – 4% of AM and PM trips
- 460 trips travelling from Letchworth Road (3) to Royston Road (6) – 4% of AM and PM trips

- 460 trips travelling from Clothall Road (9) to London Road (10) – 4% of AM and PM trips

Figure 1-3: Aggregated AM and PM weekday movements (by direction)



Weekday AM Peak movements

Two-way

1.9 Figure 1-4 below shows the weekday AM (07:00-10:00) peak movements – all motorised vehicles. To help identify any tidal differences between AM and PM peaks, the blue arrows represent movements with broadly equal directional flow and are as follows:

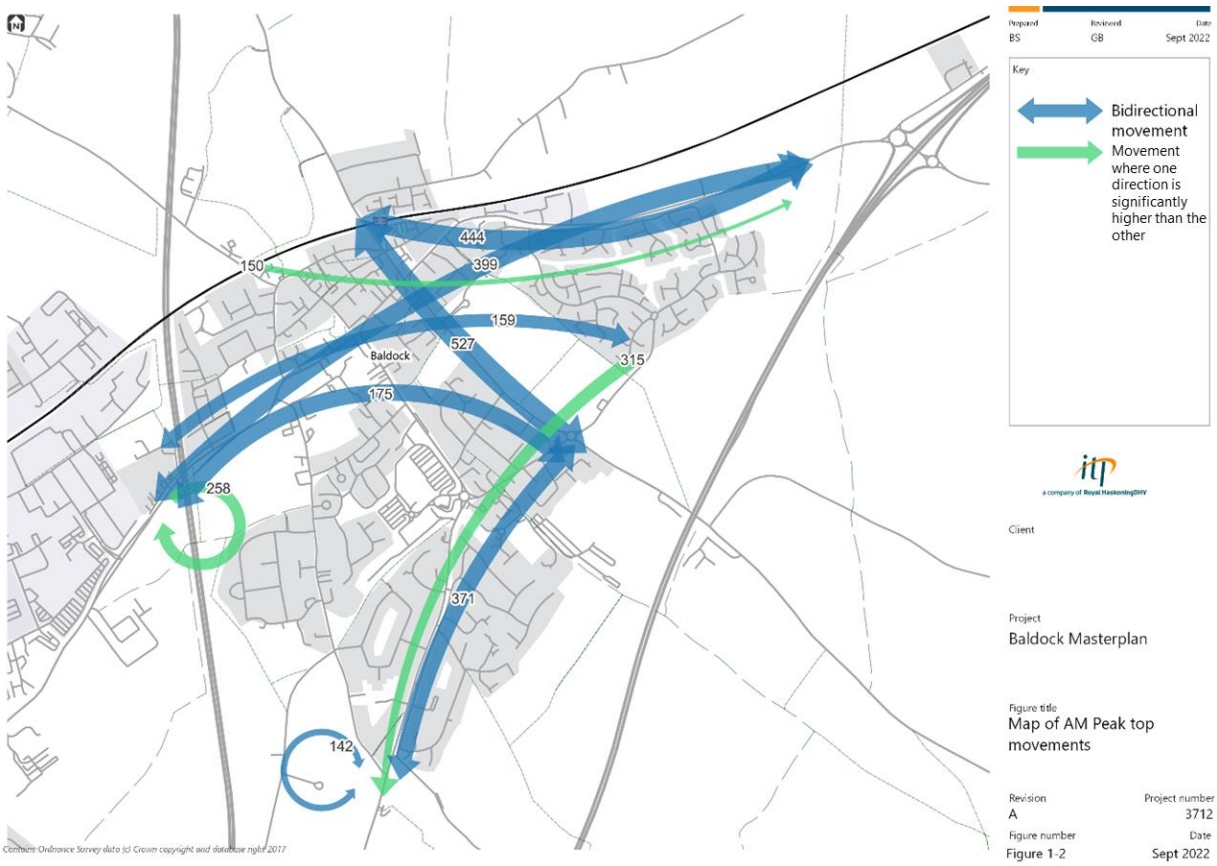
- 527 trips between North Road (1) and Clothall Road (9) – 9% of AM trips
- 444 trips between North Road (1) and Royston Road (6) – 7% of AM trips
- 399 trips between Letchworth Road (3) and Royston Road (6) – 7% of AM trips
- 371 trips between Clothall road (9) and London Road (10) – 6% of AM trips
- 286 trips between Letchworth Road (3) and Clothall Road (9) – 5% of AM trips
- 258 trips between Letchworth Road (3) and Letchworth Road (3) – 4% of AM trips
- 159 trips between Letchworth Road (3) and Wallington Road (12) – 3% of AM trips
- 142 trips between London Road (10) and London Road (10) – 2% of AM trips

1.10 The green arrows represent movements where more than two thirds of trips are in one direction for a singular movement and are as follows:

- 315 trips between Wallington Road (12) and London Road (10) – 5% of AM trips
- 150 trips between Norton Road (4) and Royston Road (6) – 2% of AM trips

1.11 The top five trips represent 34% of total movements and the top ten trips represent 50% of total movements.

Figure 1-4: Total AM weekday movements



Uni-Directional

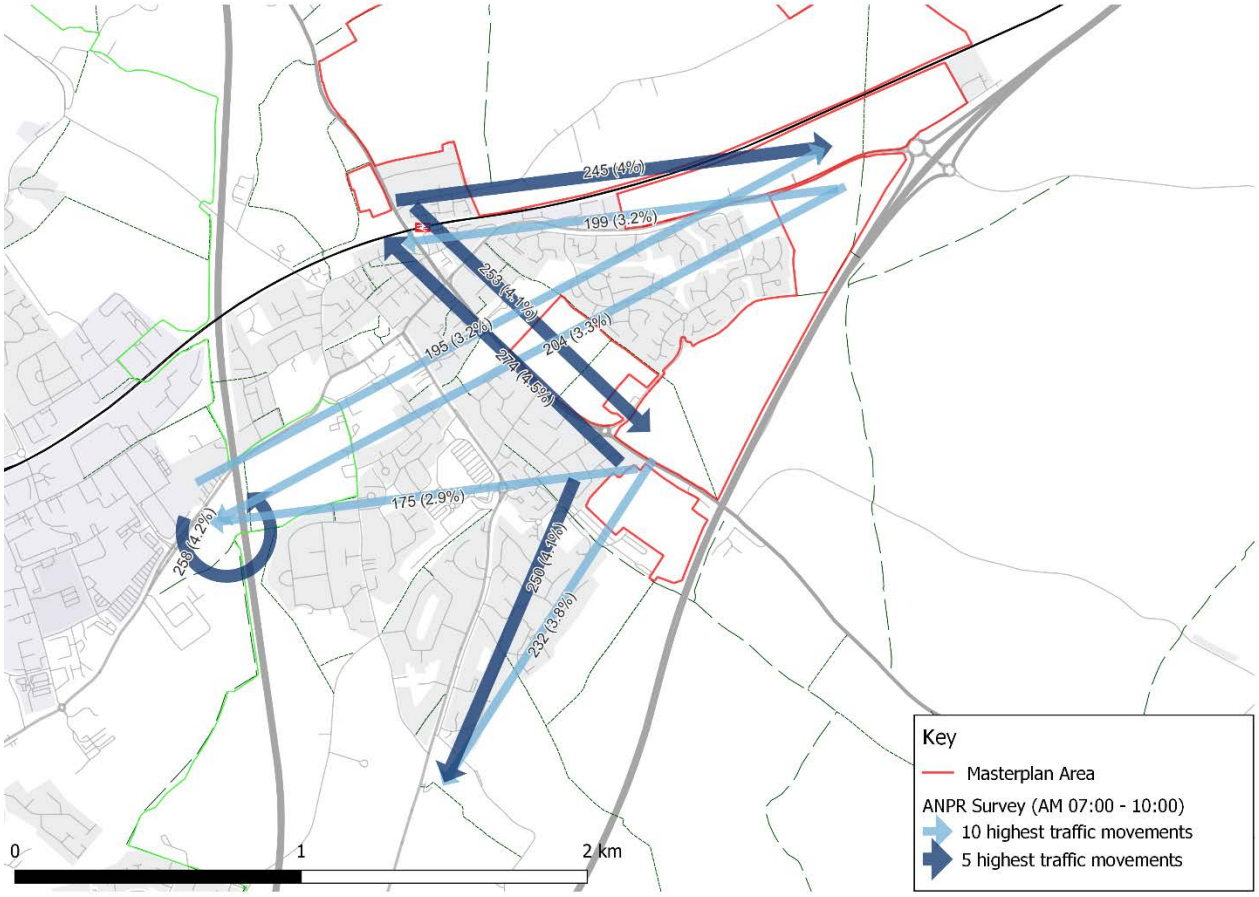
1.12 Figure 1-5 breaks the AM peak period traffic flows down by direction. The top 10 movements are shown, along with the total vehicles recorded on that movement and the proportion of total movements this represents.

1.13 The 'top five' one-way movements are (dark blue arrows in diagram):

- 274 trips travelling from Clothall Road (9) to North Road (1) – 5% of AM trips
- 258 trips travelling from and to Letchworth Road (3) – 4% of AM trips
- 253 trips travelling from North Road (1) to Clothall Road (9) – 4% of AM trips
- 250 trips travelling from Wallington Road (12) to London Road (10) – 4% of AM trips

- 245 trips travelling from North Road (1) to Royston Road (6) – 4% of AM trips

Figure 1-5: Total AM weekday movements (by direction)



Weekday PM peak Movements

Two-way

1.14 Figure 1-6 below shows the weekday PM (16:00-19:00) peak movements – all motorised vehicles. As above, the movement have been split, reflecting any tidal characteristics. The blue arrows represent movements with equal directional flow and are as follows:

- 692 trips between North Road (1) and Clothall Road (9) – 10% of PM trips
- 450 trips between Letchworth Road (3) and Royston Road (6) – 7% of PM trips
- 392 trips between Clothall Road (9) and London Road (10) – 6% of PM trips
- 282 trips between Letchworth Road (3) and Clothall Road (9) – 4% of PM trips
- 265 trips between Letchworth Road (3) and Letchworth Road (3) – 4% of PM trips
- 140 trips between London Road (10) and London Road (10) – 2% of PM trips

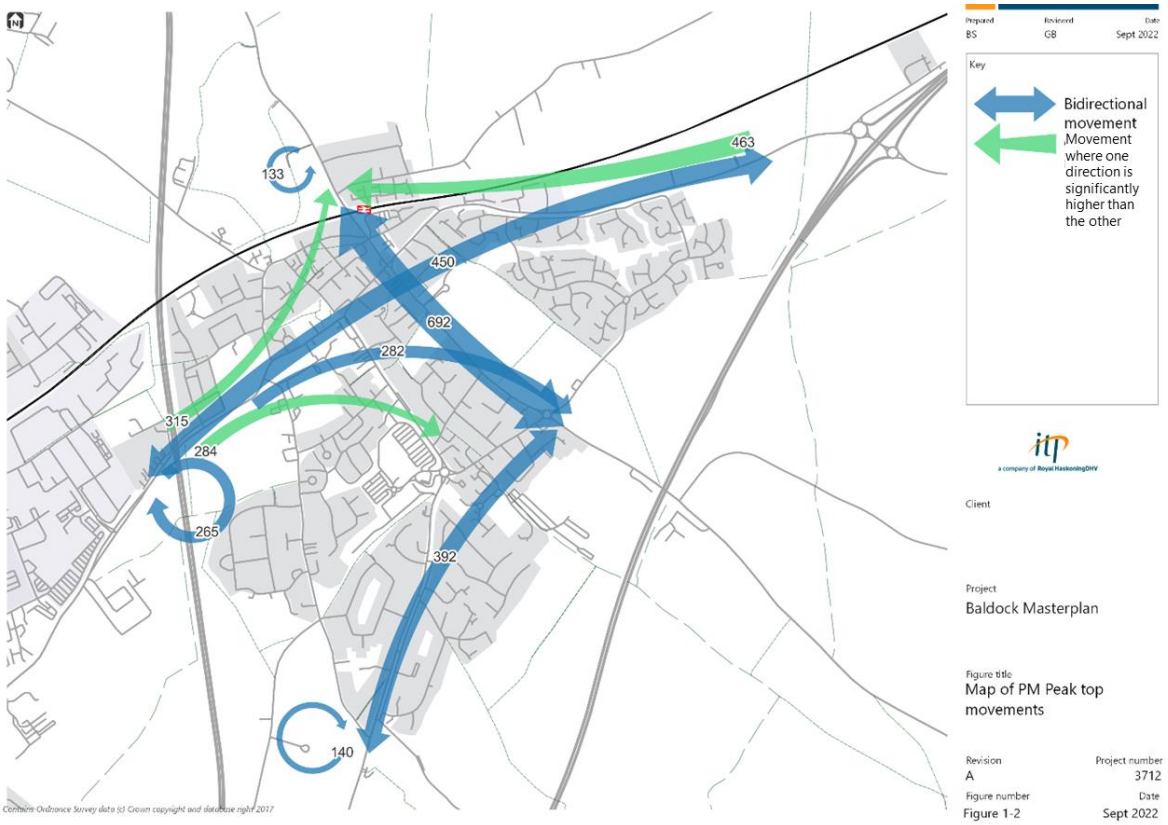
- 133 trips between North Road (1) and North Road (1) – 2% of PM trips

1.15 The green arrows represent movements where more than two thirds of trips are in one direction for a singular movement and are as follows:

- 463 trips between Royston Road (6) and North Road (1) - 7% of PM trips
- 315 trips between Letchworth Road (3) and North Road (1) – 5% of PM trips
- 284 trips between Letchworth Road (3) and High Street (11) – 4% of PM trips

1.16 The top five trips represent 34% of total movements and the top ten trips represent 51% of total movements.

Figure 1-6: Total PM weekday movements



Uni-Directional

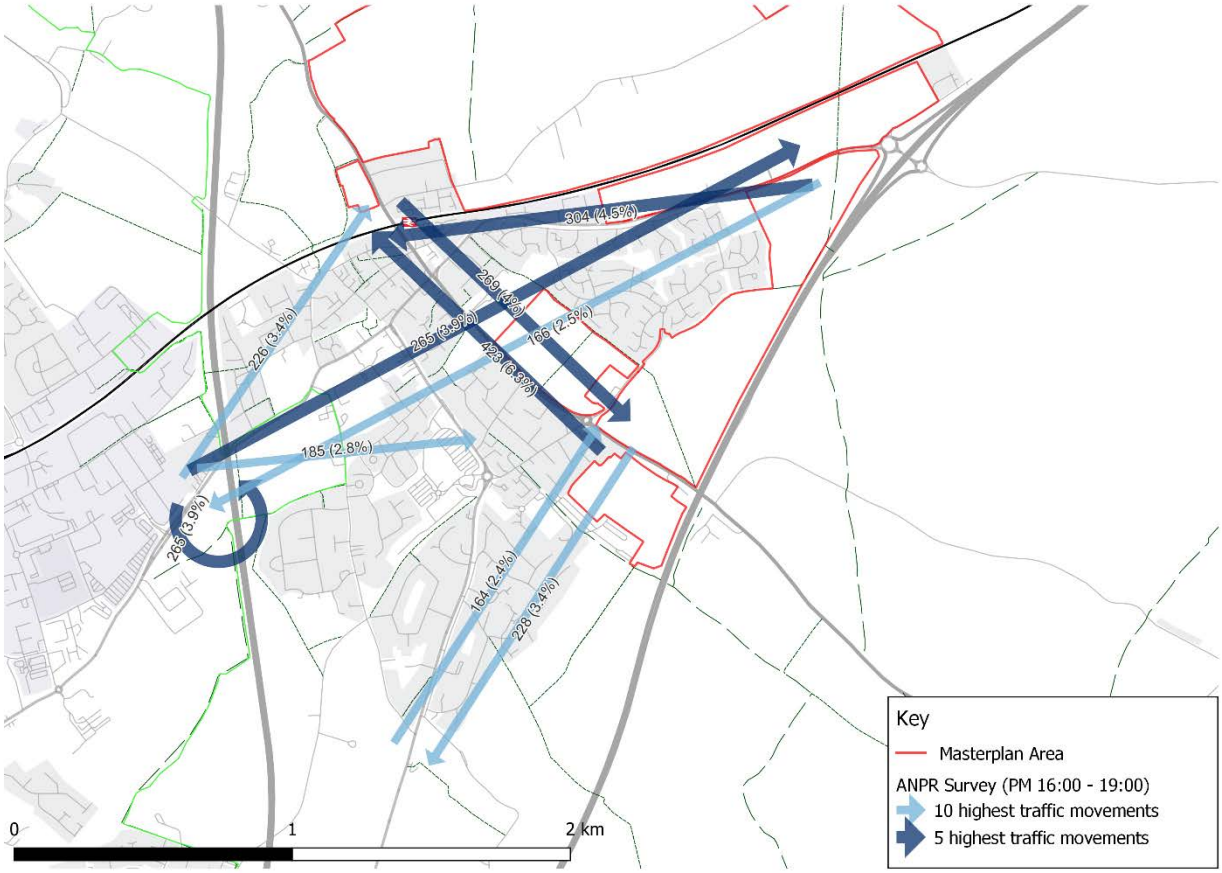
1.17 Figure 1-7 breaks the PM peak period traffic flows down by direction. The top 10 movements are shown, along with the total vehicles recorded on that movement and the proportion of total movements this represents.

1.18 The 'top five' one-way movements are (dark blue arrows in diagram):

- 423 trips travelling from Clothall Road (9) to North Road (1) – 6% of PM trips
- 304 trips travelling from Royston Road (6) to North Road (1) – 5% of PM trips
- 269 trips travelling from North Road (1) to Clothall Road (9) – 4% of PM trips

- 265 trips travelling from and to Letchworth Road (3) – 4% of PM trips
- 265 trips travelling from Letchworth Road (3) to Royston Road (6) – 4% of PM trips

Figure 1-7: Total PM weekday movements (by direction)



Weekend Peak Movements

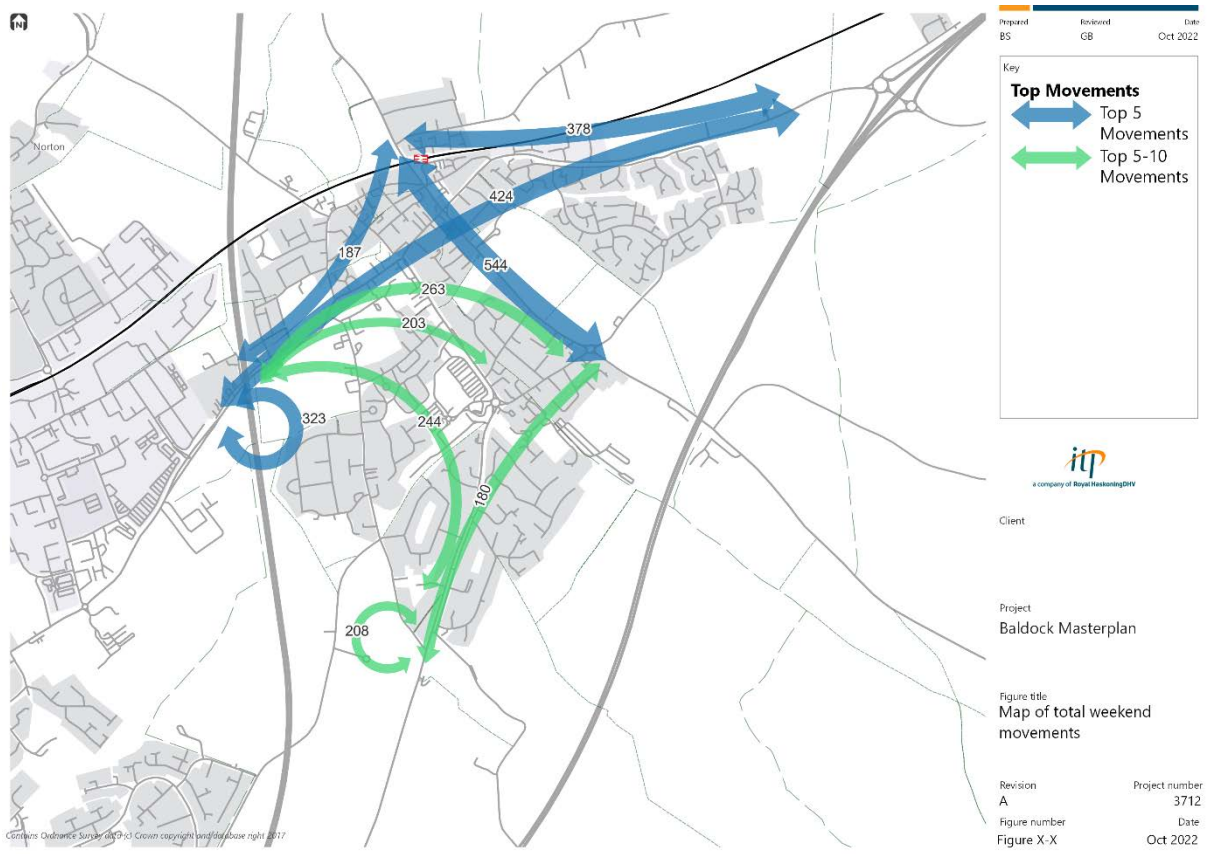
1.19 Figure 1-8 below shows the weekend peak (11:00-14:00) peak movements – all motorised vehicles. The top ten movements all had similar flows in each direction. The Blue arrows are as follows:

- 544 trips between North Road (1) and Clothall Road (9) – 9% of trips
- 424 trips between Letchworth Road (3) and Royston Road (6) – 7% of trips
- 378 trips between North Road (1) and Royston Road (6) – 6% of trips
- 323 trips between Letchworth Road (3) and Letchworth Road (3) – 5% of trips
- 322 trips between Clothall Road (9) and London Road (10) – 5% of trips
- 312 trips between Letchworth Road (3) and North Road (1) – 5 % of trips

- 263 trips between Letchworth Road (3) and Clothall Road (9) – 4% of trips
- 244 trips between Letchworth Road (3) and London Road (10) – 4% of trips
- 208 trips between London Road (10) and London Road (10) – 3% of trips
- 203 trips between Letchworth Road (3) and High Street (11) – 3% of trips

1.20 The top five trips represent 31% of total movements and the top ten trips represent 51% of total movements.

Figure 1-8: Map of total weekend movements

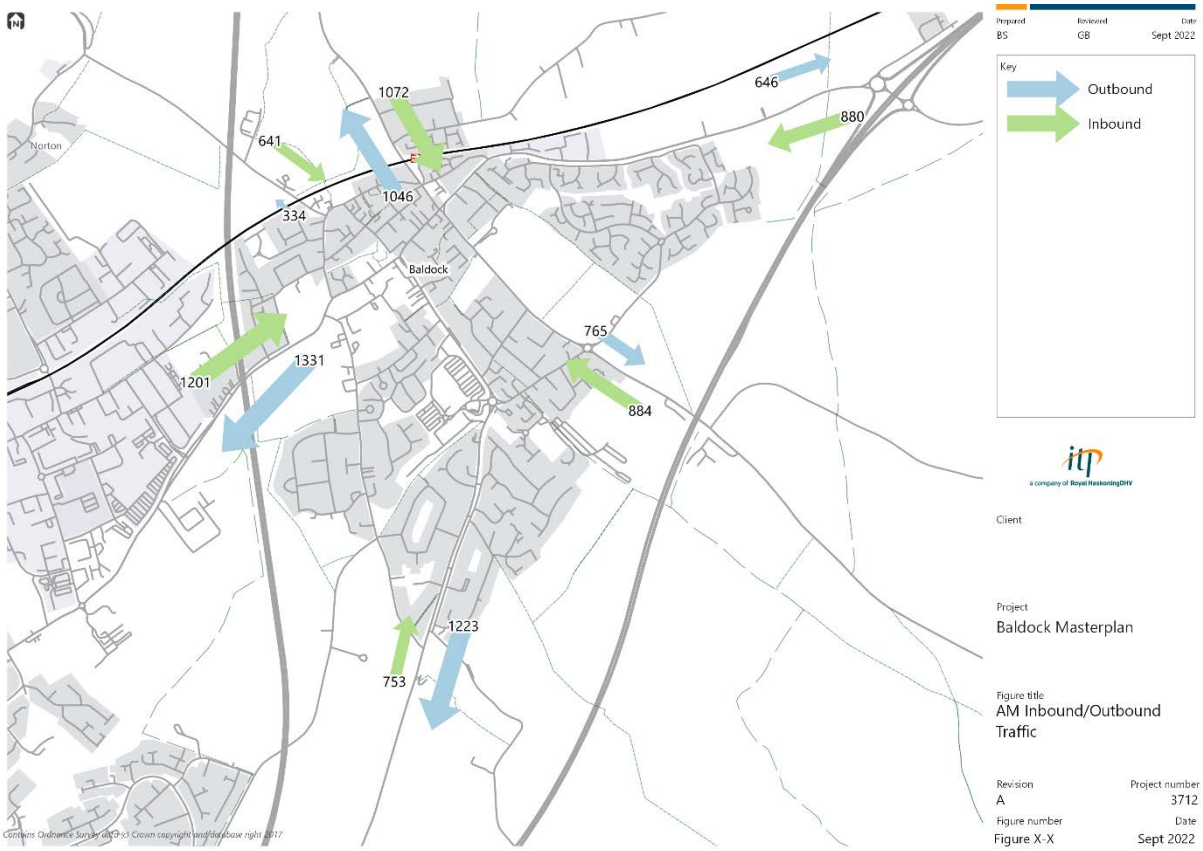


Direction of travel

AM peak

1.21 The AM inbound/outbound all mode traffic flows are broadly evenly matched for each entry/exit camera, with two exceptions. Camera ten (London Road) has significantly more outbound traffic in the AM whereas camera four (Norton Road) has significantly more inbound traffic in the AM.

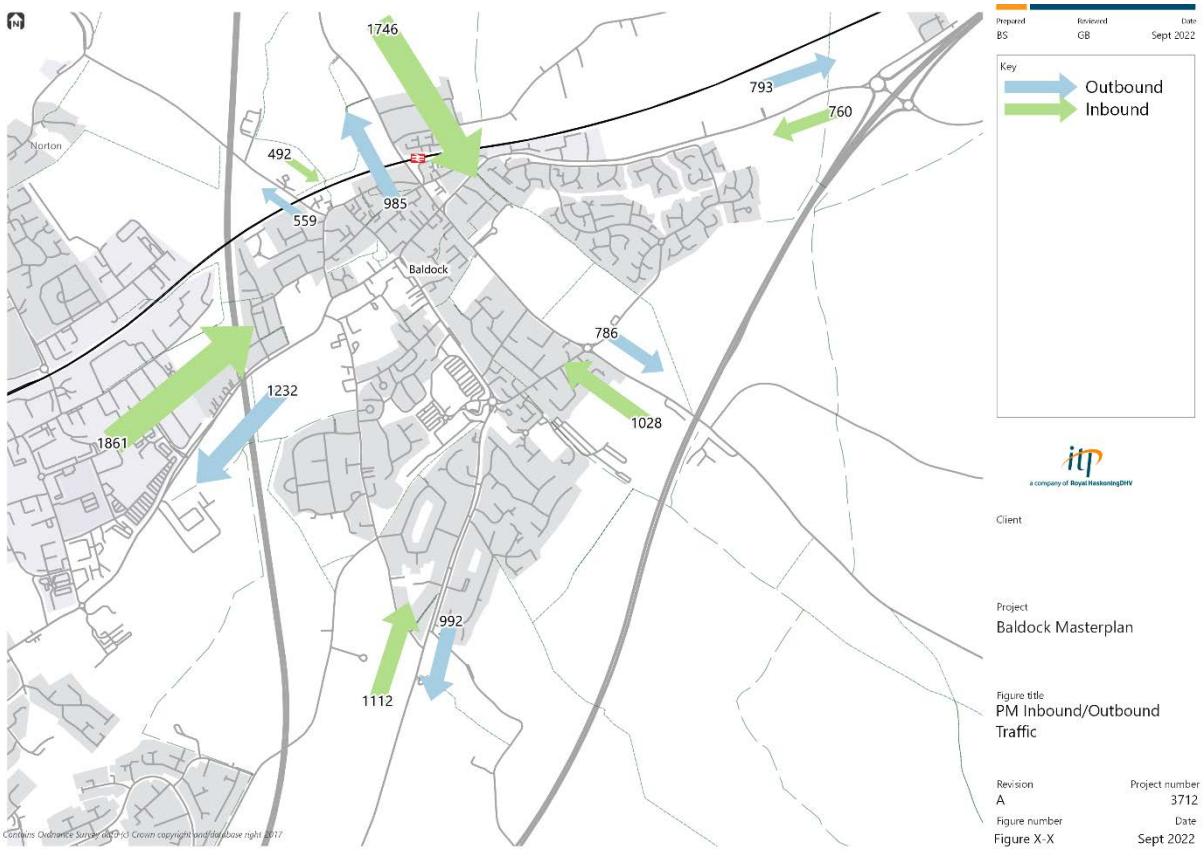
Figure 1-9: Map of AM Inbound vs Outbound traffic



PM peak

1.22 The PM total peak movements are much more varied. Camera one (North Road) has significantly more inbound trips than outbound as well as camera three (Letchworth Road). As well as this, camera ten (London Road) and nine (Clothall Road) show similar trends. In total there are more than 1,500 additional inbound trips than outbound which may represent people travelling home and not exiting the cordon again.

Figure 1-10: Map of PM Inbound vs Outbound traffic



Destinations within the cordon

1.23 An analysis has been undertaken of movement patterns within the cordon with a particular focus on identifying the main destinations people travel to within the cordon, and where from. The internal cameras are locations 2, 5, 7, 8, 11 and 12 in Figure 1-1.

1.24 Movements ending at internal cameras represent 1,074 trips in the AM peak, which is 18% of all moments within the ANPR cordon. In the PM peak this figure is 1,261, which is 19% of all movements.

1.25 In both the AM and PM peaks the most popular destination within the cordon are to camera 11, which is on the High Street towards the junction with Tesco. In the AM this represents 5% of all trips and 30% of all internal trips, with the corresponding figures being 7% and 38% in the PM peak. These are likely to be trips made to Tesco predominately, as well as to the High Street. In both the AM and PM peak the most popular origin for these trips is from Letchworth Road (26% and 38% respectively).

1.26 In the AM peak the next most popular destination is camera 12 (South Road), representing 26% of internal trips and 4% of all trips. It should be noted that trips 'ending' at camera 12 could be accessing a range of commercial and residential destinations including the areas around London Road, including Tesco, Clothall Common and Clothall Road. The most

popular origin for these trips is London Road (24%), followed by South Road itself (18%), Clothall Road (16%) and Letchworth Road (16%). The high proportion of trips only passing the South Road camera suggest a number of very local trips being made by car.

1.27 In the AM peak another popular destination is camera 8 (High Street north), representing 22% of internal trips and 4% of all trips. The most popular origin for these trips is Letchworth Road (19%), followed by London Road (12%), Norton Road (11%) and North Road (11%).

1.28 In the PM peak the next most popular destination after the High Street (Tesco end) is camera 8 (High Street north), representing 24% of internal trips and 5% of all trips. The most popular origin for these trips is Letchworth Road (28%), followed by London Road (18%), Norton Road (11%) and High Street (Tesco End) (10%). The proportion of trips only passing a High Street camera suggest a number of very local trips being made by car.

1.29 In the PM peak another popular destination is camera 12 (South Road), representing 20% of internal trips and 4% of all trips. As above, it should be noted that trips 'ending' at camera 12 could be accessing a range of commercial and residential destinations. The most popular origin for these trips is London Road (25%), followed by Clothall Road (23%) and Letchworth Road (21%).

1.30 Table 1-1 and Table 1-2 provide more detail regarding the data summarised above.

Table 1-1: Internal camera origin destination analysis AM peak

Destination	Camera 02		Camera 05		Camera 07		Camera 08		Camera 11		Camera 12	
Origin	Trips	%	Trips	%	Trips	%	Trips	%	Trips	%	Trips	%
Camera 01	8	30%	21	14%	15	21%	27	11%	21	7%	16	6%
Camera 02	4	15%	0	0%	0	0%	2	1%	0	0%	0	0%
Camera 03	1	4%	32	22%	11	15%	46	19%	83	26%	44	16%
Camera 04	2	7%	26	18%	2	3%	26	11%	45	14%	8	3%
Camera 05	0	0%	9	6%	1	1%	4	2%	3	1%	2	1%
Camera 06	1	4%	24	17%	20	28%	11	5%	6	2%	8	3%
Camera 07	1	4%	4	3%	5	7%	7	3%	2	1%	3	1%
Camera 08	1	4%	5	3%	1	1%	22	9%	40	13%	20	7%
Camera 09	5	19%	12	8%	2	3%	17	7%	18	6%	44	16%
Camera 10	0	0%	6	4%	5	7%	29	12%	40	13%	65	24%
Camera 11	3	11%	5	3%	3	4%	20	8%	34	11%	13	5%
Camera 12	1	4%	1	1%	5	7%	23	10%	24	8%	50	18%
Camera 13	0	0%	0	0%	2	3%	2	1%	0	0%	1	0%
Camera 14	0	0%	0	0%	0	0%	1	0%	3	1%	0	0%
Total trips	27	100%	145	100%	72	100%	237	100%	319	100%	274	100%
% of internal trips	3%	-	14%	-	7%	-	22%	-	30%	-	26%	-
% of all trips	0%	-	2%	-	1%	-	4%	-	5%	-	4%	-

Table 1-2: Internal camera origin destination analysis PM peak

Destination	Camera 02		Camera 05		Camera 07		Camera 08		Camera 11		Camera 12	
Origin	Trips	%	Trips	%	Trips	%	Trips	%	Trips	%	Trips	%
Camera 01	4	40%	7	6%	20	20%	34	11%	37	8%	10	4%
Camera 02	1	10%	0	0%	0	0%	1	0%	3	1%	1	0%
Camera 03	2	20%	14	13%	21	21%	86	28%	185	38%	53	21%
Camera 04	0	0%	1	1%	5	5%	18	6%	42	9%	7	3%
Camera 05	0	0%	15	14%	3	3%	3	1%	2	0%	1	0%
Camera 06	1	10%	51	47%	28	28%	18	6%	13	3%	13	5%
Camera 07	0	0%	4	4%	4	4%	5	2%	3	1%	4	2%
Camera 08	0	0%	3	3%	1	1%	16	5%	51	11%	13	5%
Camera 09	0	0%	4	4%	0	0%	26	8%	11	2%	58	23%
Camera 10	2	20%	5	5%	10	10%	55	18%	65	13%	64	25%
Camera 11	0	0%	2	2%	3	3%	31	10%	41	8%	12	5%
Camera 12	0	0%	3	3%	3	3%	11	4%	29	6%	16	6%
Camera 13	0	0%	0	0%	1	1%	2	1%	1	0%	1	0%
Camera 14	0	0%	0	0%	0	0%	1	0%	0	0%	0	0%
Total trips	10	100%	109	100%	99	100%	307	100%	483	100%	253	100%
% of internal trips	1%	-	9%	-	8%	-	24%	-	38%	-	20%	-
% of all trips	0%	-	2%	-	1%	-	5%	-	7%	-	4%	-

HGV movements

HGV AM peak movements

1.31 Figure 1-11 below shows the weekday AM (07:00-10:00) peak movements – all Heavy Goods Vehicles>3.5T. The blue arrows represent the top five movements and are as follows:

- 29 trips between North Road (1) and Clothall Road (9)
  - 12% of HGV AM trips
  - 3% of total trips from North Road to Clothall Road
  - 8% of total trips from Clothall Road to North Road
- 22 trips between North Road (1) and Royston Road (6)
  - 9% of HGV AM trips
  - 4% of total trips from North Road to Royston Road
  - 7% of total trips from Royston Road to North Road
- 20 trips between Letchworth Road (3) and Royston Road (6)
  - 9% of HGV AM trips
  - 4% of total trips from Letchworth Road to Royston Road
  - 6% of total trips from Royston Road to Letchworth Road
- 19 trips between Clothall Road (9) and London Road (10)
  - 9% of AM trips
  - 3% of total trips from Clothall Road to London Road
  - 9% of total trips from London Road to Clothall Road
- 17 trips between Letchworth Road (3) and North Road (1)
  - 7% of HGV AM trips
  - 9% of total trips from Letchworth Road to North Road
  - 7% of total trips from North Road to Letchworth Road

1.32 The remaining 'top ten' two-way movements (green arrows in diagram):

- 12 trips between Letchworth Road (3) and Clothall Road (9)
  - 5% of HGV AM trips
  - 4% of total trips from Letchworth Road to Clothall Road
  - 5% of total trips from Clothall Road to Letchworth Road
- 11 trips between Wallington Road (12) and London Road (10)

    - 5% of HGV AM trips
    - 1% of total trips from Wallington Road to London Road
    - 14% of total trips from London Road to Wallington Road
  - Nine trips between North Road (1) and Royston Road (west) (5)
    - 4% of HGV AM trips
    - 14% of total trips from North Road and Royston Road (west)
    - 27% of total trips from Royston Road (west) to North Road
  - Eight trips between Clothall Road (9) and South Road (12)
    - 3% of HGV AM trips
    - 16% of total trips from Clothall Road and South Road
    - 2% of total trips from South Road to Clothall Road
  - Six trips between London Road (10) and London Road (10)
    - 3% of HGV AM trips
    - 4% of total trips from London Road to London Road

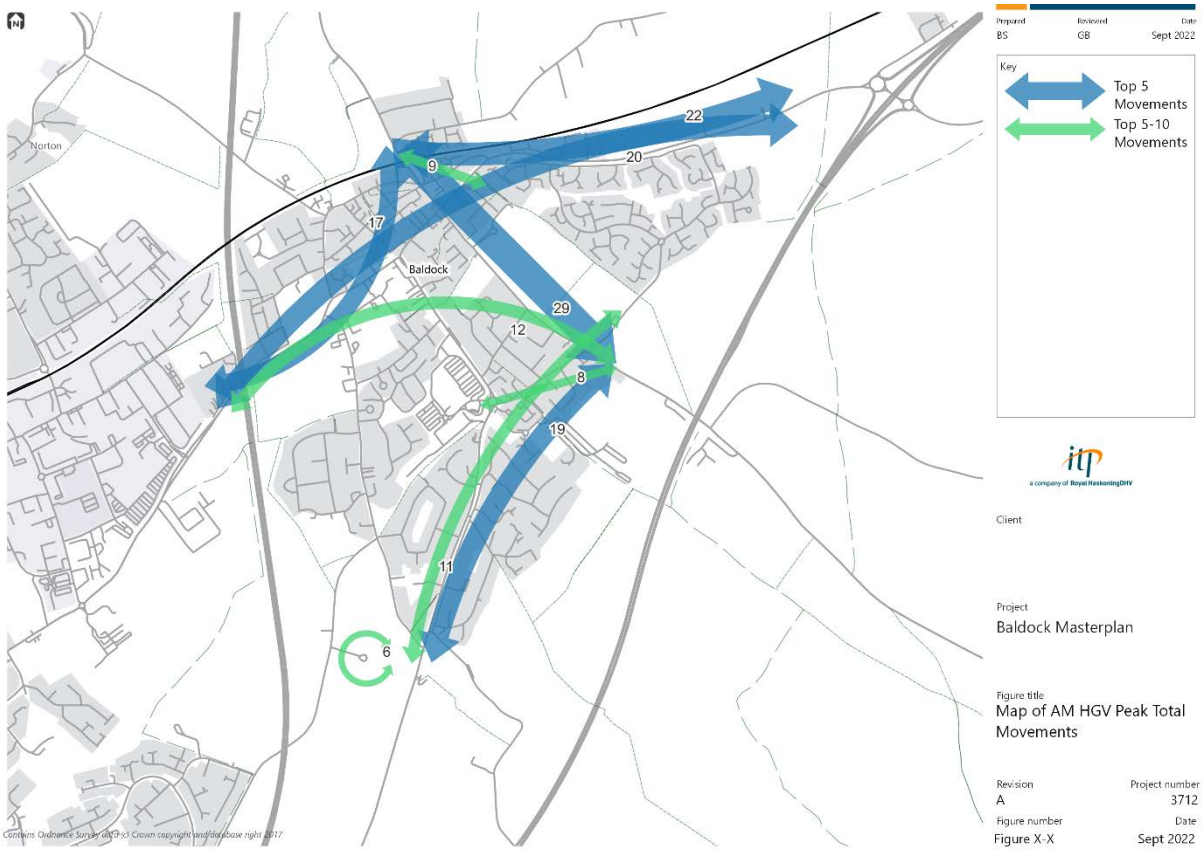
1.33 The top five trips represent 45% of total movements and the top ten trips represent 66% of total movements. The movements largely reflect the same pattern of all vehicles, however the movement from Clothall Road to South Road is new, likely representing HGV movements to Tesco, as well the movement from North Road to Royston Road (west), likely representing HGV movements to commercial premises at the western end of the road.

1.34 HGV movements represent 4% of all movements in the AM peak, although as can be seen above, for many movements, HGVs represent a higher proportion of total traffic. In the absence of cycle infrastructure proportions of HGV traffic greater than 5% will create a hostile environment for cyclists[1]. Proportions of HGV traffic above this level are seen in many locations, with particular concern where traffic volumes are also high for example between Clothall Road and North Road, Royston Road to North Road, Royston Road to Letchworth Road and between Letchworth Road and North Road (both directions).

1.35 Trips shorter than 30 minutes represent 83% of all movements.

[1] Based on guidance provided in LTN 1/20

Figure 1-11: Map of AM HGV movements



HGV PM Peak movements

1.36 Figure 1-12 below shows the weekday PM (16:00-19:00) peak movements – all Heavy Goods Vehicles>3.5T. The blue arrows represent the top five movements and are as follows:

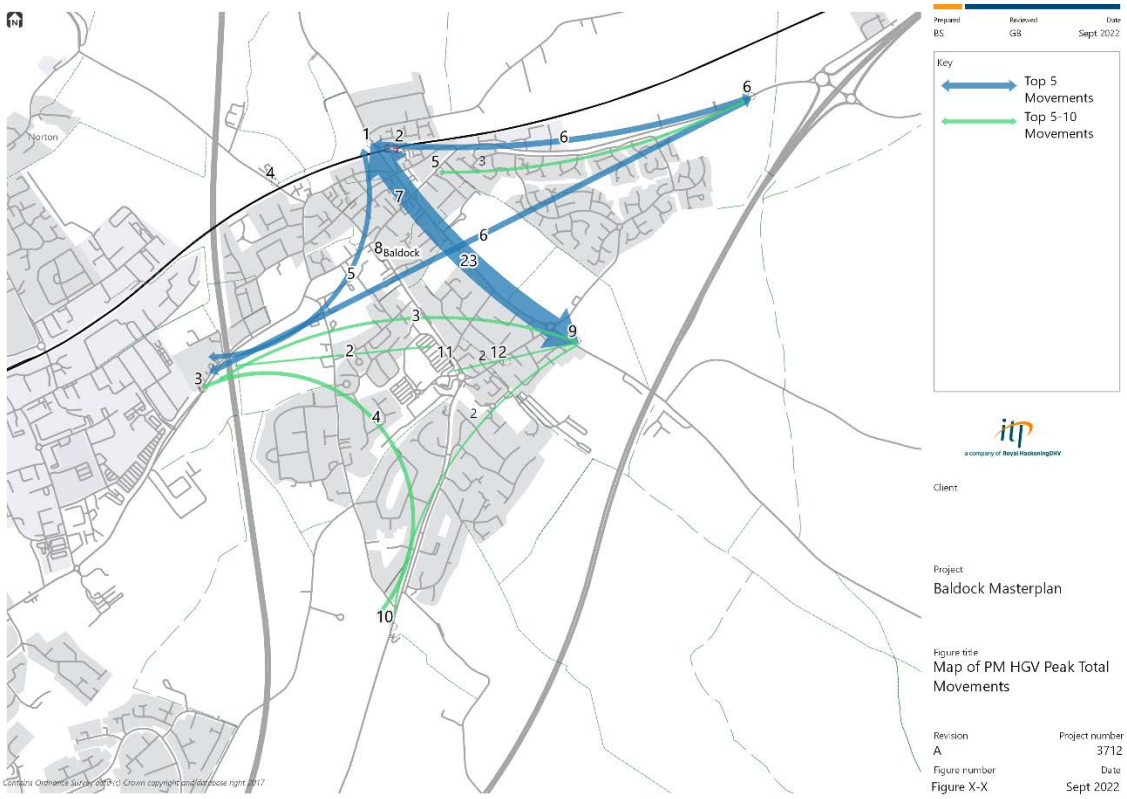
- 23 trips between North Road (1) and Clothall Road (9) – 29% of HGV PM trips
- 6 trips between North Road (1) and Royston Road (6) – 8% of HGV PM trips
- 6 trips between Letchworth Road (3) and Royston Road (6) – 8% of HGV PM trips
- 5 trips between Letchworth Road (3) and North Road (1)– 6% of HGV PM trips
- 4 trips between Letchworth Road (3) and London Road (10) – 5% of HGV PM trips

1.37 The remaining 'top ten' two-way movements (green arrows in diagram):

- 3 trips between Letchworth Road (3) and Clothall Road (9) - 4% of HGV PM trips
- 3 trips between Royston Road Short (5) and Royston Road (6) – 4% of HGV PM trips
- 2 trips between Clothall Road (9) and London Road (10) – 3% of HGV PM trips
- 2 trips between Letchworth Road (3) and Tesco (11) – 3% of HGV PM trips
- 2 trips between Clothall Road (9) and South Road (12) – 3% of HGV PM trips

1.38 The HGV movements in the PM peak are substantially different to the AM peak, and to the general traffic movements recorded. Overall volumes are substantially lower with only one notable movement being recorded, being the movement between Clothall Road and North Road. Trips shorter than 30 minutes represent 90% of all movements, suggesting most of the HGV movement are through movements. The data suggests that there is more servicing activity taking place within the town in the AM peak, as well as movement to surrounding areas.

Figure 1-12: Map of PM HGV movements



Through traffic

Methodology

1.39 The cameras used for the analysis of through traffic consist of the outlying perimeter cameras (C1, C3, C4, C6, C9, C10), as seen in Figure 1-1.

1.40 The first step was to calculate the transit times from each of the outlying cameras to another. This task used Google Maps to calculate these trips between cameras at peak hours in an AM and PM timetable (midweek). For the AM peak, the longest 'worst case' journey times were seen around 08:30. For the PM peak, the longest 'worst case' journey times were seen around 18:00. The maximum trip duration between cameras was then extracted to avoid having to analyse each individual route each vehicle took. The journey times are show in Table 1-3.

Table 1-3: Trip durations between cameras.

MAX 8:30AM time duration (min)	C1	C3	C4	C6	C9	C10	MAX
C1	0	6	3	6	4	8	8
C3	7	0	3	9	8	6	9
C4	2	3	0	7	6	9	9
C6	6	9	7	0	6	9	9
C9	3	7	6	6	0	3	7
C10	7	6	6	5	3	0	7

MAX 6:00PM time duration (min)	C1	C3	C4	C6	C9	C10	MAX
C1	0	6	2	4	6	7	7
C3	4	0	3	8	7	4	8
C4	2	2	0	6	6	4	6
C6	4	7	6	0	6	9	9
C9	3	6	6	6	0	3	6
C10	8	4	7	9	3	0	9

1.41 The values obtained in Table 1-3 then help to discard the trips with a duration that exceeds the maximum value, as it can be assumed that these trips are stopping in the town. The result of this filtering process gives the number of trips that are through trips.

Results

1.42 The total number of through trips are shown in Table 1-4, with Table 1-5 setting out the proportion of trips that are represented by through trips.

Table 1-4: Results from the cumulative calculation of through trips

Starting camera	AM through trips	PM through trips	Total through trips
C1	668	558	1226
C3	620	988	1608
C4	360	184	544
C6	468	534	1002
C9	730	825	1555
C10	272	365	637
Total	3118	3454	6572

Table 1-5: Through trips compared to total trips for AM and PM peaks

	AM	PM
Total Through trips	3118	3454
Total trips	6132	6715
% Through trips	51%	51%

1.43 The results show a cumulative percentage of 51% through trips in both peaks.

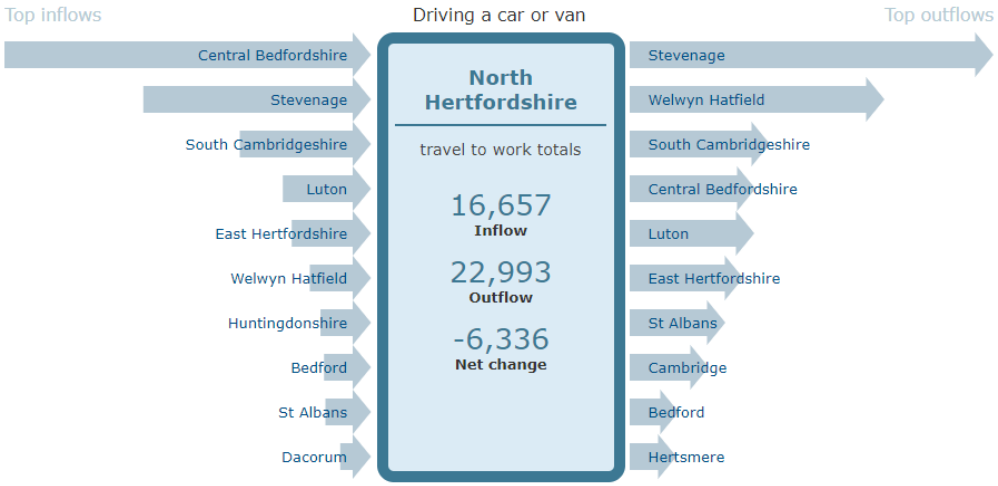
Origins and destinations of through trips

1.44 The ANPR survey only shows the points of entry and exit to the cordon and does not provide any data for the ultimate origins or destinations of the through traffic recorded. However, a number of inferences can be made when studying the Strategic Road Network (SRN) in the region.

1.45 For locations to the northwest of the town (Biggleswade, Bedford) and potentially further west such as Milton Keynes, trips to the southeast such as to Essex and Stansted are indirectly made via the SRN. Therefore, the connection through Baldock via the A507 is likely to be shorter. Local through trips are also likely to be a factor, for example the villages to the southeast of the town are likely to use the A507 to make trips to access the SRN and locations to the northwest. Many trips are also likely to be made from Letchworth through Baldock to access the SRN, either via North Road (to the A1(M)) or Royston Road (to the A505).

1.46 The Census data provides some corroboration of the regional movements described above, with large flows into and out of North Hertfordshire from Central Bedfordshire, as well as East Hertfordshire.

Figure 1-13: Census flow diagram for commuting movements (North Hertfordshire)



Research on through traffic in comparable towns

1.47 As set out above, the ANPR cordon data shows 51% of trips within Baldock are through traffic. Directly comparable data for other towns is not easily available. However, Table 1-6 highlights some examples of similar sized towns and data on through trips and HGV's.

Table 1-6: Table of traffic survey data from comparable towns/areas

Town	Data on through trips or HGV movements
Royal Tunbridge Wells A26 and A264	**3%** of all traffic classed as **HGV** Of this **HGV traffic 28%** were identified as **through traffic** Proportion of motorised vehicle **through traffic 14%** (through traffic defined as traffic then entered and exited the cordon within 40 minutes) **AM peak** higher proportion of **HGV traffic** for all junctions assessed **AM peak** slightly higher for all **motorised vehicles** for all junctions assessed
Hertford A414 Hertfordshire Count Council	**20%** of all A414 corridor movements passing the ANPR cordon classed as **'through trips'**
Swaffham A47 and A1065	**43%** of the total observed "inbound trips" are **through traffic** Of these through trips **1%** to **4%** were **HGV trips** Maximum amount of **HGVs** on the network is **15%**. Around **7% - 15%** in the **AM peak** and **4% - 8%** in the **PM peak**
Esher Traffic Survey	Average of **84% through trips** 'taking less than 15 minutes to travel through cordon'. Much smaller cordon area. In the larger cordon area **through trips** were between **45% - 55%** depending on direction of travel

1.48 The through trip percentage of 51% for Baldock puts it above most of the examples highlighted. It is also worth noting that the surveys in these locations were undertaken generally because there was a recognition that through traffic was causing negative impacts on the locations. Therefore, it is reasonable to conclude that through traffic levels would be on the high side.

2. Junction analysis

2.1 In addition to the ANPR cordon survey a range of junction and other traffic and multi-modal counts were undertaken. The analysis of this data at key locations is set out in the following sections.

Overview of junction performance

2.2 As shown below in Figure 2-1 the main congestion points within Baldock are along the B656 travelling through the centre of Baldock. The roundabouts to the south connected to South Road are busy junctions with junction 19 having 9,500+ total movements as seen in Table 2-1. This junction is a roundabout and is able to move the volumes of traffic effectively without causing significant queueing.

Figure 2-1: Summary of average queue lengths in Baldock across both AM and PM time periods



Table 2-1: Total movements and peak 1 hour AM/PM movements for the six junctions

Site	Total movements	Peak AM	Peak PM
24	7955	1,340	1,545
4	7710	1,347	1,530
22	6542	1,236	1,367
9	5480	856	1,090
12	6309	1,147	1,230
19	9549	1,705	1,953
Total	43,545	7,631	8,715

2.3 The PM flows were higher than the AM total across the three-hour period.

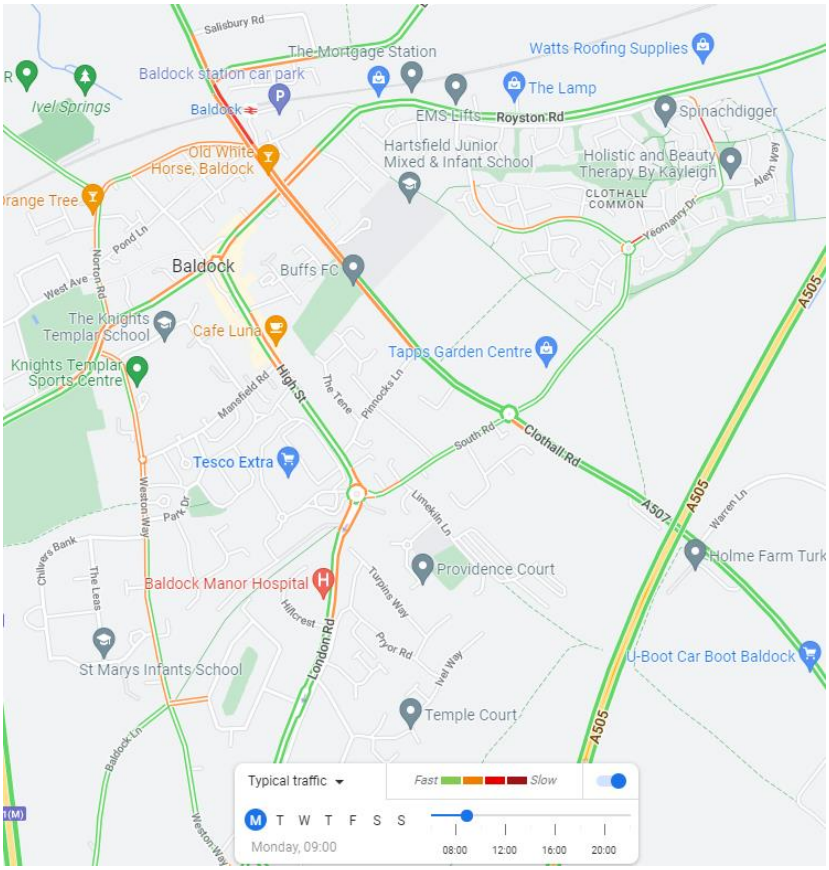
2.4 The data is limited by the extent of queue that is on view to each camera in the survey. The red arrows in Figure 2-2 show which queue lengths are longer than the camera view for more than 50% across both peak time periods. The main cameras affected are the ones along the B656 and therefore the inference can be made that the queue are longer than actually shown. This is less of an issue for the junctions with low queue lengths and therefore the data still captures the key pressure points on the network.

Figure 2-2: Summary of the percentage of time queue length exceeds camera view in Baldock across both AM and PM time periods



2.5 For reference, Figure 2-3 shows typical traffic flows recorded on Google maps and shows that the trends spotted are similar to the queue data captured. This additional analysis suggests there is delay from the Whitehorse Street / Station Road junction experienced beyond Bygrave Road. It also shows delay on Icknield Way and Norton Road, suggesting this is a well-used rat run.

Figure 2-3: A screenshot of typical traffic flows in Baldock for Monday 9am

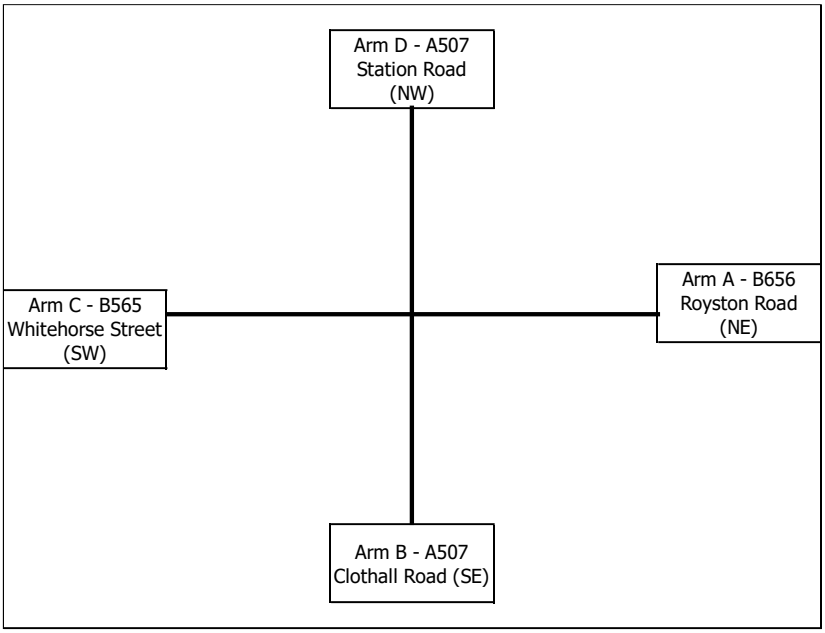


Station Road / Clothall Road

Weekday peak junction flows

2.6 This junction is in the centre of Baldock and is one of the most congested junctions in Baldock. In total, the junction recorded 7,955 trips with a split of 3,690 in the AM period and 4,265 trips in the PM period. During the peak hours the highest hourly flow recorded was 1,340 vehicles between 07:45 and 08:45 and 1,545 vehicles between 16:45 and 17:45 for the AM and PM peak respectively.

Figure 2-4- Site 24 junction layout with road names attached



2.7 The tables show the aggregated weekday AM (7:00-10:00) and PM (16:00-19:00) flows – all vehicles (including bicycles). The movements are split evenly with the top 5 flows covering between 10-14% of total flows:

- Whitehorse Street to Station Road (14%)
- Clothall Road to Station Road (14%)
- Whitehorse Street to Royston Road (13%)
- Station Road to Clothall Road (13%)
- Royston Road to Station Road (10%)

Table 2-2- Total weekday AM (07:00 – 10:00) and PM (16:00 – 19:00) counts between different arms of the sites 24

Counts		To				
		A	B	C	D	Total
From	A	0	171	773	826	1770
	B	143	0	164	1083	1390
	C	1068	107	0	**1133**	2308
	D	744	997	746	0	**2487**
	Total	1955	1275	1683	**3042**	7955

Table 2-3- Percentage splits of the weekday total AM and PM counts

Counts		To				
		A	B	C	D	Total
From	A	0%	2%	10%	10%	22%
	B	2%	0%	2%	14%	17%
	C	13%	1%	0%	**14%**	29%
	D	9%	13%	9%	0%	**31%**
	Total	25%	16%	21%	**38%**	100%

2.8 The movements most likely to be affected by any strategic route through site BA1 are those between Station Road and Royston Road, representing 19% of trips through the junction.

Weekend peak junction flows

2.9 This site also recorded data for the weekend peak between 11am and 2pm. The weekend peak flows were comparative to the weekday peak flows with a total of 3,963 trips being recorded. The peak flow was recorded between the hours 11:30am and 12:30pm at 1,397 trips. Overall the weekend individual movements were similar to the weekday with the top five individual movements were as follows:

- Whitehorse Street to Station Road (16%)
- Clothall Road to Station Road (13%)
- Whitehorse Street to Royston Road (12%)
- Station Road to Clothall Road (12%)
- Station Road to Whitehorse Street (12%)

Table 2-4: Total weekend peak (11:00 – 14:00) count between different arms of the site 24

Counts		To				
		A	B	C	D	Total
From	A	0	77	377	316	770
	B	67	0	91	523	681
	C	469	83	0	**639**	1191
	D	361	473	487	0	**1321**
	Total	897	633	955	**1478**	3963

Table 2-5: Percentage splits of the weekend peak counts

Counts		To				
		A	B	C	D	Total
From	A	0%	2%	10%	8%	19%
	B	2%	0%	2%	13%	17%
	C	12%	2%	0%	**16%**	30%
	D	9%	12%	12%	0%	**33%**
	Total	23%	16%	24%	**37%**	100%

Queue data

2.10 The junction layout can be seen in Figure 2-5 and shows two lanes of traffic for Whitehorse Street, three lanes of traffic for Royston Road and one lane of traffic each for Station and Clothall Road. The dataset is constrained by the length of queue that is visible to a camera. This means that for at least one of the five-minute timeslots, five out of the six lanes on show have the queue length exceeding camera view.

Figure 2-5: Station Road / Clothall Road junction layout



2.11 The data shows that the longest queue on average is lane A1 which is the right-hand lane travelling to Station Road from Royston Road. The other queue lengths vary between four to six vehicles, however lanes D1 and B1 will be longer than suggested as the length of queue exceeds camera view for the majority of the survey period. Lanes A2 and C1 represent the flow between Whitehorse Street and Royston Road and show

an average queue length of five vehicles. Lane A3 has minimal queuing time with cars heading from Royston Road onto Clothall Road here.

Table 2-6: Queue data for the seven lanes around Station Road / Clothall Road junction

Queue Name	% of time queue exceeds camera view	Average Number Of Vehicles Queuing	Average Queue Length (M)
Lane A1*	63%	15	92.9
Lane A2*	4%	5	32.5
Lane A3*	0%	0	0.3
Lane B1	98%	5	31.1
Lane C1**	50%	5	34.4
Lane C2**	29%	4	24.2
Lane D1	100%	6	38.3

*No AM data available

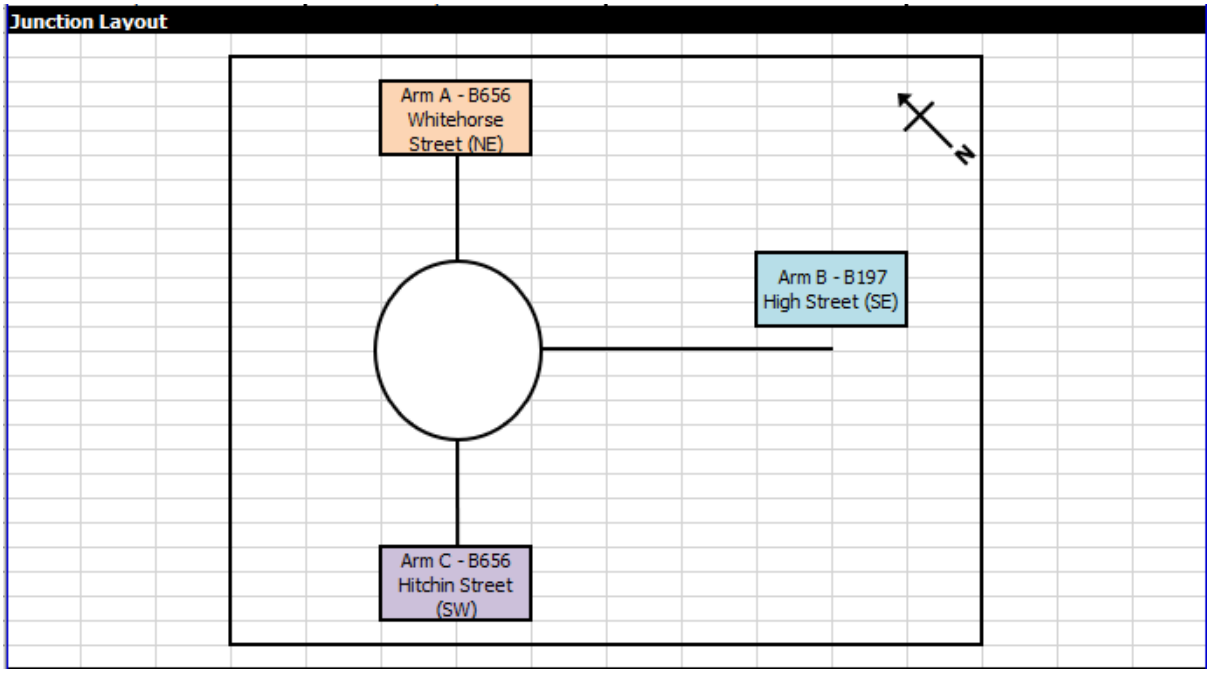
** Maximum queue length visible to camera was 2 for the AM

Hitchin Street / Whitehorse Street / High Street

Turning counts

2.12 The junction is a roundabout near Baldock high street between three roads. In total, the junction recorded 7,710 trips with a split of 3,523 in the AM period and 4,187 in the PM period. During the peak hours the highest hourly flow recorded was 1,347 vehicles between 08:15 and 09:15 and 1,530 vehicles between 17:00 and 18:00 for the AM and PM peak respectively.

Figure 2-6: Site 4 junction layout with road names attached



2.13 The tables show the aggregated weekday AM (7:00-10:00) and PM (16:00-19:00) flows – all vehicles (including bicycles). The movements are spread out with the top 5 flows covering between 12-25% of total flows:

- Hitchin Street to High Street (25%)
- High Street to Hitchin Street (20%)
- Hitchin Street to Whitehorse Street (18%)
- High Street to Whitehorse Street (15%)
- Whitehorse Street to Hitchin Street (12%)

Table 2-7: Total AM (07:00 – 10:00) and PM (16:00 – 19:00) counts between different arms of site 4

Counts		To			
		A	B	C	Total
From	A	7	760	926	1693
	B	1118	16	1551	2685
	C	1371	**1952**	9	**3332**
	Total	2496	**2728**	2486	7710

Table 2-8: Percentage splits of the Total AM and PM counts

Counts		To			
		A	B	C	Total
From	A	0%	10%	12%	22%
	B	15%	0%	20%	35%
	C	18%	**25%**	0%	**43%**
	Total	32%	**35%**	32%	100%

2.14 In total 45% of are between Hitchin Street and High Street (in both directions), with 30% of two-way trips between Hitchin Street and Whitehorse Street (in both directions). The high proportion of movements between Hitchin Street and High Street suggests traffic is seeking to avoid congestion at the Whitehorse Street junction, as well as avoiding congestion at J9 of the A1(M) when accessing Letchworth. Tesco is also likely to be drawing traffic along the High Street.

Queue data

2.15 The junction layout for queueing can be seen in Figure 2-7 and shows one lane of traffic for each of the roads.

Figure 2-7: Hitchin Street / Whitehorse Street / High Street junction layout



2.16 The data shows that on average the longest queue was for C1 with an average of ten cars in the queue across both peak time periods. Lanes A1 and B1 queue lengths have around half the number of vehicles queuing suggesting there is less congestion along these lanes. The high vehicular queue on lane C1 is explained by the turning count

analyses which showed 43% of traffic was coming from arm C (Hitchin Street). The queue in lane C1 exceeds the camera view for 71% which means the actual queue is likely to be longer than the lengths displayed.

Table 2-9: Queue data for the 3 lanes around Hitchin Street / Whitehorse Street / High Street junction

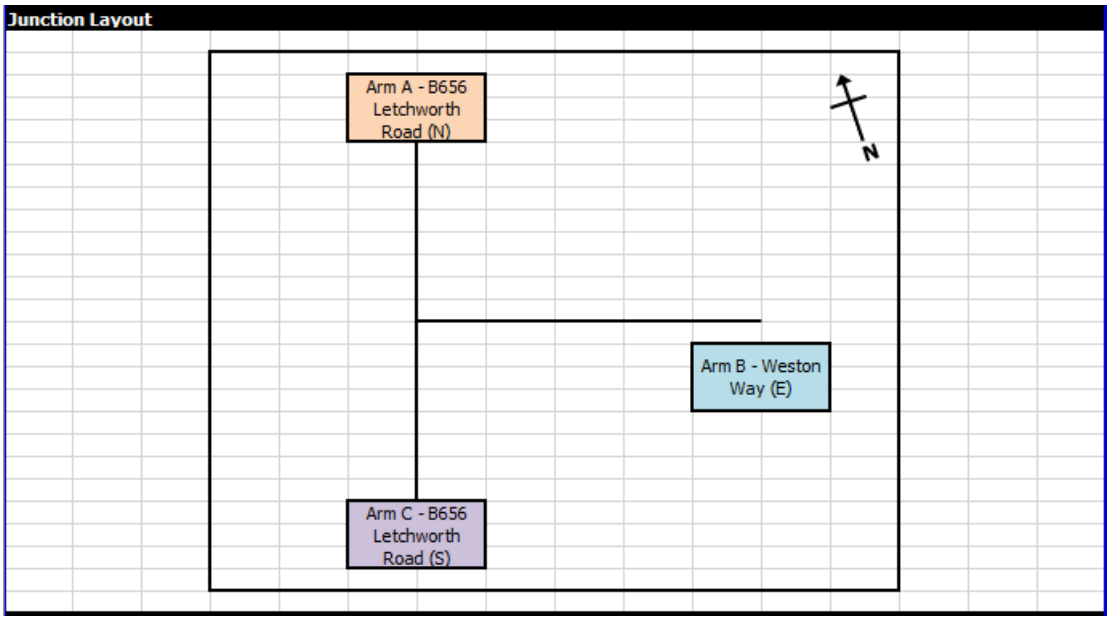
Queue Name	% of time queue exceeds camera view	Average Number Of Vehicles Queuing	Average Queue Length (M)
Lane A1	13%	4	22.8
Lane B1	0%	6	37.8
Lane C1	71%	10	62.1

Letchworth Road / Weston Way

Turning counts

2.17 This junction is in West Baldock and looks at traffic from Weston Way either leaving or joining Letchworth Road. In total, the junction recorded 6,542 trips with a split of 2,977 in the AM period and 3,565 in the PM period. During the peak hours the highest hourly flow recorded was 1,236 vehicles between 08:15 and 09:15 and 1,367 vehicles between 17:00 and 18:00 for the AM and PM peak respectively.

Figure 2-8: Site 22 junction layout with road names attached



2.18 The tables show the aggregated weekday AM (7:00-10:00) and PM (16:00-19:00) flows – all vehicles (including bicycles). The movements are spread out with the top 5 flows covering between 6-40% of total flows:

- Letchworth Road (S) to Letchworth Road (N) (40%)
- Letchworth Road (N) to Letchworth Road (S) (31%)
- Letchworth Road (S) to Weston Way (9%)
- Weston Way to Letchworth Road (S) (9%)
- Letchworth Road (N) to Weston Way (6%)

Table 2-10: Total AM (07:00 – 10:00) and PM (16:00 – 19:00) counts between different arms of site 22

Counts		To			
		A	B	C	Total
From	A	0	366	2036	2402
	B	354	0	561	915
	C	**2622**	603	0	**3225**
	Total	**2976**	969	2597	6542

Table 2-11: Percentage splits of the total AM and PM counts

Counts		To			
		A	B	C	Total
From	A	0%	6%	31%	37%
	B	5%	0%	9%	14%
	C	**40%**	9%	0%	**49%**
	Total	**45%**	15%	40%	100%

2.19 This shows that 71% of the traffic flow is running between Letchworth Road (N) and (S). Only 18% of the traffic flow is travelling between Letchworth Road (S) and Weston Way.

Queue data

2.20 The junction layout for queueing can be seen in Figure 2-9 and shows 1 lanes of traffic for traffic each of the roads.

Figure 2-9: Letchworth Road (N)/(S) / Weston Way junction layout



2.21 Three of the four lanes are heavily restricted by the camera view with the queue exceeding the cameras view for more than 60% of the time. For lanes A1, B1 and C2 the average number of vehicles queuing are very close to the maximum queue number. This means an interpretation is difficult to make. Lane C1 is not affected by this and shows an average number of three cars queuing to turn right into Weston

Way. Overall, it shows lane C1 to have the highest average of vehicles queuing which are motorists travelling from Letchworth into Baldock.

Table 2-12: Queue data for the four lanes around Letchworth Road (N)/(S) / Weston Way junction

Queue Name	% of time queue exceeds camera view	Average Number Of Vehicles Queuing	Maximum queue length in view of camera	Average Queue Length (M)
Lane A1	100%	2	2	13.3
Lane B1	63%	4	5	22.6
Lane C1	0%	3	N/A	16.3
Lane C2	71%	6	7	35.9

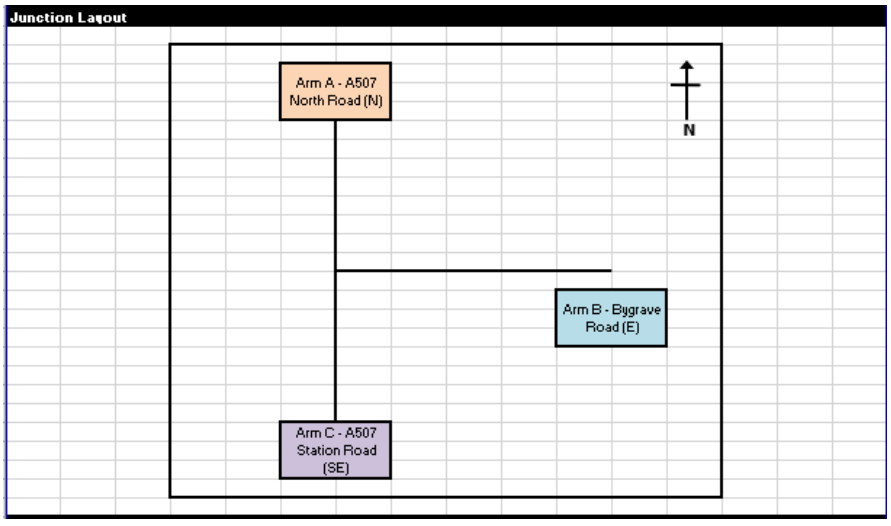
Bygrave Road / North Road

Turning counts

2.22 This junction is near the proposed development site with Bygrave Road currently running through the site up to Bygrave. This junction is important as traffic from the development will directly affect this junction. As well as this, the current traffic along Bygrave Road will need to be accommodated through the development.

2.23 In total, the junction recorded 5,480 trips with a split of 2,451 in the AM period and 3,029 in the PM period. During the peak hours the highest hourly flow recorded was 856 vehicles between 07:15 and 08:15 and 1,090 vehicles between 16:45 and 17:45 for the AM and PM peak respectively.

Figure 2-10: Site 9 junction layout with road names attached



2.24 The tables show the aggregated weekday AM (7:00-10:00) and PM (16:00-19:00) flows – all vehicles (including bicycles). The movements are spread out with the top five flows covering between 1-49% of total flows:

- Station Road to North Road (49%)
- North Road to Station Road (37%)
- Station Road to Bygrave Road (6%)
- Bygrave Road to Station Road (6%)
- North Road to Bygrave Road (1%)

Table 2-13: Total AM (07:00 – 10:00) and PM (16:00 – 19:00) counts between different arms of site 9

Counts		To			
		A	B	C	Total
From	A	0	59	2010	2069
	B	71	0	313	384
	C	**2710**	317	0	**3027**
	Total	**2781**	376	2323	5480

Table 2-14: Percentage splits of the total AM and PM counts

Counts		To			
		A	B	C	Total
From	A	0%	1%	37%	38%
	B	1%	0%	6%	7%
	C	**49%**	6%	0%	**55%**
	Total	**51%**	7%	42%	100%

2.25 This shows that the main movement along this junction is between North Road and Station Road making up 86% of trips. Only 14% of trips are going to/from Bygrave Road with most of the movements going through Station Road. Across both peaks there are around 750 cars using Bygrave Road.

Queue data

2.26 The junction layout for queueing can be seen in Figure 2-11 and shows one lane of traffic for Station Road and two lanes of traffic for Bygrave Road.

Figure 2-11: Station Road / North Road / Bygrave Road junction layout



2.27 For this junction queue lengths were minimal. The average length of B2 is longer than B1 as the previous analysis shows it is more common to want to turn left onto Station Road than to turn right onto North Road. This movement may also be more greatly affected by delay from the Whitehorse Street junction.

Table 2-15: Queue data for the four lanes around Station Road / North Road / Bygrave Road junction

Queue Name	% of time queue exceeds camera view	Average Number Of Vehicles Queuing	Average Queue Length (M)
Lane B1	0%	1	3.9
Lane B2	0%	1	8.0
Lane C1	0%	0	2.5

Clothall Road / Wallington Road

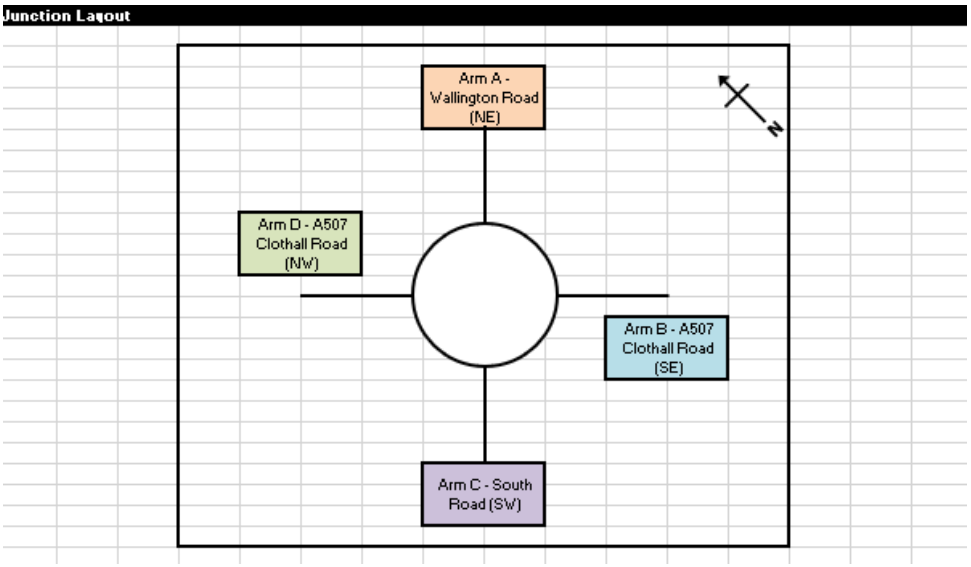
Turning counts

2.28 The junction is a roundabout with four arms. Wallington Road is an important junction to note as this contains the residential area of Clothall Common.

2.29 In total, the junction recorded 6,309 trips with a split of 2,986 in the AM period and 3,323 in the PM period. During the peak hours the highest hourly flow recorded was

1,147 vehicles between 07:30 and 08:30 and 1,230 vehicles between 17:00 and 18:00 for the AM and PM peak respectively.

Figure 2-12: Site 12 junction layout with road names attached



2.30 The tables show the aggregated weekday AM (7:00-10:00) and PM (16:00-19:00) flows – all vehicles (including bicycles). The movements are closely spread with the top 5 flows covering between 12-17% of total flows:

- Clothall Road (SE) to South Road (17%)
- South Road to Clothall Road (SE) (15%)
- Clothall Road (SE) to Clothall Road (NW) (15%)
- Clothall Road (NW) to Clothall Road (SE) (13%)
- Wallington Road to South Road (12%)

Table 2-16: Total AM (07:00 – 10:00) and PM (16:00 – 19:00) counts between different arms of site 12

Counts		To				
		A	B	C	D	Total
From	A	2	49	767	236	1054
	B	49	0	**1060**	919	**2028**
	C	653	937	11	218	1819
	D	204	807	390	7	1408
	Total	908	1793	**2228**	1380	6309

Table 2-17: Percentage splits of the total AM and PM counts

Counts		To				
		A	B	C	D	Total
From	A	0%	1%	12%	4%	17%
	B	1%	0%	**17%**	15%	**32%**
	C	10%	15%	0%	3%	29%
	D	3%	13%	6%	0%	22%
	Total	14%	28%	**35%**	22%	100%

2.31 Four of the top five flows include Clothall Road (SE/NW) showing that it is the predominate route for this junction. The data also shows that the movement between South Road and Clothall Road (SE) is stronger than the movement between the two Clothall Roads. The Wallington Road data shows that around 950 trips are coming from or going into Clothall Common during the combined AM and PM peak.

Queue data

2.32 The junction layout for queueing can be seen in Figure 2-13 and shows 1 lanes of traffic for Station road and 2 lanes of traffic for Bygrave Road.

Figure 2-13: Clothall Road / Wallington Road / South Road junction layout



2.33 Overall, the number of vehicles queuing around this junction is low, suggesting the roundabout flows smoothly. The longest queue on average is on lane C1 with most of this traffic coming from Letchworth or London Road. Looking more specifically into the data, this lane can be a choke point as between 08:30 and 09:00 there was an average of 20 vehicles queuing.

Table 2-18: Queue data for the five lanes around Clothall Road / Wallington Road / South Road junction

Queue Name	% of time queue exceeds camera view	Average Number Of Vehicles Queuing	Average Queue Length (M)
Lane A1	0%	2	12.2
Lane B1	8%	0	1.4
Lane B2	69%	1	10.2
Lane C1	0%	5	32.3
Lane D1	0%	2	10.6

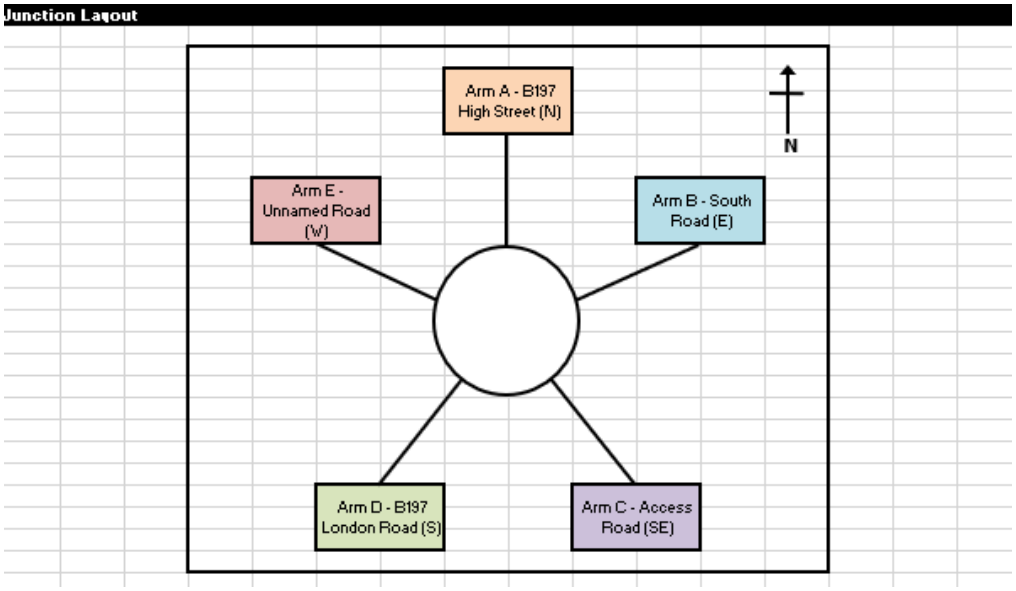
London Road / South Road / High Street

Turning counts

2.34 The junction is a roundabout with five arms. These comprise of London Road, South Road and High Street which connect Baldock to surrounding areas. Arm E is a direct road out of Tesco and shows the number of vehicles entering/exiting the supermarket during the peaks. Arm C leads onto a small housing estate.

2.35 In total, the junction recorded 9,549 trips with a split of 4,409 in the AM period and 5,140 in the PM period. During the peak hours the highest hourly flow recorded was 1,705 vehicles between 08:15 and 09:15 and 1,953 vehicles between 17:00 and 18:00 for the AM and PM peak respectively.

Figure 2-14: Site 19 junction layout with road names attached



2.36 The tables show the aggregated weekday AM (7:00-10:00) and PM (16:00-19:00) flows – all vehicles (including bicycles). The movements are closely spread with the top 5 flows covering between 9-12% of total flows:

- South Road to London Road (12%)
- Unnamed Road (Tesco) to High Street (10%)
- London Road to South Road (9%)
- London Road to High Street (9%)
- High Street to Unnamed Road (Tesco) (9%)

Table 2-19: Total AM (07:00 – 10:00) and PM (16:00 – 19:00) counts between different arms of site 19

Counts		To					
		A	B	C	D	E	Total
From	A	48	851	5	795	885	**2584**
	B	890	4	4	**1180**	461	2539
	C	9	4	0	11	2	26
	D	844	818	9	14	758	2443
	E	981	390	0	576	10	1957
	Total	**2772**	2067	18	2576	2116	9549

Table 2-20: Percentage splits of the total AM and PM counts

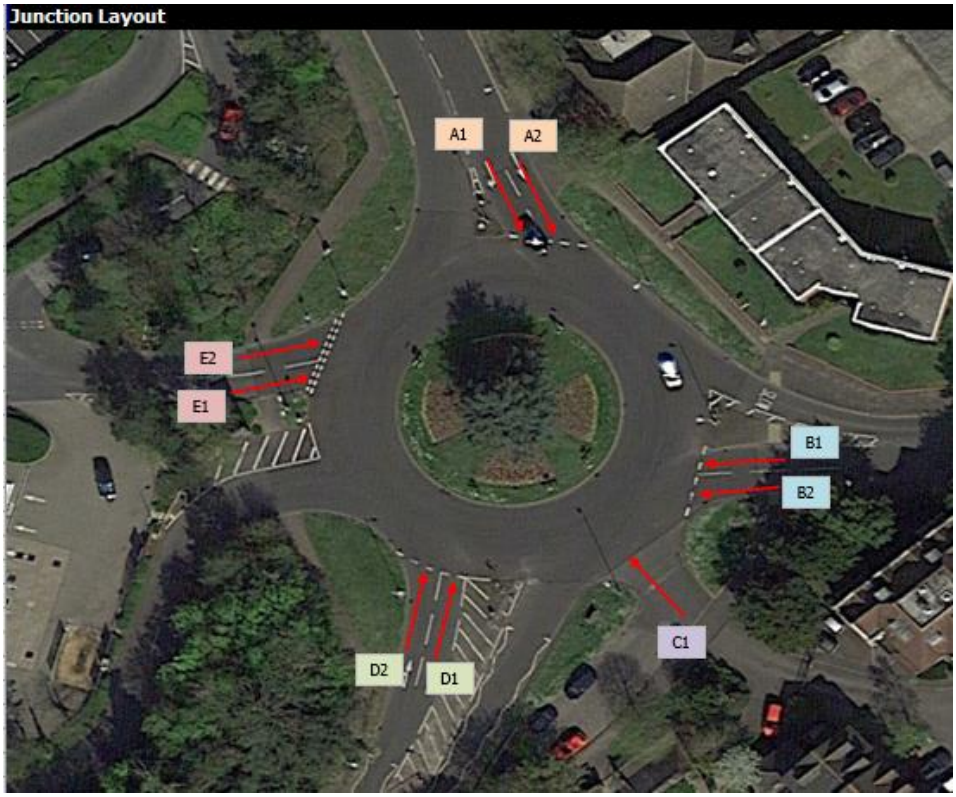
Counts		To					
		A	B	C	D	E	Total
From	**A**	1%	9%	0%	8%	9%	**27%**
	B	9%	0%	0%	**12%**	5%	27%
	C	0%	0%	0%	0%	0%	0%
	D	9%	9%	0%	0%	8%	26%
	E	10%	4%	0%	6%	0%	20%
	Total	**29%**	22%	0%	27%	22%	100%

2.37 The main flow identified here is between South Road and London Road – taking up 21% of total trips. Two flows in the top five use the unnamed road from Tesco, contributing 19% of traffic with 42% of traffic entering or existing from Tesco. Across the two peaks around 4,000 trips start or end in Tesco. An even higher proportion of trips (56%) enter or exit via the High Street arm.

Queue data

2.38 The junction layout for queueing can be seen in Figure 2-15 and shows two lanes of traffic for each road apart from the access road which has only one lane.

Figure 2-15: London Road / South Road / High Street junction layout



2.39 Overall, the queue lengths are low with most lanes having two to three vehicles on average queuing in them. This means traffic on the junction is like to flow well. Lane B2 has the longest queue length on average and contains drivers from South road either travelling to London Road or to Tesco.

Table 2-21: Queue data for the 9 lanes around London Road / South Road / High Street junction

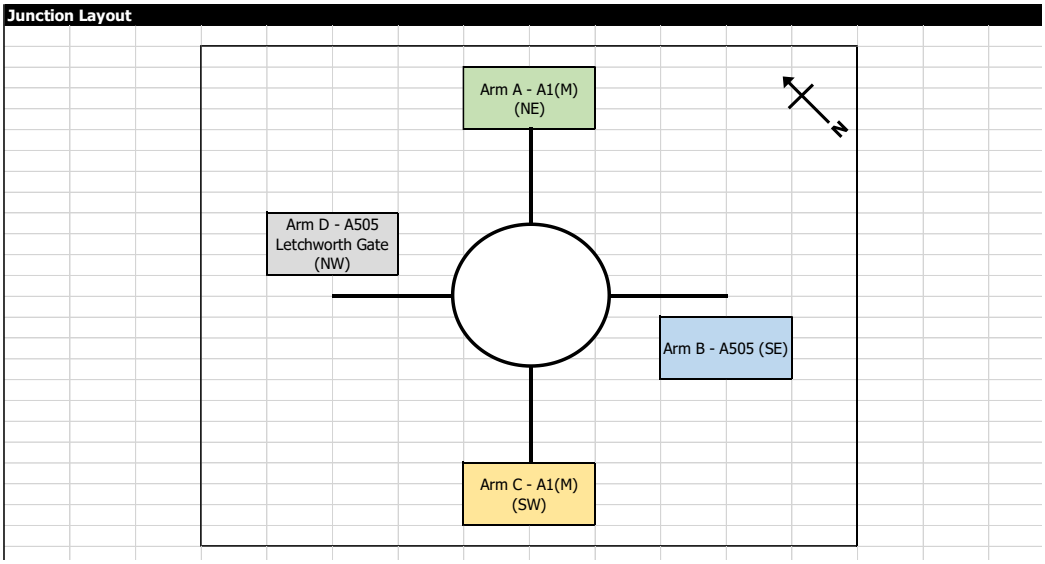
Queue Name	% of time queue exceeds camera view	Average Number Of Vehicles Queuing	Average Queue Length (M)
Lane A1	2%	2	10.9
Lane A2	0%	2	11.1
Lane B1	0%	2	12.3
Lane B2	0%	3	16.8
Lane C1	0%	0	0.8
Lane D1	23%	2	10.6
Lane D2	52%	2	12.7
Lane E1	0%	1	4.5
Lane E2	0%	1	8.3

A1(M) Junction 9

2.40 The junction is a grade separated interchange between the A1(M) and the A505. The survey captures movements between on the A1(M) slip roads and the A505 only, it does not capture through movements on the main A1(M) running lanes. Arm A includes the A1(M) slips to the north east, Arm B the A505 (SE), Arm C the A1(M) slips to the south west and Arm D the A505 (NW).

2.41 In total, the junction recorded 25,766 trips with a split of 12,322 in the AM period and 13,444 in the PM period. During the peak hours the highest hourly flow recorded was 4,551 vehicles between 07:45 and 08:45 and 4,874 vehicles between 17:00 and 18:00 for the AM and PM peak respectively.

Figure 2-16: Site 15 Junction Layout with road names



2.42 The tables show the aggregated weekday AM (7:00-10:00) and PM (16:00-19:00) flows – all vehicles (including bicycles). The highest movements are to and from the A1(M) (SW) and A505 (SE), with significant movements also from the A1(M) (SW) to the A505 (NW):

- A1(M) (SW) to A505 (SE) (23%)
- A505 (SE) to A1(M) (SW) (22%)
- A1(M) (SW) to A505 (NW) (15%)
- A505 (NW) to A1(M) (SW) (14%)
- A505 (SE) to A505 (NW) (8%)

Table 2-22: Total AM (07:00 – 10:00) and PM (16:00 – 19:00) counts between different arms of site 12

Counts		To				
		A	B	C	D	Total
From	A	5	686	3	852	1546
	B	530	417	5611	2125	8683
	C	15	6024	11	3874	9924
	D	688	1232	3621	72	5613
	Total	1238	8359	9246	6923	25766

Table 2-23: Percentage splits of the total AM and PM counts

Counts		To				
		A	B	C	D	Total
From	A	0%	3%	0%	3%	6%
	B	2%	2%	22%	8%	34%
	C	0%	23%	0%	15%	39%
	D	3%	5%	14%	0%	22%
	Total	5%	32%	36%	27%	**100%**

2.43 This analysis demonstrates that the main movements at the interchange are to and from the A1(M) (SW) to the A505, with movements between the arms of the A505 also significant. In total these movements represent 87% of all movements.

2.44 The movement from the A505 (SE) to the A1(M) (NE) are relatively low at 3% of the total for trips from A1(M) (NE) to A505 (SE) and 2% from A505 (SE) to A1(M) (NE). This suggests that if a more convenient link were made between the A1(M) and the A505 at J10, more traffic would be attracted along this link. Furthermore, a significant proportion of the movement between the A1(M) (NE) to the A505 (SW) at J10 are currently being made by HGV – a maximum of 25% in the AM peak and 7% in the PM peak.

Baldock Station Pick up and drop off

Figure 2-17: Baldock Station pick up and drop off camera



2.45 Baldock train station sees higher amounts of activity in the PM peak period (39 pick up and drop offs) compared to the AM peak (23 pick up and drop offs). There are larger numbers of drop offs in the AM peak than picks up, with slightly larger numbers of picks in the PM peak. Baldock Train Station had around 650,000 yearly passenger entry and exits over 2019/2020, equivalent to around 1,500 per day. Total entries and exists dropped dramatically over the course of the pandemic to 154,000 in 2020/2021. More recent figures, unaffected by lockdowns, are not currently available.

2.46 The total number of pick-ups and drop offs appears relatively low, which suggests that a significant proportion of station users walk to the station or are dropped off elsewhere. As reported below, cycle trips and car parking numbers are relatively low.

2.47 The number of weekend pick up and drop off is significantly higher than the weekday peak period (11am to 2pm), potentially suggesting a large amount of leisure trips from Baldock Station. On average there are still 2 more drop off / pick ups every hour through the weekend peak.

Table 2-24: Weekday and weekend peak split of station pick up and drop offs

Car Park occupancy	21.07.2022		23.07.2022	
Time	Pick Up	Drop Off	Pick Up	Drop Off
AM Total (7am - 10am)	2	23		
PM Total (4pm - 7pm)	21	16		
Weekend (11am - 2pm)			24	34
Total	23	39		

Table 2-25: Peak AM occupancy and pick-ups/drop offs

Time period	Peak occupancy	Peak pick ups	Peak drop offs
10am	32 (46%)		
7:15am – 7:30am		2	
7:00am - 7:15am			6

Table 2-26: Peak PM occupancy and pick-ups/drop offs

Time period	Peak occupancy	Peak pick ups	Peak drop offs
4pm	43 (61%)		
6:45pm - 7:00pm		6	
6:00pm – 6:15pm			4

Car parking accumulation

2.48 The car park can be seen in Figure 2-17 and the survey data indicates that the peak occupancy of the car park is 61%, with an average occupancy of 33% in the AM peak and 48% in the PM peak. The occupancy is higher in the PM peak, suggesting the car park continues to fill up during the day, rather than being filled with vehicles early. The maximum occupancy percentage for the car park is 61% as 4pm.

2.49 The car park capacity is 70 spaces, meaning during the weekday AM peak there are around 23 cars parked in the station, whilst across PM peak there are around 34 cars parked.

2.50 Over the weekend peak, the occupancy rate is lower at 20%, which contrasts with the higher levels of pick-ups/drop offs reported in Table 2-27. This suggests there are a lot of day visitors to Baldock perhaps getting a taxi to the station but not parking in it.

2.51 The pattern of use of the car park suggests it is not heavily used by commuters but is more so used by leisure visitors.

Table 2-27: Car park occupancy for the weekday AM and PM peak and weekend peak

Car Park Occupancy	Occupancy %	Count
Time	**21.07.2022**	**21.07.2022**
07:00	14%	10
07:15	17%	12
07:30	28%	19
07:45	29%	20
08:00	33%	23
08:15	32%	22
08:30	35%	24
08:45	35%	24
09:00	38%	26
09:15	42%	29
09:30	46%	32
09:45	46%	32
AM Average	**33%**	**23**
16:00	61%	43
16:15	59%	42
16:30	51%	36
16:45	51%	36
17:00	48%	33
17:15	48%	33
17:30	45%	31
17:45	42%	29
18:00	45%	31
18:15	42%	29
18:30	45%	31
18:45	38%	26
PM Average	**48%**	**33**
Total Average	**40.40%**	**28**

Cycle parking arrivals and departures

2.52 The cycle parking data shows a higher amount of cycles during the weekdays than the weekend, although the overall numbers are low, given the overall use of the station. Use is lower still during the weekend, suggesting that most people parking at the station are commuters.

Table 2-28: Cycle parking accumulations at Baldock Train Station split by weekend and weekday peak time periods

Cycle Parking	21.07.2022		23.07.2022	
Time	**Arrivals**	**Departures**	**Arrivals**	**Departures**
AM Total (7am - 10am)	**8**	**0**		
PM Total (4pm - 7pm)	**0**	**4**		
Weekend (11am - 3pm)			**1**	**0**
Total	**23**	**39**		

3. ROW movements around proposed development site

North Road (A507)

3.1 The pedestrian and cycle movements around North Road are relatively low which may be expected as it leads out onto the busy A507. Average daily pedestrian trips into the ROW are four, with exiting trips being an average of five. There is no clear difference between weekends and weekdays. A total of nine cyclists were recorded entering and exiting the right of way over the two week survey.

Table 3-1: Daily pedestrian and cycle movements around North Road (weekend days highlighted)

A507	Movement 1			Movement 2		
Date	**Peds**	**Cyclists**	**Total**	**Peds**	**Cyclists**	**Total**
08.07.2022	6	0	**6**	2	4	**6**
09.07.2022	3	0	**3**	6	0	**6**
10.07.2022	3	0	**3**	1	1	**2**
11.07.2022	2	1	**3**	4	1	**5**
12.07.2022	0	0	**0**	1	0	**1**
13.07.2022	10	0	**10**	8	0	**8**
14.07.2022	1	0	**1**	4	0	**4**
15.07.2022	3	0	**3**	4	0	**4**
16.07.2022	2	0	**2**	9	0	**9**
17.07.2022	5	1	**6**	3	1	**4**
18.07.2022	3	0	**3**	4	0	**4**
19.07.2022	0	0	**0**	0	0	**0**
20.07.2022	5	0	**5**	4	0	**4**
21.07.2022	9	0	**9**	8	0	**8**
Daily Average	3.7	0.1	**3.9**	4.1	0.5	**4.6**
Total	52	2	**54**	58	7	**65**

Figure 3-1: North Road site location



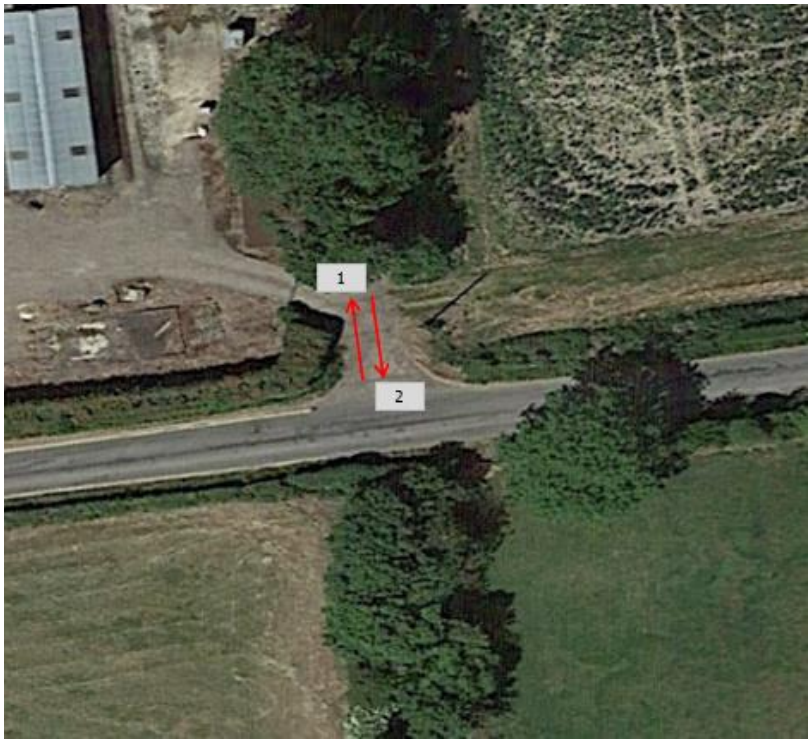
Bygrave Road

3.2 For Bygrave Road the active travel movements are larger with an average of 26 active travel movements entering or leaving the site. This site leads onto PRoW- Bygrave 002 which runs directly through the proposed development site and onto leisure countryside walks north of Baldock. Average daily pedestrian trips into the ROW are 14, with exiting trips being an average of 12. There is no clear difference between weekends and weekdays. A total of eight cyclists were recorded entering and exiting the right of way over the two week survey..

Table 3-2: Daily pedestrian and cycle movements around Bygrave Road

Bygrave Road	**Movement 1**			**Movement 2**		
Date	**Peds**	**Cyclists**	**Total**	**Peds**	**Cyclists**	**Total**
08.07.2022	20	0	**20**	11	0	**11**
09.07.2022	15	0	**15**	11	0	**11**
10.07.2022	14	1	**15**	14	1	**15**
11.07.2022	14	0	**14**	30	1	**31**
12.07.2022	14	0	**14**	8	0	**8**
13.07.2022	12	0	**12**	9	0	**9**
14.07.2022	15	0	**15**	11	0	**11**
15.07.2022	12	1	**13**	12	1	**13**
16.07.2022	24	0	**24**	5	0	**5**
17.07.2022	12	0	**12**	12	0	**12**
18.07.2022	5	0	**5**	7	0	**7**
19.07.2022	8	1	**9**	8	0	**8**
20.07.2022	18	0	**18**	16	2	**18**
21.07.2022	15	0	**15**	10	0	**10**
Daily Average	14.1	0.2	**14.4**	11.7	0.4	**12.1**
Total	198	3	**201**	164	5	**169**

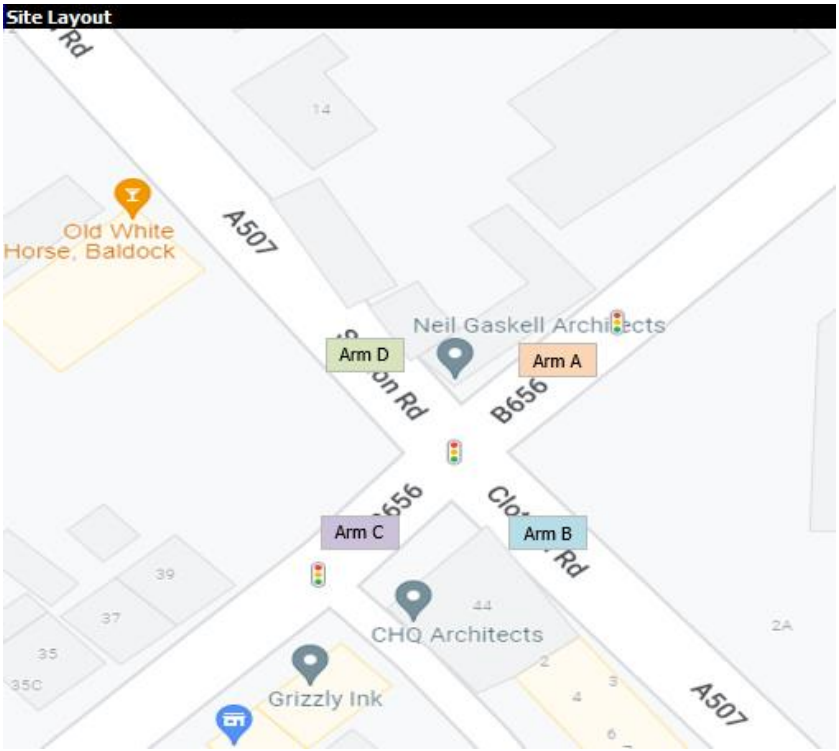
Figure 3-2: Bygrave Road site location



4. Additional Station Road / Clothall Road analysis

4.1 Additional active travel analysis was undertaken at this junction with Figure 4-1 displaying the corresponding arms and road names. This junction could provide value insights as it links Baldock train station to the high street and surrounding areas of Baldock.

Figure 4-1: Site 24 active travel junction layout



4.2 The main movement identified was between arm C and D which represents the movement between the town centre/high street and train station. Movement C to D represents 28% of the total with movement D to C representing 25% of total movements. All over movements were lower than 10% of the total showing how strong this movement is. C to B is the next biggest movement with 8% going either to or from either arm. It should be noted that this data is only for the PM peak for this junction as the AM peak is missing. The cyclist only movements represent around 6% of total active movements for the junction but the flows are similar in terms of direction.

Table 4-1: Total PM (16:00 – 19:00) active travel movements between different arms of site 24

Counts		To				
		A	B	C	D	Total
From	A	0	9	28	12	49
	B	3	0	38	24	65
	C	30	24	0	**131**	**185**
	D	14	35	118	0	167
	Total	47	68	**184**	167	466

Table 4-2: Percentage splits of the PM counts

Counts		To				
		A	B	C	D	Total
From	A	0%	2%	6%	3%	11%
	B	1%	0%	8%	5%	14%
	C	6%	5%	0%	**28%**	**40%**
	D	3%	8%	25%	0%	36%
	Total	10%	15%	**39%**	36%	100%

4.3 The total bicycle count across the junction was 29. The relative movements were similar to the pedestrian and total count tables with the main flow being identified as the movement between Whitehorse Street and Station Road.

Table 4-3: Total PM (16:00 – 19:00) pedal cycle movements between different arms of site 24

Counts		To				
		A	B	C	D	Total
From	A	0	2	2	1	5
	B	0	0	3	1	4
	C	2	1	0	5	8
	D	2	2	**8**	0	**12**
	Total	4	5	**13**	7	29

Table 4-4: Percentage splits of the PM counts

Counts		To				
		A	B	C	D	Total
From	A	0%	7%	7%	3%	17%
	B	0%	0%	10%	3%	14%
	C	7%	3%	0%	17%	28%
	D	7%	7%	**28%**	0%	**41%**
	Total	14%	17%	**45%**	24%	100%

Weekend junction flow

4.4 The weekend directional flow remains similar with the only change being the C to D movement becoming more heavily used. On the weekend cyclists make up 4% of total movements which is less than the weekday.

Table 4-5: Total weekend peak (11:00 – 14:00) active travel movements between different arms of site 24

Counts		To				
		A	B	C	D	Total
From	A	0	3	33	4	40
	B	10	0	36	24	70
	C	36	32	0	**146**	**214**
	D	1	11	86	0	98
	Total	47	46	155	**174**	422

Table 4-6: Percentage splits of the weekend counts

Counts		To				
		A	B	C	D	Total
From	A	0%	1%	8%	1%	9%
	B	2%	0%	9%	6%	17%
	C	9%	8%	0%	**35%**	**51%**
	D	0%	3%	20%	0%	23%
	Total	11%	11%	37%	**41%**	100%

4.5 The cycling movements were different to the pedestrian, with less movements from Whitehorse Street to Station Road. This can be explained by the very small sample size of 16 which means an anomaly such as a cycling group travelling a particular way may be able to skew the percentage splits in Table 4-8.

Table 4-7: Total weekend peak (11:00 – 14:00) pedal cycle movements between different arms of site 24

Counts		To				
		A	B	C	D	Total
From	A	0	0	1	0	1
	B	2	0	3	2	**7**
	C	2	0	0	1	3
	D	0	0	**5**	0	5
	Total	4	0	**9**	3	16

Table 4-8: Percentage splits of the weekend counts

Counts		To				
		A	B	C	D	Total
From	A	0%	0%	6%	0%	6%
	B	13%	0%	19%	13%	**44%**
	C	13%	0%	0%	6%	19%
	D	0%	0%	**31%**	0%	31%
	Total	25%	0%	**56%**	19%	100%

Appendix B

Accessibility Audit Report

Integrated Transport Planning Ltd
Cornerblock, 2 Cornwall St
Birmingham
B3 2DX
+44 (0)121 285 7301

Integrated Transport Planning Ltd
2 Abbey Gardens
Great College Street, Westminster
London
SW1P 3NL UK
+44 (0)7498 563196

Integrated Transport Planning Ltd
1 Broadway
Nottingham
NG1 1PR UK
+44 (0)115 824 8250

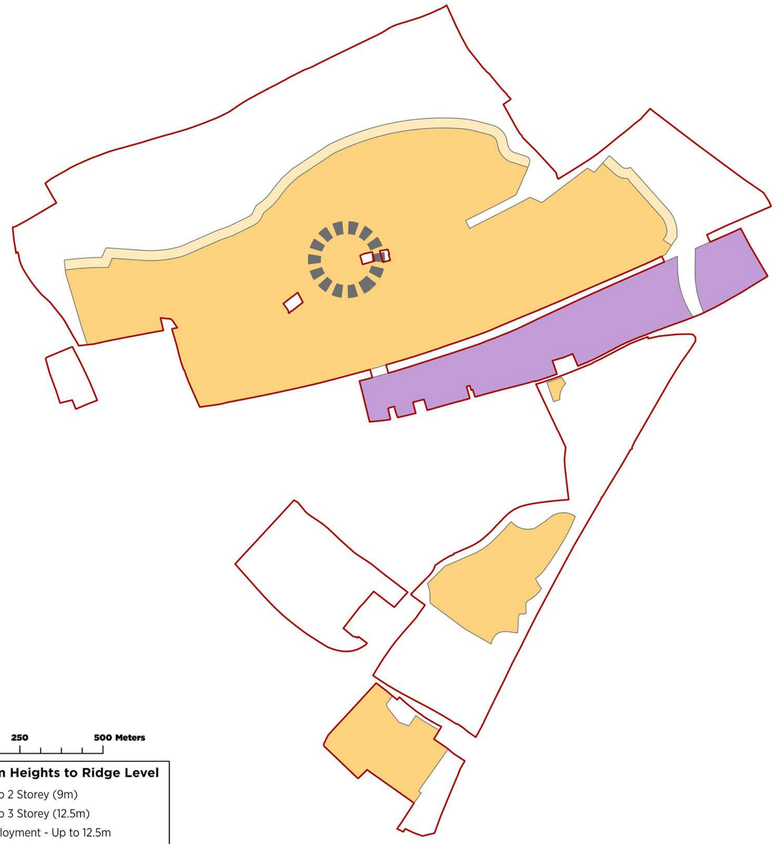
www.itpworld.net

a company of Royal HaskoningDHV

Annex D: Draft Parameter Plans

DRAFT

Maximum Building Heights Inset



All heights shown are finished floor level to building ridge height.
Finished floor levels may vary from existing ground levels AOD by up to 1.5m (+or -)

- Outline Application Site Boundary (DRAFT)

Existing Features
- Bygrave Road Wildlife Site (Onsite)
- Walls Field Scheduled Monument
- Existing Agricultural and Residential Buildings for Retention
- Key Retained Habitat

Land Use
- Development Area (Residential)
- Development Area (Employment)
- Development Area (Flexible Land Use - Residential or Education)
- Local Centre
- Health Hub
- Primary School
- Secondary School Option
- SEND School
- Battery Store or other energy infrastructure
- Waste Facilities

Access and Movement
- Primary Site Accesses - All Modes
- Public Transport Site Accesses
- Key Pedestrian and Cycle Accesses
- Modal Filter
- Primary Street Alignment
- Public Transport Only Route (Connecting to Primary Street)
- All Modes Bridge
- Active Travel Bridge
- Retained Public Rights of Way
- Existing PROW to be Diverted
- PROW Diversion Alignment
- Green Link
- Green Lane

Landscape/Green Infrastructure
- Strategic Green Infrastructure
- Formal Outdoor Sport
- Baldock Greenway
- Sustainable Drainage Corridor
- Primary SUDS Features

DRAFT

Rev	Description	Date

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Client:

Urban&Civic

Growing Baldock - Outline Planning Application

Parameter Plan

Scale@A1:	Drawn:	Designed:	Approved:
1:5,000	NMW	SJP	HA

0 250 Meters

Drawing Number:	Revision:	Date:
UAC092-002	H	28/01/2025

50 North Thirteenth Street, Central Milton Keynes, MK9 3BP
01908 666276 mail@davidlock.com **davidlock.com**

DAVID LOCK ASSOCIATES

Annex E: Residential TRICS Output

Calculation Reference: AUDIT-703109-230719-0728

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	KC	KENT	2 days
	WS	WEST SUSSEX	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 212 to 918 (units:)
Range Selected by User: 8 to 918 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 02/04/19

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

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	2 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	3

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

Selected Location Sub Categories:

Residential Zone	4

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 Vehicles Counts:

Servicing vehicles Included	12 days - Selected
Servicing vehicles Excluded	9 days - Selected

Secondary Filtering selection:

Use Class:

C3	4 days

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:

All Surveys Included

Population within 1 mile:

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

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

Population within 5 miles:

50,001 to 75,000	2 days
75,001 to 100,000	1 days
125,001 to 250,000	1 days

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

Car ownership within 5 miles:

1.1 to 1.5	4 days

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

Travel Plan:

Yes	1 days
No	3 days

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

PTAL Rating:

No PTAL Present	4 days

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

LIST OF SITES relevant to selection parameters

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

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

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

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

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

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

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

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
HC-03-A-21	To match WYG site selection
HC-03-A-22	To match WYG site selection
KC-03-A-03	To match WYG site selection
KC-03-A-04	To match WYG site selection
SC-03-A-04	To match WYG site selection
WS-03-A-08	To match WYG site selection

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.74

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	445	0.067	4	445	0.294	4	445	0.361
08:00 - 09:00	4	445	0.153	4	445	0.428	4	445	0.581
09:00 - 10:00	4	445	0.142	4	445	0.159	4	445	0.301
10:00 - 11:00	4	445	0.108	4	445	0.142	4	445	0.250
11:00 - 12:00	4	445	0.126	4	445	0.149	4	445	0.275
12:00 - 13:00	4	445	0.153	4	445	0.134	4	445	0.287
13:00 - 14:00	4	445	0.154	4	445	0.150	4	445	0.304
14:00 - 15:00	4	445	0.177	4	445	0.184	4	445	0.361
15:00 - 16:00	4	445	0.272	4	445	0.177	4	445	0.449
16:00 - 17:00	4	445	0.299	4	445	0.174	4	445	0.473
17:00 - 18:00	4	445	0.415	4	445	0.177	4	445	0.592
18:00 - 19:00	4	445	0.351	4	445	0.212	4	445	0.563
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.417			2.380			4.797

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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Parameter summary

Trip rate parameter range selected:	212 - 918 (units:)
Survey date date range:	01/01/11 - 02/04/19
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	11
Surveys manually removed from selection:	6

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	445	0.001	4	445	0.001	4	445	0.002
08:00 - 09:00	4	445	0.003	4	445	0.003	4	445	0.006
09:00 - 10:00	4	445	0.003	4	445	0.001	4	445	0.004
10:00 - 11:00	4	445	0.001	4	445	0.001	4	445	0.002
11:00 - 12:00	4	445	0.002	4	445	0.002	4	445	0.004
12:00 - 13:00	4	445	0.001	4	445	0.001	4	445	0.002
13:00 - 14:00	4	445	0.001	4	445	0.000	4	445	0.001
14:00 - 15:00	4	445	0.003	4	445	0.003	4	445	0.006
15:00 - 16:00	4	445	0.004	4	445	0.003	4	445	0.007
16:00 - 17:00	4	445	0.003	4	445	0.003	4	445	0.006
17:00 - 18:00	4	445	0.001	4	445	0.001	4	445	0.002
18:00 - 19:00	4	445	0.001	4	445	0.001	4	445	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.020			0.044

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	445	0.000	4	445	0.000	4	445	0.000
08:00 - 09:00	4	445	0.001	4	445	0.001	4	445	0.002
09:00 - 10:00	4	445	0.002	4	445	0.000	4	445	0.002
10:00 - 11:00	4	445	0.003	4	445	0.003	4	445	0.006
11:00 - 12:00	4	445	0.001	4	445	0.001	4	445	0.002
12:00 - 13:00	4	445	0.001	4	445	0.002	4	445	0.003
13:00 - 14:00	4	445	0.000	4	445	0.000	4	445	0.000
14:00 - 15:00	4	445	0.001	4	445	0.000	4	445	0.001
15:00 - 16:00	4	445	0.001	4	445	0.001	4	445	0.002
16:00 - 17:00	4	445	0.002	4	445	0.001	4	445	0.003
17:00 - 18:00	4	445	0.001	4	445	0.001	4	445	0.002
18:00 - 19:00	4	445	0.000	4	445	0.000	4	445	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.010			0.023

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	445	0.002	4	445	0.006	4	445	0.008
08:00 - 09:00	4	445	0.003	4	445	0.015	4	445	0.018
09:00 - 10:00	4	445	0.001	4	445	0.003	4	445	0.004
10:00 - 11:00	4	445	0.001	4	445	0.001	4	445	0.002
11:00 - 12:00	4	445	0.001	4	445	0.001	4	445	0.002
12:00 - 13:00	4	445	0.003	4	445	0.002	4	445	0.005
13:00 - 14:00	4	445	0.001	4	445	0.000	4	445	0.001
14:00 - 15:00	4	445	0.002	4	445	0.001	4	445	0.003
15:00 - 16:00	4	445	0.005	4	445	0.001	4	445	0.006
16:00 - 17:00	4	445	0.007	4	445	0.004	4	445	0.011
17:00 - 18:00	4	445	0.011	4	445	0.005	4	445	0.016
18:00 - 19:00	4	445	0.010	4	445	0.007	4	445	0.017
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.047			0.046			0.093

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	445	0.089	4	445	0.435	4	445	0.524
08:00 - 09:00	4	445	0.199	4	445	0.757	4	445	0.956
09:00 - 10:00	4	445	0.189	4	445	0.219	4	445	0.408
10:00 - 11:00	4	445	0.153	4	445	0.200	4	445	0.353
11:00 - 12:00	4	445	0.173	4	445	0.217	4	445	0.390
12:00 - 13:00	4	445	0.207	4	445	0.181	4	445	0.388
13:00 - 14:00	4	445	0.218	4	445	0.206	4	445	0.424
14:00 - 15:00	4	445	0.241	4	445	0.238	4	445	0.479
15:00 - 16:00	4	445	0.479	4	445	0.241	4	445	0.720
16:00 - 17:00	4	445	0.505	4	445	0.259	4	445	0.764
17:00 - 18:00	4	445	0.663	4	445	0.268	4	445	0.931
18:00 - 19:00	4	445	0.552	4	445	0.348	4	445	0.900
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.668			3.569			7.237

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	445	0.013	4	445	0.029	4	445	0.042
08:00 - 09:00	4	445	0.035	4	445	0.135	4	445	0.170
09:00 - 10:00	4	445	0.023	4	445	0.020	4	445	0.043
10:00 - 11:00	4	445	0.019	4	445	0.022	4	445	0.041
11:00 - 12:00	4	445	0.014	4	445	0.012	4	445	0.026
12:00 - 13:00	4	445	0.013	4	445	0.011	4	445	0.024
13:00 - 14:00	4	445	0.018	4	445	0.018	4	445	0.036
14:00 - 15:00	4	445	0.024	4	445	0.029	4	445	0.053
15:00 - 16:00	4	445	0.106	4	445	0.028	4	445	0.134
16:00 - 17:00	4	445	0.047	4	445	0.015	4	445	0.062
17:00 - 18:00	4	445	0.036	4	445	0.036	4	445	0.072
18:00 - 19:00	4	445	0.044	4	445	0.049	4	445	0.093
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.392			0.404			0.796

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	445	0.002	4	445	0.026	4	445	0.028
08:00 - 09:00	4	445	0.000	4	445	0.016	4	445	0.016
09:00 - 10:00	4	445	0.002	4	445	0.007	4	445	0.009
10:00 - 11:00	4	445	0.002	4	445	0.003	4	445	0.005
11:00 - 12:00	4	445	0.002	4	445	0.006	4	445	0.008
12:00 - 13:00	4	445	0.002	4	445	0.003	4	445	0.005
13:00 - 14:00	4	445	0.003	4	445	0.004	4	445	0.007
14:00 - 15:00	4	445	0.005	4	445	0.004	4	445	0.009
15:00 - 16:00	4	445	0.015	4	445	0.006	4	445	0.021
16:00 - 17:00	4	445	0.020	4	445	0.003	4	445	0.023
17:00 - 18:00	4	445	0.010	4	445	0.003	4	445	0.013
18:00 - 19:00	4	445	0.021	4	445	0.007	4	445	0.028
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.084			0.088			0.172

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	445	0.000	4	445	0.008	4	445	0.008
08:00 - 09:00	4	445	0.000	4	445	0.009	4	445	0.009
09:00 - 10:00	4	445	0.000	4	445	0.004	4	445	0.004
10:00 - 11:00	4	445	0.000	4	445	0.003	4	445	0.003
11:00 - 12:00	4	445	0.000	4	445	0.002	4	445	0.002
12:00 - 13:00	4	445	0.001	4	445	0.001	4	445	0.002
13:00 - 14:00	4	445	0.002	4	445	0.000	4	445	0.002
14:00 - 15:00	4	445	0.001	4	445	0.000	4	445	0.001
15:00 - 16:00	4	445	0.003	4	445	0.002	4	445	0.005
16:00 - 17:00	4	445	0.003	4	445	0.001	4	445	0.004
17:00 - 18:00	4	445	0.010	4	445	0.001	4	445	0.011
18:00 - 19:00	4	445	0.007	4	445	0.001	4	445	0.008
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.027			0.032			0.059

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	445	0.002	4	445	0.034	4	445	0.036
08:00 - 09:00	4	445	0.000	4	445	0.027	4	445	0.027
09:00 - 10:00	4	445	0.002	4	445	0.012	4	445	0.014
10:00 - 11:00	4	445	0.002	4	445	0.006	4	445	0.008
11:00 - 12:00	4	445	0.002	4	445	0.007	4	445	0.009
12:00 - 13:00	4	445	0.002	4	445	0.003	4	445	0.005
13:00 - 14:00	4	445	0.005	4	445	0.004	4	445	0.009
14:00 - 15:00	4	445	0.006	4	445	0.004	4	445	0.010
15:00 - 16:00	4	445	0.019	4	445	0.007	4	445	0.026
16:00 - 17:00	4	445	0.024	4	445	0.003	4	445	0.027
17:00 - 18:00	4	445	0.020	4	445	0.003	4	445	0.023
18:00 - 19:00	4	445	0.029	4	445	0.008	4	445	0.037
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.113			0.118			0.231

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.74

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	445	0.106	4	445	0.504	4	445	0.610
08:00 - 09:00	4	445	0.237	4	445	0.934	4	445	1.171
09:00 - 10:00	4	445	0.215	4	445	0.253	4	445	0.468
10:00 - 11:00	4	445	0.175	4	445	0.230	4	445	0.405
11:00 - 12:00	4	445	0.190	4	445	0.237	4	445	0.427
12:00 - 13:00	4	445	0.226	4	445	0.197	4	445	0.423
13:00 - 14:00	4	445	0.241	4	445	0.228	4	445	0.469
14:00 - 15:00	4	445	0.273	4	445	0.271	4	445	0.544
15:00 - 16:00	4	445	0.609	4	445	0.277	4	445	0.886
16:00 - 17:00	4	445	0.583	4	445	0.281	4	445	0.864
17:00 - 18:00	4	445	0.730	4	445	0.312	4	445	1.042
18:00 - 19:00	4	445	0.635	4	445	0.413	4	445	1.048
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.220			4.137			8.357

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.*

Annex F: Non-residential TRICS Outputs

HaskoningDHV UK Ltd Wick Road Surrey Licence No: 703101

Calculation Reference: AUDIT-703101-250130-0100

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 15 - VEHICLE SERVICES
Category : B - MOTORIST CENTRE (FAST FIT)
TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	DV	DEVON	1 days
05	EAST MIDLANDS		
	DY	DERBY	2 days
	NN	NORTH NORTHAMPTONSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	GM	GREATER MANCHESTER	1 days
	MS	MERSEYSIDE	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	200 to 1878 (units: sqm)
Range Selected by User:	150 to 1878 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 22/05/24

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

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	3 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	5
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Industrial Zone	2
Residential Zone	3
Built-Up Zone	1
No Sub Category	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	1 days - Selected
Servicing vehicles Excluded	6 days - Selected

Secondary Filtering selection:

Use Class:
Not Known 7 days

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:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	2 days
20,001 to 25,000	2 days
25,001 to 50,000	3 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	4 days

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

Travel Plan:

No	7 days

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

PTAL Rating:

No PTAL Present	7 days

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

LIST OF SITES relevant to selection parameters

1 DV-15-B-02 KWIK FIT DEVON
MARSH BARTON ROAD
EXETER
MARSH BARTON
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 1878 sqm
Survey date: THURSDAY 28/11/13 Survey Type: MANUAL

2 DY-15-B-01 KWIK FIT DERBY
OSMASTON ROAD
DERBY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 525 sqm
Survey date: TUESDAY 21/10/14 Survey Type: MANUAL

3 DY-15-B-02 NATIONAL TYRES & AUTOCARE DERBY
NOTTINGHAM ROAD
DERBY

Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 320 sqm
Survey date: FRIDAY 26/06/15 Survey Type: MANUAL

4 GM-15-B-03 ATS EUROMASTER GREATER MANCHESTER
YORKSHIRE STREET
ROCHDALE

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 600 sqm
Survey date: WEDNESDAY 21/10/15 Survey Type: MANUAL

5 MS-15-B-01 FAST FIT CENTRE MERSEYSIDE
HOYLAKE ROAD
BIRKENHEAD
NORTH BIRKENHEAD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 200 sqm
Survey date: WEDNESDAY 22/05/24 Survey Type: MANUAL

6 NN-15-B-01 NATIONAL TYRES NORTH NORTHAMPTONSHIRE
OXFORD STREET
WELLINGBOROUGH

Neighbourhood Centre (PPS6 Local Centre)
Built-Up Zone
Total Gross floor area: 336 sqm
Survey date: WEDNESDAY 26/09/12 Survey Type: MANUAL

7 NY-15-B-04 KWIK FIT NORTH YORKSHIRE
LONG STREET
THIRSK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 363 sqm
Survey date: MONDAY 17/10/11 Survey Type: MANUAL

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

TRIP RATE for Land Use 15 - VEHICLE SERVICES/B - MOTORIST CENTRE (FAST FIT)
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	643	0.363	6	643	0.078	6	643	0.441
08:00 - 09:00	7	603	0.971	7	603	0.261	7	603	1.232
09:00 - 10:00	7	603	0.900	7	603	0.853	7	603	1.753
10:00 - 11:00	7	603	0.805	7	603	0.734	7	603	1.539
11:00 - 12:00	7	603	0.829	7	603	0.829	7	603	1.658
12:00 - 13:00	7	603	0.782	7	603	0.876	7	603	1.658
13:00 - 14:00	7	603	0.640	7	603	0.829	7	603	1.469
14:00 - 15:00	7	603	0.545	7	603	0.640	7	603	1.185
15:00 - 16:00	7	603	0.474	7	603	0.521	7	603	0.995
16:00 - 17:00	7	603	0.663	7	603	0.663	7	603	1.326
17:00 - 18:00	7	603	0.213	7	603	0.663	7	603	0.876
18:00 - 19:00	6	643	0.104	6	643	0.389	6	643	0.493
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			7.289			7.336			14.625

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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Parameter summary

Trip rate parameter range selected:	200 - 1878 (units: sqm)
Survey date date range:	01/01/10 - 22/05/24
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 15 - VEHICLE SERVICES/B - MOTORIST CENTRE (FAST FIT)
TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	643	0.000	6	643	0.000	6	643	0.000
08:00 - 09:00	7	603	0.000	7	603	0.000	7	603	0.000
09:00 - 10:00	7	603	0.000	7	603	0.000	7	603	0.000
10:00 - 11:00	7	603	0.024	7	603	0.024	7	603	0.048
11:00 - 12:00	7	603	0.000	7	603	0.000	7	603	0.000
12:00 - 13:00	7	603	0.000	7	603	0.000	7	603	0.000
13:00 - 14:00	7	603	0.000	7	603	0.000	7	603	0.000
14:00 - 15:00	7	603	0.000	7	603	0.000	7	603	0.000
15:00 - 16:00	7	603	0.000	7	603	0.000	7	603	0.000
16:00 - 17:00	7	603	0.024	7	603	0.024	7	603	0.048
17:00 - 18:00	7	603	0.000	7	603	0.000	7	603	0.000
18:00 - 19:00	6	643	0.000	6	643	0.000	6	643	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.048			0.048			0.096

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

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

TRIP RATE for Land Use 15 - VEHICLE SERVICES/B - MOTORIST CENTRE (FAST FIT)
OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	643	0.000	6	643	0.000	6	643	0.000
08:00 - 09:00	7	603	0.000	7	603	0.000	7	603	0.000
09:00 - 10:00	7	603	0.024	7	603	0.024	7	603	0.048
10:00 - 11:00	7	603	0.095	7	603	0.071	7	603	0.166
11:00 - 12:00	7	603	0.047	7	603	0.047	7	603	0.094
12:00 - 13:00	7	603	0.047	7	603	0.071	7	603	0.118
13:00 - 14:00	7	603	0.000	7	603	0.000	7	603	0.000
14:00 - 15:00	7	603	0.024	7	603	0.000	7	603	0.024
15:00 - 16:00	7	603	0.024	7	603	0.047	7	603	0.071
16:00 - 17:00	7	603	0.024	7	603	0.024	7	603	0.048
17:00 - 18:00	7	603	0.000	7	603	0.024	7	603	0.024
18:00 - 19:00	6	643	0.000	6	643	0.000	6	643	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.285			0.308			0.593

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

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

TRIP RATE for Land Use 15 - VEHICLE SERVICES/B - MOTORIST CENTRE (FAST FIT)
CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	643	0.000	6	643	0.000	6	643	0.000
08:00 - 09:00	7	603	0.000	7	603	0.000	7	603	0.000
09:00 - 10:00	7	603	0.000	7	603	0.000	7	603	0.000
10:00 - 11:00	7	603	0.000	7	603	0.000	7	603	0.000
11:00 - 12:00	7	603	0.000	7	603	0.000	7	603	0.000
12:00 - 13:00	7	603	0.000	7	603	0.000	7	603	0.000
13:00 - 14:00	7	603	0.000	7	603	0.000	7	603	0.000
14:00 - 15:00	7	603	0.000	7	603	0.000	7	603	0.000
15:00 - 16:00	7	603	0.000	7	603	0.000	7	603	0.000
16:00 - 17:00	7	603	0.000	7	603	0.000	7	603	0.000
17:00 - 18:00	7	603	0.024	7	603	0.024	7	603	0.048
18:00 - 19:00	6	643	0.000	6	643	0.000	6	643	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.024			0.048

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

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

Calculation Reference: AUDIT-703101-250130-0121

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : G - GP SURGERIES
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	IW	ISLE OF WIGHT	1 days
03	SOUTH WEST		
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
05	EAST MIDLANDS		
	DY	DERBY	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	DR	DONCASTER	1 days
09	NORTH		
	CU	CUMBERLAND	1 days
	TW	TYNE & WEAR	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	1046 to 2150 (units: sqm)
Range Selected by User:	750 to 2250 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 18/06/24

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

Selected survey days:

Tuesday	1 days
Wednesday	2 days
Thursday	4 days
Friday	1 days

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

Selected survey types:

Manual count	8 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Residential Zone	8

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 Vehicles Counts:

Servicing vehicles Included	8 days - Selected
Servicing vehicles Excluded	X days - Selected

Secondary Filtering selection:

Use Class:

E(e)	8 days

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:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

15,001 to 20,000	2 days
20,001 to 25,000	3 days
25,001 to 50,000	2 days
50,001 to 100,000	1 days

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

Population within 5 miles:

50,001 to 75,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	1 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	5 days

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

Travel Plan:

No	8 days

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

PTAL Rating:

No PTAL Present	8 days

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

LIST OF SITES relevant to selection parameters

1 CA-05-G-01 MEDICAL CENTRE CAMBRIDGESHIRE
NUFFIELD ROAD
CAMBRIDGE
CHESTERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1046 sqm
Survey date: FRIDAY *23/06/23* *Survey Type: MANUAL*

2 CU-05-G-03 GP SURGERY CUMBERLAND
FUSEHILL STREET
CARLISLE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1370 sqm
Survey date: TUESDAY *18/06/24* *Survey Type: MANUAL*

3 DR-05-G-01 GP SURGERY DONCASTER
GOODISON BOULEVARD
DONCASTER
CANTLEY
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 1050 sqm
Survey date: THURSDAY *23/09/21* *Survey Type: MANUAL*

4 DY-05-G-02 GP SURGERY DERBY
ST THOMAS ROAD
DERBY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 2000 sqm
Survey date: WEDNESDAY *11/10/23* *Survey Type: MANUAL*

5 ES-05-G-03 MEDICAL CENTRE EAST SUSSEX
VICTORIA DRIVE
EASTBOURNE

Edge of Town
Residential Zone
Total Gross floor area: 1976 sqm
Survey date: THURSDAY *28/03/24* *Survey Type: MANUAL*

6 IW-05-G-01 GP SURGERY ISLE OF WIGHT
NEWPORT ROAD
COWES

Edge of Town
Residential Zone
Total Gross floor area: 1400 sqm
Survey date: WEDNESDAY *26/06/19* *Survey Type: MANUAL*

7 TW-05-G-04 GP SURGERY TYNE & WEAR
MANOR WALK
NEWCASTLE UPON TYNE
BENTON
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 1400 sqm
Survey date: THURSDAY *18/10/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 WL-05-G-01 MEDICAL CENTRE WILTSHIRE
MIDDLEFIELD ROAD
CHIPPENHAM

Edge of Town
Residential Zone
Total Gross floor area: 2150 sqm
Survey date: THURSDAY *11/05/23* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.80

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.071	1	1400	0.000	1	1400	0.071
07:00 - 08:00	7	1607	1.156	7	1607	0.196	7	1607	1.352
08:00 - 09:00	8	1537	2.563	8	1537	1.359	8	1537	3.922
09:00 - 10:00	8	1537	2.831	8	1537	2.628	8	1537	5.459
10:00 - 11:00	8	1537	2.709	8	1537	2.376	8	1537	5.085
11:00 - 12:00	8	1537	2.432	8	1537	2.522	8	1537	4.954
12:00 - 13:00	8	1537	2.392	8	1537	2.546	8	1537	4.938
13:00 - 14:00	8	1537	2.156	8	1537	2.229	8	1537	4.385
14:00 - 15:00	8	1537	2.522	8	1537	2.465	8	1537	4.987
15:00 - 16:00	8	1537	2.164	8	1537	2.319	8	1537	4.483
16:00 - 17:00	8	1537	1.896	8	1537	2.546	8	1537	4.442
17:00 - 18:00	8	1537	1.058	8	1537	1.952	8	1537	3.010
18:00 - 19:00	8	1537	0.456	8	1537	0.944	8	1537	1.400
19:00 - 20:00	1	1400	0.143	1	1400	0.143	1	1400	0.286
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			24.549			24.225			48.774

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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Parameter summary

Trip rate parameter range selected:	1046 - 2150 (units: sqm)
Survey date date range:	01/01/16 - 18/06/24
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
07:00 - 08:00	7	1607	0.009	7	1607	0.000	7	1607	0.009
08:00 - 09:00	8	1537	0.049	8	1537	0.000	8	1537	0.049
09:00 - 10:00	8	1537	0.016	8	1537	0.024	8	1537	0.040
10:00 - 11:00	8	1537	0.016	8	1537	0.033	8	1537	0.049
11:00 - 12:00	8	1537	0.065	8	1537	0.041	8	1537	0.106
12:00 - 13:00	8	1537	0.008	8	1537	0.033	8	1537	0.041
13:00 - 14:00	8	1537	0.033	8	1537	0.041	8	1537	0.074
14:00 - 15:00	8	1537	0.041	8	1537	0.041	8	1537	0.082
15:00 - 16:00	8	1537	0.033	8	1537	0.041	8	1537	0.074
16:00 - 17:00	8	1537	0.049	8	1537	0.033	8	1537	0.082
17:00 - 18:00	8	1537	0.016	8	1537	0.041	8	1537	0.057
18:00 - 19:00	8	1537	0.024	8	1537	0.016	8	1537	0.040
19:00 - 20:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.359			0.344			0.703

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

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.071	1	1400	0.000	1	1400	0.071
07:00 - 08:00	7	1607	1.298	7	1607	0.213	7	1607	1.511
08:00 - 09:00	8	1537	3.189	8	1537	1.595	8	1537	4.784
09:00 - 10:00	8	1537	3.881	8	1537	3.449	8	1537	7.330
10:00 - 11:00	8	1537	3.441	8	1537	3.157	8	1537	6.598
11:00 - 12:00	8	1537	3.287	8	1537	3.222	8	1537	6.509
12:00 - 13:00	8	1537	3.124	8	1537	3.384	8	1537	6.508
13:00 - 14:00	8	1537	2.872	8	1537	2.872	8	1537	5.744
14:00 - 15:00	8	1537	3.490	8	1537	3.319	8	1537	6.809
15:00 - 16:00	8	1537	2.904	8	1537	3.181	8	1537	6.085
16:00 - 17:00	8	1537	2.644	8	1537	3.506	8	1537	6.150
17:00 - 18:00	8	1537	1.318	8	1537	2.498	8	1537	3.816
18:00 - 19:00	8	1537	0.586	8	1537	1.196	8	1537	1.782
19:00 - 20:00	1	1400	0.143	1	1400	0.143	1	1400	0.286
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			32.248			31.735			63.983

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

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
07:00 - 08:00	7	1607	0.507	7	1607	0.027	7	1607	0.534
08:00 - 09:00	8	1537	0.789	8	1537	0.610	8	1537	1.399
09:00 - 10:00	8	1537	1.106	8	1537	1.058	8	1537	2.164
10:00 - 11:00	8	1537	0.976	8	1537	1.131	8	1537	2.107
11:00 - 12:00	8	1537	0.960	8	1537	1.033	8	1537	1.993
12:00 - 13:00	8	1537	0.716	8	1537	0.781	8	1537	1.497
13:00 - 14:00	8	1537	0.830	8	1537	0.667	8	1537	1.497
14:00 - 15:00	8	1537	0.822	8	1537	0.879	8	1537	1.701
15:00 - 16:00	8	1537	0.748	8	1537	0.773	8	1537	1.521
16:00 - 17:00	8	1537	0.643	8	1537	0.757	8	1537	1.400
17:00 - 18:00	8	1537	0.504	8	1537	0.781	8	1537	1.285
18:00 - 19:00	8	1537	0.081	8	1537	0.187	8	1537	0.268
19:00 - 20:00	1	1400	0.143	1	1400	0.357	1	1400	0.500
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.825			9.041			17.866

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

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
07:00 - 08:00	7	1607	0.080	7	1607	0.000	7	1607	0.080
08:00 - 09:00	8	1537	0.301	8	1537	0.081	8	1537	0.382
09:00 - 10:00	8	1537	0.325	8	1537	0.366	8	1537	0.691
10:00 - 11:00	8	1537	0.309	8	1537	0.268	8	1537	0.577
11:00 - 12:00	8	1537	0.350	8	1537	0.382	8	1537	0.732
12:00 - 13:00	8	1537	0.203	8	1537	0.220	8	1537	0.423
13:00 - 14:00	8	1537	0.220	8	1537	0.228	8	1537	0.448
14:00 - 15:00	8	1537	0.236	8	1537	0.212	8	1537	0.448
15:00 - 16:00	8	1537	0.212	8	1537	0.236	8	1537	0.448
16:00 - 17:00	8	1537	0.236	8	1537	0.260	8	1537	0.496
17:00 - 18:00	8	1537	0.114	8	1537	0.195	8	1537	0.309
18:00 - 19:00	8	1537	0.008	8	1537	0.130	8	1537	0.138
19:00 - 20:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.594			2.578			5.172

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

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.80

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.071	1	1400	0.000	1	1400	0.071
07:00 - 08:00	7	1607	1.894	7	1607	0.240	7	1607	2.134
08:00 - 09:00	8	1537	4.328	8	1537	2.286	8	1537	6.614
09:00 - 10:00	8	1537	5.329	8	1537	4.897	8	1537	10.226
10:00 - 11:00	8	1537	4.743	8	1537	4.588	8	1537	9.331
11:00 - 12:00	8	1537	4.662	8	1537	4.678	8	1537	9.340
12:00 - 13:00	8	1537	4.051	8	1537	4.418	8	1537	8.469
13:00 - 14:00	8	1537	3.954	8	1537	3.807	8	1537	7.761
14:00 - 15:00	8	1537	4.588	8	1537	4.450	8	1537	9.038
15:00 - 16:00	8	1537	3.897	8	1537	4.230	8	1537	8.127
16:00 - 17:00	8	1537	3.571	8	1537	4.556	8	1537	8.127
17:00 - 18:00	8	1537	1.952	8	1537	3.514	8	1537	5.466
18:00 - 19:00	8	1537	0.700	8	1537	1.529	8	1537	2.229
19:00 - 20:00	1	1400	0.286	1	1400	0.500	1	1400	0.786
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			44.026			43.693			87.719

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

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL Servicing Vehicles
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
07:00 - 08:00	7	1607	0.027	7	1607	0.018	7	1607	0.045
08:00 - 09:00	8	1537	0.057	8	1537	0.033	8	1537	0.090
09:00 - 10:00	8	1537	0.106	8	1537	0.138	8	1537	0.244
10:00 - 11:00	8	1537	0.122	8	1537	0.106	8	1537	0.228
11:00 - 12:00	8	1537	0.065	8	1537	0.073	8	1537	0.138
12:00 - 13:00	8	1537	0.065	8	1537	0.073	8	1537	0.138
13:00 - 14:00	8	1537	0.033	8	1537	0.016	8	1537	0.049
14:00 - 15:00	8	1537	0.089	8	1537	0.089	8	1537	0.178
15:00 - 16:00	8	1537	0.065	8	1537	0.065	8	1537	0.130
16:00 - 17:00	8	1537	0.033	8	1537	0.049	8	1537	0.082
17:00 - 18:00	8	1537	0.041	8	1537	0.033	8	1537	0.074
18:00 - 19:00	8	1537	0.016	8	1537	0.016	8	1537	0.032
19:00 - 20:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.719			0.709			1.428

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.*

HaskoningDHV UK Ltd Wick Road Surrey Licence No: 703101

Calculation Reference: AUDIT-703101-250130-0132

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
05	EAST MIDLANDS		
	NT	NOTTINGHAMSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	DR	DONCASTER	1 days
	NY	NORTH YORKSHIRE	1 days
09	NORTH		
	CU	CUMBERLAND	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	1750 to 105335 (units: sqm)
Range Selected by User:	1750 to 105335 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 19/06/24

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

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	2 days
Friday	1 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	4

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:

Industrial Zone	4
Development Zone	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	3 days - Selected
Servicing vehicles Excluded	2 days - Selected

Secondary Filtering selection:

Use Class:

n/a	1 days
B8	4 days

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®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	1 days
5,001 to 10,000	1 days
10,001 to 15,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

1.1 to 1.5	5 days

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

Travel Plan:

Yes	1 days
No	4 days

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

PTAL Rating:

No PTAL Present	5 days

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

LIST OF SITES relevant to selection parameters

1 CU-02-F-01 WAREHOUSING & DISTRIBUTION CUMBERLAND
CARLISLE ROAD
BRAMPTON

Edge of Town
Industrial Zone
Total Gross floor area: 4007 sqm
Survey date: WEDNESDAY 19/06/24 Survey Type: MANUAL

2 DR-02-F-01 TESCO DISTRIBUTION CENTRE DONCASTER
MIDDLE BANK
DONCASTER

Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 80100 sqm
Survey date: TUESDAY 21/09/21 Survey Type: MANUAL

3 EX-02-F-01 SPORTS SUPPLEMENTS ESSEX
BRUNEL WAY
COLCHESTER
SEVERALLS INDUSTRIAL PK
Edge of Town
Industrial Zone
Total Gross floor area: 6560 sqm
Survey date: FRIDAY 18/05/18 Survey Type: MANUAL

4 NT-02-F-01 LOGISTICS WAREHOUSING PARK NOTTINGHAMSHIRE
NOOK FLATT ROAD
NEAR WORKSOP
BLYTH
Edge of Town
Development Zone
Total Gross floor area: 105335 sqm
Survey date: WEDNESDAY 18/10/23 Survey Type: MANUAL

5 NY-02-F-01 REMOVALS SERVICE NORTH YORKSHIRE
GRIMBALD CRAG CLOSE
KNARESBOROUGH

Edge of Town
Industrial Zone
Total Gross floor area: 1750 sqm
Survey date: MONDAY 19/06/23 Survey Type: MANUAL

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.21

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.074	3	63147	0.029	3	63147	0.103
06:00 - 07:00	3	63147	0.028	3	63147	0.063	3	63147	0.091
07:00 - 08:00	5	39550	0.047	5	39550	0.025	5	39550	0.072
08:00 - 09:00	5	39550	0.039	5	39550	0.026	5	39550	0.065
09:00 - 10:00	5	39550	0.052	5	39550	0.035	5	39550	0.087
10:00 - 11:00	5	39550	0.049	5	39550	0.049	5	39550	0.098
11:00 - 12:00	5	39550	0.050	5	39550	0.040	5	39550	0.090
12:00 - 13:00	5	39550	0.050	5	39550	0.059	5	39550	0.109
13:00 - 14:00	5	39550	0.052	5	39550	0.041	5	39550	0.093
14:00 - 15:00	5	39550	0.050	5	39550	0.078	5	39550	0.128
15:00 - 16:00	5	39550	0.044	5	39550	0.042	5	39550	0.086
16:00 - 17:00	5	39550	0.034	5	39550	0.045	5	39550	0.079
17:00 - 18:00	5	39550	0.037	5	39550	0.041	5	39550	0.078
18:00 - 19:00	5	39550	0.022	5	39550	0.046	5	39550	0.068
19:00 - 20:00	3	63147	0.018	3	63147	0.023	3	63147	0.041
20:00 - 21:00	3	63147	0.016	3	63147	0.020	3	63147	0.036
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.662			0.662			1.324

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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Parameter summary

Trip rate parameter range selected:	1750 - 105335 (units: sqm)
Survey date date range:	01/01/16 - 19/06/24
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.007	3	63147	0.010	3	63147	0.017
06:00 - 07:00	3	63147	0.008	3	63147	0.010	3	63147	0.018
07:00 - 08:00	5	39550	0.013	5	39550	0.014	5	39550	0.027
08:00 - 09:00	5	39550	0.018	5	39550	0.016	5	39550	0.034
09:00 - 10:00	5	39550	0.022	5	39550	0.016	5	39550	0.038
10:00 - 11:00	5	39550	0.025	5	39550	0.027	5	39550	0.052
11:00 - 12:00	5	39550	0.022	5	39550	0.015	5	39550	0.037
12:00 - 13:00	5	39550	0.022	5	39550	0.021	5	39550	0.043
13:00 - 14:00	5	39550	0.018	5	39550	0.018	5	39550	0.036
14:00 - 15:00	5	39550	0.026	5	39550	0.021	5	39550	0.047
15:00 - 16:00	5	39550	0.024	5	39550	0.021	5	39550	0.045
16:00 - 17:00	5	39550	0.014	5	39550	0.015	5	39550	0.029
17:00 - 18:00	5	39550	0.020	5	39550	0.014	5	39550	0.034
18:00 - 19:00	5	39550	0.011	5	39550	0.018	5	39550	0.029
19:00 - 20:00	3	63147	0.007	3	63147	0.013	3	63147	0.020
20:00 - 21:00	3	63147	0.007	3	63147	0.012	3	63147	0.019
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.264			0.261			0.525

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.002	3	63147	0.001	3	63147	0.003
06:00 - 07:00	3	63147	0.000	3	63147	0.000	3	63147	0.000
07:00 - 08:00	5	39550	0.000	5	39550	0.000	5	39550	0.000
08:00 - 09:00	5	39550	0.001	5	39550	0.000	5	39550	0.001
09:00 - 10:00	5	39550	0.000	5	39550	0.000	5	39550	0.000
10:00 - 11:00	5	39550	0.002	5	39550	0.001	5	39550	0.003
11:00 - 12:00	5	39550	0.000	5	39550	0.000	5	39550	0.000
12:00 - 13:00	5	39550	0.000	5	39550	0.000	5	39550	0.000
13:00 - 14:00	5	39550	0.002	5	39550	0.000	5	39550	0.002
14:00 - 15:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
15:00 - 16:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
16:00 - 17:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
17:00 - 18:00	5	39550	0.001	5	39550	0.000	5	39550	0.001
18:00 - 19:00	5	39550	0.001	5	39550	0.000	5	39550	0.001
19:00 - 20:00	3	63147	0.001	3	63147	0.004	3	63147	0.005
20:00 - 21:00	3	63147	0.000	3	63147	0.000	3	63147	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.009			0.019

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.080	3	63147	0.031	3	63147	0.111
06:00 - 07:00	3	63147	0.030	3	63147	0.065	3	63147	0.095
07:00 - 08:00	5	39550	0.053	5	39550	0.030	5	39550	0.083
08:00 - 09:00	5	39550	0.047	5	39550	0.028	5	39550	0.075
09:00 - 10:00	5	39550	0.062	5	39550	0.038	5	39550	0.100
10:00 - 11:00	5	39550	0.051	5	39550	0.051	5	39550	0.102
11:00 - 12:00	5	39550	0.054	5	39550	0.045	5	39550	0.099
12:00 - 13:00	5	39550	0.054	5	39550	0.062	5	39550	0.116
13:00 - 14:00	5	39550	0.055	5	39550	0.045	5	39550	0.100
14:00 - 15:00	5	39550	0.054	5	39550	0.091	5	39550	0.145
15:00 - 16:00	5	39550	0.048	5	39550	0.047	5	39550	0.095
16:00 - 17:00	5	39550	0.034	5	39550	0.053	5	39550	0.087
17:00 - 18:00	5	39550	0.038	5	39550	0.050	5	39550	0.088
18:00 - 19:00	5	39550	0.023	5	39550	0.054	5	39550	0.077
19:00 - 20:00	3	63147	0.017	3	63147	0.023	3	63147	0.040
20:00 - 21:00	3	63147	0.016	3	63147	0.020	3	63147	0.036
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.716			0.733			1.449

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.008	3	63147	0.011	3	63147	0.019
06:00 - 07:00	3	63147	0.006	3	63147	0.000	3	63147	0.006
07:00 - 08:00	5	39550	0.002	5	39550	0.001	5	39550	0.003
08:00 - 09:00	5	39550	0.002	5	39550	0.000	5	39550	0.002
09:00 - 10:00	5	39550	0.011	5	39550	0.001	5	39550	0.012
10:00 - 11:00	5	39550	0.002	5	39550	0.001	5	39550	0.003
11:00 - 12:00	5	39550	0.008	5	39550	0.002	5	39550	0.010
12:00 - 13:00	5	39550	0.004	5	39550	0.002	5	39550	0.006
13:00 - 14:00	5	39550	0.001	5	39550	0.001	5	39550	0.002
14:00 - 15:00	5	39550	0.000	5	39550	0.003	5	39550	0.003
15:00 - 16:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
16:00 - 17:00	5	39550	0.001	5	39550	0.010	5	39550	0.011
17:00 - 18:00	5	39550	0.003	5	39550	0.001	5	39550	0.004
18:00 - 19:00	5	39550	0.000	5	39550	0.003	5	39550	0.003
19:00 - 20:00	3	63147	0.002	3	63147	0.013	3	63147	0.015
20:00 - 21:00	3	63147	0.003	3	63147	0.010	3	63147	0.013
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.053			0.060			0.113

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.004	3	63147	0.003	3	63147	0.007
06:00 - 07:00	3	63147	0.003	3	63147	0.000	3	63147	0.003
07:00 - 08:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
08:00 - 09:00	5	39550	0.002	5	39550	0.000	5	39550	0.002
09:00 - 10:00	5	39550	0.002	5	39550	0.000	5	39550	0.002
10:00 - 11:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
11:00 - 12:00	5	39550	0.002	5	39550	0.001	5	39550	0.003
12:00 - 13:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
13:00 - 14:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
14:00 - 15:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
15:00 - 16:00	5	39550	0.000	5	39550	0.000	5	39550	0.000
16:00 - 17:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
17:00 - 18:00	5	39550	0.001	5	39550	0.003	5	39550	0.004
18:00 - 19:00	5	39550	0.001	5	39550	0.000	5	39550	0.001
19:00 - 20:00	3	63147	0.001	3	63147	0.003	3	63147	0.004
20:00 - 21:00	3	63147	0.000	3	63147	0.000	3	63147	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.016			0.032

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.21

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.094	3	63147	0.045	3	63147	0.139
06:00 - 07:00	3	63147	0.040	3	63147	0.065	3	63147	0.105
07:00 - 08:00	5	39550	0.054	5	39550	0.031	5	39550	0.085
08:00 - 09:00	5	39550	0.052	5	39550	0.028	5	39550	0.080
09:00 - 10:00	5	39550	0.075	5	39550	0.039	5	39550	0.114
10:00 - 11:00	5	39550	0.055	5	39550	0.053	5	39550	0.108
11:00 - 12:00	5	39550	0.063	5	39550	0.048	5	39550	0.111
12:00 - 13:00	5	39550	0.058	5	39550	0.065	5	39550	0.123
13:00 - 14:00	5	39550	0.057	5	39550	0.046	5	39550	0.103
14:00 - 15:00	5	39550	0.054	5	39550	0.095	5	39550	0.149
15:00 - 16:00	5	39550	0.048	5	39550	0.048	5	39550	0.096
16:00 - 17:00	5	39550	0.034	5	39550	0.064	5	39550	0.098
17:00 - 18:00	5	39550	0.042	5	39550	0.054	5	39550	0.096
18:00 - 19:00	5	39550	0.024	5	39550	0.057	5	39550	0.081
19:00 - 20:00	3	63147	0.021	3	63147	0.043	3	63147	0.064
20:00 - 21:00	3	63147	0.019	3	63147	0.030	3	63147	0.049
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.790			0.811			1.601

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.001	3	63147	0.002	3	63147	0.003
06:00 - 07:00	3	63147	0.002	3	63147	0.001	3	63147	0.003
07:00 - 08:00	5	39550	0.004	5	39550	0.005	5	39550	0.009
08:00 - 09:00	5	39550	0.004	5	39550	0.003	5	39550	0.007
09:00 - 10:00	5	39550	0.007	5	39550	0.002	5	39550	0.009
10:00 - 11:00	5	39550	0.006	5	39550	0.005	5	39550	0.011
11:00 - 12:00	5	39550	0.006	5	39550	0.004	5	39550	0.010
12:00 - 13:00	5	39550	0.003	5	39550	0.004	5	39550	0.007
13:00 - 14:00	5	39550	0.004	5	39550	0.002	5	39550	0.006
14:00 - 15:00	5	39550	0.003	5	39550	0.003	5	39550	0.006
15:00 - 16:00	5	39550	0.002	5	39550	0.002	5	39550	0.004
16:00 - 17:00	5	39550	0.004	5	39550	0.004	5	39550	0.008
17:00 - 18:00	5	39550	0.003	5	39550	0.002	5	39550	0.005
18:00 - 19:00	5	39550	0.001	5	39550	0.005	5	39550	0.006
19:00 - 20:00	3	63147	0.001	3	63147	0.001	3	63147	0.002
20:00 - 21:00	3	63147	0.001	3	63147	0.000	3	63147	0.001
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.052			0.045			0.097

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

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

Calculation Reference: AUDIT-703101-250130-0136

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
	HF	HERTFORDSHIRE	1 days
03	SOUTH WEST		
	DV	DEVON	1 days
06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	1500 to 17834 (units: sqm)
Range Selected by User:	1000 to 60000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 08/11/24

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:

Wednesday	3 days
Thursday	2 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	1

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:

Industrial Zone	4
Village	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	4 days - Selected
Servicing vehicles Excluded	1 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	5 days

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®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
5,001 to 10,000	2 days
15,001 to 20,000	2 days

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

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	2 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	3 days
1.6 to 2.0	1 days

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

Travel Plan:

No	5 days

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

PTAL Rating:

No PTAL Present	5 days

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

LIST OF SITES relevant to selection parameters

1 DV-02-C-02 ENERGY RECOVERY FACILITY DEVON
GRACE ROAD SOUTH
EXETER
MARSH BARTON TRAD. EST.
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 3513 sqm
Survey date: THURSDAY 06/07/17 Survey Type: MANUAL

2 HC-02-C-02 GIN DISTILLERY HAMPSHIRE
LONDON ROAD
LAVERSTOKE

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 8000 sqm
Survey date: WEDNESDAY 09/05/18 Survey Type: MANUAL

3 HF-02-C-02 FRESH PRODUCE HERTFORDSHIRE
COCKERELL CLOSE
STEVENAGE

Edge of Town
Industrial Zone
Total Gross floor area: 17834 sqm
Survey date: WEDNESDAY 08/11/23 Survey Type: MANUAL

4 NY-02-C-03 WORKWEAR MANUFACTURER NORTH YORKSHIRE
WETHERBY ROAD
KNARESBOROUGH

Edge of Town
Industrial Zone
Total Gross floor area: 1500 sqm
Survey date: THURSDAY 29/06/23 Survey Type: MANUAL

5 WK-02-C-01 MACHINE ENGINEERING WARWICKSHIRE
CASTLE MOUND WAY
RUGBY

Edge of Town
Industrial Zone
Total Gross floor area: 9216 sqm
Survey date: WEDNESDAY 10/11/21 Survey Type: MANUAL

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.32

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.078	2	13525	0.007	2	13525	0.085
06:00 - 07:00	2	13525	0.214	2	13525	0.148	2	13525	0.362
07:00 - 08:00	5	8013	0.220	5	8013	0.037	5	8013	0.257
08:00 - 09:00	5	8013	0.177	5	8013	0.037	5	8013	0.214
09:00 - 10:00	5	8013	0.130	5	8013	0.075	5	8013	0.205
10:00 - 11:00	5	8013	0.115	5	8013	0.050	5	8013	0.165
11:00 - 12:00	5	8013	0.057	5	8013	0.060	5	8013	0.117
12:00 - 13:00	5	8013	0.115	5	8013	0.145	5	8013	0.260
13:00 - 14:00	5	8013	0.082	5	8013	0.162	5	8013	0.244
14:00 - 15:00	5	8013	0.070	5	8013	0.072	5	8013	0.142
15:00 - 16:00	5	8013	0.040	5	8013	0.137	5	8013	0.177
16:00 - 17:00	5	8013	0.022	5	8013	0.217	5	8013	0.239
17:00 - 18:00	5	8013	0.047	5	8013	0.105	5	8013	0.152
18:00 - 19:00	5	8013	0.087	5	8013	0.105	5	8013	0.192
19:00 - 20:00	3	11683	0.006	3	11683	0.029	3	11683	0.035
20:00 - 21:00	3	11683	0.003	3	11683	0.049	3	11683	0.052
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.463			1.435			2.898

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

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

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Parameter summary

Trip rate parameter range selected:	1500 - 17834 (units: sqm)
Survey date date range:	01/01/16 - 08/11/24
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.004	2	13525	0.000	2	13525	0.004
06:00 - 07:00	2	13525	0.004	2	13525	0.007	2	13525	0.011
07:00 - 08:00	5	8013	0.027	5	8013	0.015	5	8013	0.042
08:00 - 09:00	5	8013	0.022	5	8013	0.020	5	8013	0.042
09:00 - 10:00	5	8013	0.025	5	8013	0.027	5	8013	0.052
10:00 - 11:00	5	8013	0.007	5	8013	0.007	5	8013	0.014
11:00 - 12:00	5	8013	0.017	5	8013	0.017	5	8013	0.034
12:00 - 13:00	5	8013	0.050	5	8013	0.050	5	8013	0.100
13:00 - 14:00	5	8013	0.027	5	8013	0.025	5	8013	0.052
14:00 - 15:00	5	8013	0.007	5	8013	0.010	5	8013	0.017
15:00 - 16:00	5	8013	0.012	5	8013	0.017	5	8013	0.029
16:00 - 17:00	5	8013	0.005	5	8013	0.012	5	8013	0.017
17:00 - 18:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
18:00 - 19:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
19:00 - 20:00	3	11683	0.003	3	11683	0.000	3	11683	0.003
20:00 - 21:00	3	11683	0.000	3	11683	0.003	3	11683	0.003
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.210			0.210			0.420

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.000	2	13525	0.000	2	13525	0.000
06:00 - 07:00	2	13525	0.022	2	13525	0.004	2	13525	0.026
07:00 - 08:00	5	8013	0.005	5	8013	0.002	5	8013	0.007
08:00 - 09:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
09:00 - 10:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
10:00 - 11:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
11:00 - 12:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
12:00 - 13:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
13:00 - 14:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
14:00 - 15:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
15:00 - 16:00	5	8013	0.000	5	8013	0.005	5	8013	0.005
16:00 - 17:00	5	8013	0.000	5	8013	0.002	5	8013	0.002
17:00 - 18:00	5	8013	0.000	5	8013	0.005	5	8013	0.005
18:00 - 19:00	5	8013	0.017	5	8013	0.002	5	8013	0.019
19:00 - 20:00	3	11683	0.000	3	11683	0.006	3	11683	0.006
20:00 - 21:00	3	11683	0.000	3	11683	0.000	3	11683	0.000
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.044			0.026			0.070

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.074	2	13525	0.007	2	13525	0.081
06:00 - 07:00	2	13525	0.288	2	13525	0.174	2	13525	0.462
07:00 - 08:00	5	8013	0.225	5	8013	0.050	5	8013	0.275
08:00 - 09:00	5	8013	0.207	5	8013	0.040	5	8013	0.247
09:00 - 10:00	5	8013	0.190	5	8013	0.095	5	8013	0.285
10:00 - 11:00	5	8013	0.197	5	8013	0.052	5	8013	0.249
11:00 - 12:00	5	8013	0.095	5	8013	0.077	5	8013	0.172
12:00 - 13:00	5	8013	0.190	5	8013	0.230	5	8013	0.420
13:00 - 14:00	5	8013	0.125	5	8013	0.265	5	8013	0.390
14:00 - 15:00	5	8013	0.117	5	8013	0.110	5	8013	0.227
15:00 - 16:00	5	8013	0.060	5	8013	0.200	5	8013	0.260
16:00 - 17:00	5	8013	0.032	5	8013	0.277	5	8013	0.309
17:00 - 18:00	5	8013	0.072	5	8013	0.127	5	8013	0.199
18:00 - 19:00	5	8013	0.130	5	8013	0.162	5	8013	0.292
19:00 - 20:00	3	11683	0.009	3	11683	0.046	3	11683	0.055
20:00 - 21:00	3	11683	0.003	3	11683	0.083	3	11683	0.086
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.014			1.995			4.009

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.000	2	13525	0.000	2	13525	0.000
06:00 - 07:00	2	13525	0.000	2	13525	0.000	2	13525	0.000
07:00 - 08:00	5	8013	0.017	5	8013	0.000	5	8013	0.017
08:00 - 09:00	5	8013	0.005	5	8013	0.000	5	8013	0.005
09:00 - 10:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
10:00 - 11:00	5	8013	0.002	5	8013	0.002	5	8013	0.004
11:00 - 12:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
12:00 - 13:00	5	8013	0.005	5	8013	0.007	5	8013	0.012
13:00 - 14:00	5	8013	0.000	5	8013	0.002	5	8013	0.002
14:00 - 15:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
15:00 - 16:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
16:00 - 17:00	5	8013	0.000	5	8013	0.012	5	8013	0.012
17:00 - 18:00	5	8013	0.000	5	8013	0.010	5	8013	0.010
18:00 - 19:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
19:00 - 20:00	3	11683	0.000	3	11683	0.000	3	11683	0.000
20:00 - 21:00	3	11683	0.000	3	11683	0.000	3	11683	0.000
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.029			0.033			0.062

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.004	2	13525	0.000	2	13525	0.004
06:00 - 07:00	2	13525	0.089	2	13525	0.078	2	13525	0.167
07:00 - 08:00	5	8013	0.020	5	8013	0.005	5	8013	0.025
08:00 - 09:00	5	8013	0.035	5	8013	0.000	5	8013	0.035
09:00 - 10:00	5	8013	0.077	5	8013	0.002	5	8013	0.079
10:00 - 11:00	5	8013	0.100	5	8013	0.087	5	8013	0.187
11:00 - 12:00	5	8013	0.140	5	8013	0.015	5	8013	0.155
12:00 - 13:00	5	8013	0.112	5	8013	0.102	5	8013	0.214
13:00 - 14:00	5	8013	0.075	5	8013	0.070	5	8013	0.145
14:00 - 15:00	5	8013	0.012	5	8013	0.167	5	8013	0.179
15:00 - 16:00	5	8013	0.170	5	8013	0.062	5	8013	0.232
16:00 - 17:00	5	8013	0.017	5	8013	0.107	5	8013	0.124
17:00 - 18:00	5	8013	0.167	5	8013	0.130	5	8013	0.297
18:00 - 19:00	5	8013	0.170	5	8013	0.097	5	8013	0.267
19:00 - 20:00	3	11683	0.060	3	11683	0.143	3	11683	0.203
20:00 - 21:00	3	11683	0.009	3	11683	0.203	3	11683	0.212
21:00 - 22:00	1	8000	0.013	1	8000	0.000	1	8000	0.013
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.270			1.268			2.538

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.32

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.078	2	13525	0.007	2	13525	0.085
06:00 - 07:00	2	13525	0.399	2	13525	0.255	2	13525	0.654
07:00 - 08:00	5	8013	0.267	5	8013	0.057	5	8013	0.324
08:00 - 09:00	5	8013	0.247	5	8013	0.040	5	8013	0.287
09:00 - 10:00	5	8013	0.267	5	8013	0.097	5	8013	0.364
10:00 - 11:00	5	8013	0.300	5	8013	0.142	5	8013	0.442
11:00 - 12:00	5	8013	0.235	5	8013	0.092	5	8013	0.327
12:00 - 13:00	5	8013	0.307	5	8013	0.339	5	8013	0.646
13:00 - 14:00	5	8013	0.200	5	8013	0.337	5	8013	0.537
14:00 - 15:00	5	8013	0.130	5	8013	0.277	5	8013	0.407
15:00 - 16:00	5	8013	0.230	5	8013	0.267	5	8013	0.497
16:00 - 17:00	5	8013	0.050	5	8013	0.399	5	8013	0.449
17:00 - 18:00	5	8013	0.240	5	8013	0.272	5	8013	0.512
18:00 - 19:00	5	8013	0.317	5	8013	0.262	5	8013	0.579
19:00 - 20:00	3	11683	0.068	3	11683	0.194	3	11683	0.262
20:00 - 21:00	3	11683	0.011	3	11683	0.285	3	11683	0.296
21:00 - 22:00	1	8000	0.013	1	8000	0.000	1	8000	0.013
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.359			3.322			6.681

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.004	2	13525	0.000	2	13525	0.004
06:00 - 07:00	2	13525	0.011	2	13525	0.011	2	13525	0.022
07:00 - 08:00	5	8013	0.010	5	8013	0.005	5	8013	0.015
08:00 - 09:00	5	8013	0.030	5	8013	0.010	5	8013	0.040
09:00 - 10:00	5	8013	0.030	5	8013	0.025	5	8013	0.055
10:00 - 11:00	5	8013	0.030	5	8013	0.025	5	8013	0.055
11:00 - 12:00	5	8013	0.010	5	8013	0.012	5	8013	0.022
12:00 - 13:00	5	8013	0.015	5	8013	0.015	5	8013	0.030
13:00 - 14:00	5	8013	0.015	5	8013	0.022	5	8013	0.037
14:00 - 15:00	5	8013	0.017	5	8013	0.020	5	8013	0.037
15:00 - 16:00	5	8013	0.007	5	8013	0.007	5	8013	0.014
16:00 - 17:00	5	8013	0.005	5	8013	0.020	5	8013	0.025
17:00 - 18:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
18:00 - 19:00	5	8013	0.007	5	8013	0.010	5	8013	0.017
19:00 - 20:00	3	11683	0.000	3	11683	0.000	3	11683	0.000
20:00 - 21:00	3	11683	0.003	3	11683	0.003	3	11683	0.006
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.194			0.185			0.379

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.*

HaskoningDHV UK Ltd Wick Road Surrey Licence No: 703101

Calculation Reference: AUDIT-703101-250130-0146

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : B - BUSINESS PARK
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	SC	SURREY	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	15100 to 56520 (units: sqm)
Range Selected by User:	10000 to 60000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 20/06/24

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

Selected survey days:

Monday	1 days
Wednesday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	3

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:

Industrial Zone	1
Commercial Zone	2
Out of Town	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	1 days - Selected
Servicing vehicles Excluded	3 days - Selected

Secondary Filtering selection:

Use Class:
Not Known 4 days

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

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

50,001 to 75,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	2 days

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

Travel Plan:

Yes	2 days
No	2 days

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

PTAL Rating:

No PTAL Present	4 days

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

LIST OF SITES relevant to selection parameters

1 CA-02-B-01 BUSINESS PARK CAMBRIDGESHIRE
MILTON ROAD
CAMBRIDGE

Edge of Town
Commercial Zone
Total Gross floor area: 23354 sqm
Survey date: MONDAY 26/06/23 Survey Type: MANUAL

2 SC-02-B-04 BUSINESS PARK SURREY
SURREY WAY
GUILDFORD

Suburban Area (PPS6 Out of Centre)
Commercial Zone
Total Gross floor area: 15800 sqm
Survey date: THURSDAY 20/06/24 Survey Type: MANUAL

3 ST-02-B-04 BUSINESS PARK STAFFORDSHIRE
STONE ROAD
STAFFORD

Edge of Town
Industrial Zone
Total Gross floor area: 20760 sqm
Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL

4 WK-02-B-01 BUSINESS/TECH. PARK WARWICKSHIRE
GALLOWS HILL
WARWICK

Edge of Town
Out of Town
Total Gross floor area: 56520 sqm
Survey date: WEDNESDAY 25/09/19 Survey Type: MANUAL

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.39

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	1.259	4	27284	0.093	4	27284	1.352
08:00 - 09:00	4	27284	1.531	4	27284	0.153	4	27284	1.684
09:00 - 10:00	4	27284	0.877	4	27284	0.181	4	27284	1.058
10:00 - 11:00	4	27284	0.244	4	27284	0.119	4	27284	0.363
11:00 - 12:00	4	27284	0.153	4	27284	0.164	4	27284	0.317
12:00 - 13:00	4	27284	0.317	4	27284	0.360	4	27284	0.677
13:00 - 14:00	4	27284	0.326	4	27284	0.263	4	27284	0.589
14:00 - 15:00	4	27284	0.150	4	27284	0.274	4	27284	0.424
15:00 - 16:00	4	27284	0.107	4	27284	0.764	4	27284	0.871
16:00 - 17:00	4	27284	0.104	4	27284	1.271	4	27284	1.375
17:00 - 18:00	4	27284	0.096	4	27284	1.133	4	27284	1.229
18:00 - 19:00	4	27284	0.059	4	27284	0.569	4	27284	0.628
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.223			5.344			10.567

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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Parameter summary

Trip rate parameter range selected:	15100 - 56520 (units: sqm)
Survey date date range:	01/01/16 - 20/06/24
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	0.004	4	27284	0.003	4	27284	0.007
08:00 - 09:00	4	27284	0.002	4	27284	0.003	4	27284	0.005
09:00 - 10:00	4	27284	0.005	4	27284	0.002	4	27284	0.007
10:00 - 11:00	4	27284	0.005	4	27284	0.005	4	27284	0.010
11:00 - 12:00	4	27284	0.006	4	27284	0.005	4	27284	0.011
12:00 - 13:00	4	27284	0.006	4	27284	0.004	4	27284	0.010
13:00 - 14:00	4	27284	0.005	4	27284	0.008	4	27284	0.013
14:00 - 15:00	4	27284	0.005	4	27284	0.005	4	27284	0.010
15:00 - 16:00	4	27284	0.002	4	27284	0.003	4	27284	0.005
16:00 - 17:00	4	27284	0.000	4	27284	0.002	4	27284	0.002
17:00 - 18:00	4	27284	0.002	4	27284	0.002	4	27284	0.004
18:00 - 19:00	4	27284	0.000	4	27284	0.001	4	27284	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.042			0.043			0.085

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	0.058	4	27284	0.002	4	27284	0.060
08:00 - 09:00	4	27284	0.090	4	27284	0.001	4	27284	0.091
09:00 - 10:00	4	27284	0.061	4	27284	0.005	4	27284	0.066
10:00 - 11:00	4	27284	0.017	4	27284	0.009	4	27284	0.026
11:00 - 12:00	4	27284	0.006	4	27284	0.005	4	27284	0.011
12:00 - 13:00	4	27284	0.005	4	27284	0.012	4	27284	0.017
13:00 - 14:00	4	27284	0.010	4	27284	0.012	4	27284	0.022
14:00 - 15:00	4	27284	0.005	4	27284	0.010	4	27284	0.015
15:00 - 16:00	4	27284	0.007	4	27284	0.020	4	27284	0.027
16:00 - 17:00	4	27284	0.001	4	27284	0.057	4	27284	0.058
17:00 - 18:00	4	27284	0.004	4	27284	0.084	4	27284	0.088
18:00 - 19:00	4	27284	0.004	4	27284	0.030	4	27284	0.034
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.268			0.247			0.515

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	1.432	4	27284	0.111	4	27284	1.543
08:00 - 09:00	4	27284	1.758	4	27284	0.193	4	27284	1.951
09:00 - 10:00	4	27284	0.980	4	27284	0.214	4	27284	1.194
10:00 - 11:00	4	27284	0.293	4	27284	0.134	4	27284	0.427
11:00 - 12:00	4	27284	0.193	4	27284	0.199	4	27284	0.392
12:00 - 13:00	4	27284	0.380	4	27284	0.421	4	27284	0.801
13:00 - 14:00	4	27284	0.377	4	27284	0.301	4	27284	0.678
14:00 - 15:00	4	27284	0.196	4	27284	0.324	4	27284	0.520
15:00 - 16:00	4	27284	0.155	4	27284	0.861	4	27284	1.016
16:00 - 17:00	4	27284	0.156	4	27284	1.451	4	27284	1.607
17:00 - 18:00	4	27284	0.128	4	27284	1.275	4	27284	1.403
18:00 - 19:00	4	27284	0.073	4	27284	0.675	4	27284	0.748
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.121			6.159			12.280

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	0.071	4	27284	0.013	4	27284	0.084
08:00 - 09:00	4	27284	0.096	4	27284	0.008	4	27284	0.104
09:00 - 10:00	4	27284	0.068	4	27284	0.006	4	27284	0.074
10:00 - 11:00	4	27284	0.032	4	27284	0.022	4	27284	0.054
11:00 - 12:00	4	27284	0.025	4	27284	0.019	4	27284	0.044
12:00 - 13:00	4	27284	0.183	4	27284	0.208	4	27284	0.391
13:00 - 14:00	4	27284	0.137	4	27284	0.137	4	27284	0.274
14:00 - 15:00	4	27284	0.043	4	27284	0.038	4	27284	0.081
15:00 - 16:00	4	27284	0.019	4	27284	0.046	4	27284	0.065
16:00 - 17:00	4	27284	0.013	4	27284	0.086	4	27284	0.099
17:00 - 18:00	4	27284	0.004	4	27284	0.093	4	27284	0.097
18:00 - 19:00	4	27284	0.006	4	27284	0.031	4	27284	0.037
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.697			0.707			1.404

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	0.029	4	27284	0.001	4	27284	0.030
08:00 - 09:00	4	27284	0.089	4	27284	0.004	4	27284	0.093
09:00 - 10:00	4	27284	0.033	4	27284	0.004	4	27284	0.037
10:00 - 11:00	4	27284	0.008	4	27284	0.009	4	27284	0.017
11:00 - 12:00	4	27284	0.012	4	27284	0.007	4	27284	0.019
12:00 - 13:00	4	27284	0.025	4	27284	0.016	4	27284	0.041
13:00 - 14:00	4	27284	0.019	4	27284	0.010	4	27284	0.029
14:00 - 15:00	4	27284	0.008	4	27284	0.010	4	27284	0.018
15:00 - 16:00	4	27284	0.008	4	27284	0.016	4	27284	0.024
16:00 - 17:00	4	27284	0.002	4	27284	0.053	4	27284	0.055
17:00 - 18:00	4	27284	0.005	4	27284	0.064	4	27284	0.069
18:00 - 19:00	4	27284	0.003	4	27284	0.028	4	27284	0.031
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.241			0.222			0.463

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.39

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	1.590	4	27284	0.126	4	27284	1.716
08:00 - 09:00	4	27284	2.033	4	27284	0.206	4	27284	2.239
09:00 - 10:00	4	27284	1.142	4	27284	0.229	4	27284	1.371
10:00 - 11:00	4	27284	0.351	4	27284	0.174	4	27284	0.525
11:00 - 12:00	4	27284	0.236	4	27284	0.230	4	27284	0.466
12:00 - 13:00	4	27284	0.594	4	27284	0.656	4	27284	1.250
13:00 - 14:00	4	27284	0.543	4	27284	0.460	4	27284	1.003
14:00 - 15:00	4	27284	0.252	4	27284	0.383	4	27284	0.635
15:00 - 16:00	4	27284	0.190	4	27284	0.944	4	27284	1.134
16:00 - 17:00	4	27284	0.171	4	27284	1.647	4	27284	1.818
17:00 - 18:00	4	27284	0.141	4	27284	1.516	4	27284	1.657
18:00 - 19:00	4	27284	0.086	4	27284	0.765	4	27284	0.851
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			7.329			7.336			14.665

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.

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TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	0.016	4	27284	0.010	4	27284	0.026
08:00 - 09:00	4	27284	0.028	4	27284	0.010	4	27284	0.038
09:00 - 10:00	4	27284	0.019	4	27284	0.016	4	27284	0.035
10:00 - 11:00	4	27284	0.029	4	27284	0.022	4	27284	0.051
11:00 - 12:00	4	27284	0.021	4	27284	0.028	4	27284	0.049
12:00 - 13:00	4	27284	0.023	4	27284	0.022	4	27284	0.045
13:00 - 14:00	4	27284	0.017	4	27284	0.016	4	27284	0.033
14:00 - 15:00	4	27284	0.016	4	27284	0.022	4	27284	0.038
15:00 - 16:00	4	27284	0.009	4	27284	0.022	4	27284	0.031
16:00 - 17:00	4	27284	0.009	4	27284	0.013	4	27284	0.022
17:00 - 18:00	4	27284	0.003	4	27284	0.009	4	27284	0.012
18:00 - 19:00	4	27284	0.002	4	27284	0.008	4	27284	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.192			0.198			0.390

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.*

HaskoningDHV UK Ltd Wick Road Surrey Licence No: 703101

Calculation Reference: AUDIT-703101-250130-0153

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 12 - CIVIC AMENITY SITES
Category : A - CIVIC AMENITY SITE
TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	SG	SOUTH GLOUCESTERSHIRE	1 days
06	WEST MIDLANDS		
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	LS	LEEDS	1 days
08	NORTH WEST		
	AC	CHESHIRE WEST & CHESTER	1 days

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

Primary Filtering selection:

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

Parameter:	Site area
Actual Range:	0.21 to 0.90 (units: hect)
Range Selected by User:	0.10 to 1 (units: hect)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 24/03/24

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

Selected survey days:

Tuesday	1 days
Wednesday	2 days
Friday	1 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	3

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:

Industrial Zone	3
Residential Zone	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	X days - Selected
Servicing vehicles Excluded	4 days - Selected

Secondary Filtering selection:

Use Class:

B2	4 days

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:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

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

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

Population within 5 miles:

100,001 to 125,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	1 days

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

Travel Plan:

No	4 days

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

PTAL Rating:

No PTAL Present	4 days

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

LIST OF SITES relevant to selection parameters

1	AC-12-A-01 BUMPERS LANE CHESTER SEALAND IND. ESTATE Edge of Town Industrial Zone	RECYCLING CENTRE		CHESHIRE WEST & CHESTER
	Total Site area:		0.30 hect	
	Survey date: WEDNESDAY		*12/11/14*	*Survey Type: MANUAL*
2	LS-12-A-01 LIMEWOOD ROAD LEEDS Edge of Town Industrial Zone	CIVIC AMENITY SITE		LEEDS
	Total Site area:		0.73 hect	
	Survey date: TUESDAY		*08/06/10*	*Survey Type: MANUAL*
3	SG-12-A-01 CARSONS ROAD NEAR BRISTOL MANGOTSFIELD Edge of Town Industrial Zone	RECYCLING CENTRE		SOUTH GLOUCESTERSHIRE
	Total Site area:		0.90 hect	
	Survey date: FRIDAY		*19/05/23*	*Survey Type: MANUAL*
4	WO-12-A-02 HORSFORD ROAD WORCESTER Suburban Area (PPS6 Out of Centre) Residential Zone	CIVIC AMENITY		WORCESTERSHIRE
	Total Site area:		0.21 hect	
	Survey date: WEDNESDAY		*13/10/10*	*Survey Type: MANUAL*

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

TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE
TOTAL VEHICLES
Calculation factor: 1 hect
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	0.64	7.772	3	0.64	6.218	3	0.64	13.990
08:00 - 09:00	4	0.54	35.981	4	0.54	32.243	4	0.54	68.224
09:00 - 10:00	4	0.54	71.963	4	0.54	62.150	4	0.54	134.113
10:00 - 11:00	4	0.54	81.776	4	0.54	80.374	4	0.54	162.150
11:00 - 12:00	4	0.54	88.785	4	0.54	85.514	4	0.54	174.299
12:00 - 13:00	4	0.54	66.822	4	0.54	69.159	4	0.54	135.981
13:00 - 14:00	4	0.54	54.206	4	0.54	59.346	4	0.54	113.552
14:00 - 15:00	4	0.54	51.402	4	0.54	52.336	4	0.54	103.738
15:00 - 16:00	4	0.54	45.327	4	0.54	51.402	4	0.54	96.729
16:00 - 17:00	4	0.54	8.411	4	0.54	15.888	4	0.54	24.299
17:00 - 18:00	3	0.61	0.000	3	0.61	3.261	3	0.61	3.261
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			512.445			517.891			1030.336

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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Parameter summary

Trip rate parameter range selected:	0.21 to 0.90 (units: hect)
Survey date date range:	01/01/10 - 24/03/24
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE
OGVS
Calculation factor: 1 hect
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	0.64	1.554	3	0.64	1.554	3	0.64	3.108
08:00 - 09:00	4	0.54	0.467	4	0.54	0.935	4	0.54	1.402
09:00 - 10:00	4	0.54	2.804	4	0.54	1.402	4	0.54	4.206
10:00 - 11:00	4	0.54	2.804	4	0.54	2.804	4	0.54	5.608
11:00 - 12:00	4	0.54	3.271	4	0.54	4.206	4	0.54	7.477
12:00 - 13:00	4	0.54	2.336	4	0.54	1.402	4	0.54	3.738
13:00 - 14:00	4	0.54	2.336	4	0.54	2.804	4	0.54	5.140
14:00 - 15:00	4	0.54	1.402	4	0.54	1.869	4	0.54	3.271
15:00 - 16:00	4	0.54	1.402	4	0.54	2.336	4	0.54	3.738
16:00 - 17:00	4	0.54	0.935	4	0.54	0.935	4	0.54	1.870
17:00 - 18:00	3	0.61	0.000	3	0.61	0.000	3	0.61	0.000
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			19.311			20.247			39.558

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

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

TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE
PSVS
Calculation factor: 1 hect
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	0.64	0.000	3	0.64	0.000	3	0.64	0.000
08:00 - 09:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
09:00 - 10:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
10:00 - 11:00	4	0.54	0.467	4	0.54	0.467	4	0.54	0.934
11:00 - 12:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
12:00 - 13:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
13:00 - 14:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
14:00 - 15:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
15:00 - 16:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
16:00 - 17:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
17:00 - 18:00	3	0.61	0.000	3	0.61	0.000	3	0.61	0.000
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.467			0.467			0.934

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.

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TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE
CYCLISTS
Calculation factor: 1 hect
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	0.64	0.000	3	0.64	0.000	3	0.64	0.000
08:00 - 09:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
09:00 - 10:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
10:00 - 11:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
11:00 - 12:00	4	0.54	0.467	4	0.54	0.467	4	0.54	0.934
12:00 - 13:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
13:00 - 14:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
14:00 - 15:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
15:00 - 16:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
16:00 - 17:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
17:00 - 18:00	3	0.61	0.000	3	0.61	0.000	3	0.61	0.000
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.467			0.467			0.934

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.

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HaskoningDHV UK Ltd Wick Road Surrey Licence No: 703101

Calculation Reference: AUDIT-703101-250130-0154

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
Category : Q - COMMUNITY CENTRE
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

06	WEST MIDLANDS		
	TE	TELFORD & WREKIN	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	EC	CHESHIRE EAST	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	100 to 1486 (units: sqm)
Range Selected by User:	100 to 1486 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 07/06/24

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

Selected survey days:

Tuesday	1 days
Wednesday	1 days
Thursday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Residential Zone	1
Village	1
No Sub Category	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	1 days - Selected
Servicing vehicles Excluded	2 days - Selected

Secondary Filtering selection:

Use Class:

F2(b)	3 days

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:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
5,001 to 10,000	1 days
15,001 to 20,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	1 days

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

Travel Plan:

No	3 days

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

PTAL Rating:

No PTAL Present	3 days

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

LIST OF SITES relevant to selection parameters

1 EC-07-Q-01 COMMUNITY CENTRE CHESHIRE EAST
WARRINGTON ROAD
MERE

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 100 sqm
Survey date: TUESDAY *07/11/17* *Survey Type: MANUAL*

2 NY-07-Q-01 COMMUNITY CENTRE NORTH YORKSHIRE
SHUTE ROAD
CATTERRICK GARRISON

Neighbourhood Centre (PPS6 Local Centre)
No Sub Category
Total Gross floor area: 316 sqm
Survey date: WEDNESDAY *10/05/17* *Survey Type: MANUAL*

3 TE-07-Q-01 COMMUNITY CENTRE TELFORD & WREKIN
SOUTHGATE
TELFORD
SUTTON HILL
Edge of Town
Residential Zone
Total Gross floor area: 1486 sqm
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.78

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.481	2	208	0.000	2	208	0.481
08:00 - 09:00	3	634	0.315	3	634	0.105	3	634	0.420
09:00 - 10:00	3	634	0.368	3	634	0.158	3	634	0.526
10:00 - 11:00	3	634	0.105	3	634	0.526	3	634	0.631
11:00 - 12:00	3	634	0.210	3	634	0.158	3	634	0.368
12:00 - 13:00	3	634	0.263	3	634	0.631	3	634	0.894
13:00 - 14:00	3	634	0.263	3	634	0.473	3	634	0.736
14:00 - 15:00	3	634	0.368	3	634	0.105	3	634	0.473
15:00 - 16:00	3	634	0.263	3	634	0.263	3	634	0.526
16:00 - 17:00	2	793	0.189	2	793	0.063	2	793	0.252
17:00 - 18:00	2	793	0.189	2	793	0.315	2	793	0.504
18:00 - 19:00	2	793	0.820	2	793	0.126	2	793	0.946
19:00 - 20:00	2	793	1.513	2	793	0.000	2	793	1.513
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	1.324	2	793	1.324
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.347			4.247			9.594

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.

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Parameter summary

Trip rate parameter range selected:	100 - 1486 (units: sqm)
Survey date date range:	01/01/13 - 07/06/24
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

HaskoningDHV UK Ltd Wick Road Surrey Licence No: 703101

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.000	3	634	0.000	3	634	0.000
09:00 - 10:00	3	634	0.000	3	634	0.000	3	634	0.000
10:00 - 11:00	3	634	0.000	3	634	0.000	3	634	0.000
11:00 - 12:00	3	634	0.000	3	634	0.000	3	634	0.000
12:00 - 13:00	3	634	0.000	3	634	0.000	3	634	0.000
13:00 - 14:00	3	634	0.053	3	634	0.000	3	634	0.053
14:00 - 15:00	3	634	0.000	3	634	0.053	3	634	0.053
15:00 - 16:00	3	634	0.000	3	634	0.000	3	634	0.000
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.053			0.053			0.106

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.

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TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.000	3	634	0.000	3	634	0.000
09:00 - 10:00	3	634	0.000	3	634	0.000	3	634	0.000
10:00 - 11:00	3	634	0.053	3	634	0.053	3	634	0.106
11:00 - 12:00	3	634	0.000	3	634	0.000	3	634	0.000
12:00 - 13:00	3	634	0.000	3	634	0.000	3	634	0.000
13:00 - 14:00	3	634	0.000	3	634	0.000	3	634	0.000
14:00 - 15:00	3	634	0.000	3	634	0.000	3	634	0.000
15:00 - 16:00	3	634	0.000	3	634	0.000	3	634	0.000
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.053			0.053			0.106

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.481	2	208	0.000	2	208	0.481
08:00 - 09:00	3	634	0.368	3	634	0.158	3	634	0.526
09:00 - 10:00	3	634	0.473	3	634	0.210	3	634	0.683
10:00 - 11:00	3	634	0.053	3	634	0.578	3	634	0.631
11:00 - 12:00	3	634	0.263	3	634	0.158	3	634	0.421
12:00 - 13:00	3	634	0.315	3	634	0.736	3	634	1.051
13:00 - 14:00	3	634	0.210	3	634	0.578	3	634	0.788
14:00 - 15:00	3	634	0.421	3	634	0.105	3	634	0.526
15:00 - 16:00	3	634	0.315	3	634	0.210	3	634	0.525
16:00 - 17:00	2	793	0.252	2	793	0.063	2	793	0.315
17:00 - 18:00	2	793	0.189	2	793	0.441	2	793	0.630
18:00 - 19:00	2	793	0.883	2	793	0.189	2	793	1.072
19:00 - 20:00	2	793	1.955	2	793	0.000	2	793	1.955
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	1.765	2	793	1.765
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.178			5.191			11.369

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.210	3	634	0.000	3	634	0.210
09:00 - 10:00	3	634	0.210	3	634	0.473	3	634	0.683
10:00 - 11:00	3	634	0.105	3	634	0.263	3	634	0.368
11:00 - 12:00	3	634	0.210	3	634	0.053	3	634	0.263
12:00 - 13:00	3	634	0.263	3	634	0.368	3	634	0.631
13:00 - 14:00	3	634	0.158	3	634	0.368	3	634	0.526
14:00 - 15:00	3	634	0.210	3	634	0.105	3	634	0.315
15:00 - 16:00	3	634	0.315	3	634	0.210	3	634	0.525
16:00 - 17:00	2	793	0.567	2	793	0.883	2	793	1.450
17:00 - 18:00	2	793	1.135	2	793	0.441	2	793	1.576
18:00 - 19:00	2	793	2.081	2	793	0.757	2	793	2.838
19:00 - 20:00	2	793	0.000	2	793	1.576	2	793	1.576
20:00 - 21:00	2	793	0.000	2	793	0.126	2	793	0.126
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.464			5.623			11.087

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.000	3	634	0.000	3	634	0.000
09:00 - 10:00	3	634	0.105	3	634	0.000	3	634	0.105
10:00 - 11:00	3	634	1.209	3	634	0.105	3	634	1.314
11:00 - 12:00	3	634	0.368	3	634	0.210	3	634	0.578
12:00 - 13:00	3	634	0.053	3	634	0.210	3	634	0.263
13:00 - 14:00	3	634	0.105	3	634	0.421	3	634	0.526
14:00 - 15:00	3	634	0.000	3	634	0.053	3	634	0.053
15:00 - 16:00	3	634	0.000	3	634	0.841	3	634	0.841
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.840			1.840			3.680

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.000	3	634	0.000	3	634	0.000
09:00 - 10:00	3	634	0.105	3	634	0.000	3	634	0.105
10:00 - 11:00	3	634	1.209	3	634	0.105	3	634	1.314
11:00 - 12:00	3	634	0.368	3	634	0.210	3	634	0.578
12:00 - 13:00	3	634	0.053	3	634	0.210	3	634	0.263
13:00 - 14:00	3	634	0.105	3	634	0.421	3	634	0.526
14:00 - 15:00	3	634	0.000	3	634	0.053	3	634	0.053
15:00 - 16:00	3	634	0.000	3	634	0.841	3	634	0.841
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.840			1.840			3.680

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.78

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.481	2	208	0.000	2	208	0.481
08:00 - 09:00	3	634	0.578	3	634	0.158	3	634	0.736
09:00 - 10:00	3	634	0.789	3	634	0.683	3	634	1.472
10:00 - 11:00	3	634	1.367	3	634	0.946	3	634	2.313
11:00 - 12:00	3	634	0.841	3	634	0.421	3	634	1.262
12:00 - 13:00	3	634	0.631	3	634	1.314	3	634	1.945
13:00 - 14:00	3	634	0.473	3	634	1.367	3	634	1.840
14:00 - 15:00	3	634	0.631	3	634	0.263	3	634	0.894
15:00 - 16:00	3	634	0.631	3	634	1.262	3	634	1.893
16:00 - 17:00	2	793	0.820	2	793	0.946	2	793	1.766
17:00 - 18:00	2	793	1.324	2	793	0.883	2	793	2.207
18:00 - 19:00	2	793	2.963	2	793	0.946	2	793	3.909
19:00 - 20:00	2	793	1.955	2	793	1.576	2	793	3.531
20:00 - 21:00	2	793	0.000	2	793	0.126	2	793	0.126
21:00 - 22:00	2	793	0.000	2	793	1.765	2	793	1.765
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			13.484			12.656			26.140

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL CARS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.481	2	208	0.000	2	208	0.481
08:00 - 09:00	3	634	0.263	3	634	0.105	3	634	0.368
09:00 - 10:00	3	634	0.315	3	634	0.158	3	634	0.473
10:00 - 11:00	3	634	0.053	3	634	0.421	3	634	0.474
11:00 - 12:00	3	634	0.210	3	634	0.158	3	634	0.368
12:00 - 13:00	3	634	0.263	3	634	0.631	3	634	0.894
13:00 - 14:00	3	634	0.210	3	634	0.473	3	634	0.683
14:00 - 15:00	3	634	0.315	3	634	0.053	3	634	0.368
15:00 - 16:00	3	634	0.263	3	634	0.210	3	634	0.473
16:00 - 17:00	2	793	0.189	2	793	0.063	2	793	0.252
17:00 - 18:00	2	793	0.189	2	793	0.315	2	793	0.504
18:00 - 19:00	2	793	0.820	2	793	0.126	2	793	0.946
19:00 - 20:00	2	793	1.513	2	793	0.000	2	793	1.513
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	1.324	2	793	1.324
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.084			4.037			9.121

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.000	3	634	0.000	3	634	0.000
09:00 - 10:00	3	634	0.053	3	634	0.000	3	634	0.053
10:00 - 11:00	3	634	0.000	3	634	0.053	3	634	0.053
11:00 - 12:00	3	634	0.000	3	634	0.000	3	634	0.000
12:00 - 13:00	3	634	0.000	3	634	0.000	3	634	0.000
13:00 - 14:00	3	634	0.000	3	634	0.000	3	634	0.000
14:00 - 15:00	3	634	0.053	3	634	0.000	3	634	0.053
15:00 - 16:00	3	634	0.000	3	634	0.000	3	634	0.000
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.106			0.053			0.159

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL MOTOR CYCLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.053	3	634	0.000	3	634	0.053
09:00 - 10:00	3	634	0.000	3	634	0.000	3	634	0.000
10:00 - 11:00	3	634	0.000	3	634	0.000	3	634	0.000
11:00 - 12:00	3	634	0.000	3	634	0.000	3	634	0.000
12:00 - 13:00	3	634	0.000	3	634	0.000	3	634	0.000
13:00 - 14:00	3	634	0.000	3	634	0.000	3	634	0.000
14:00 - 15:00	3	634	0.000	3	634	0.000	3	634	0.000
15:00 - 16:00	3	634	0.000	3	634	0.053	3	634	0.053
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.053			0.053			0.106

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.*

Annex G: Decide and Provide Methodology

Historic Trends - Change over Time

		Total Veh - MM	Cyc - MM	Veh Occ - MM	Peds - MM	Pub Tran - MM	Total People - MM	Taxi - MM
07:00 - 10:00	Change over period	20.5%	-9.1%	24.1%	42.1%	60.9%	28.2%	#N/A
	Annual average change	0.6%	-0.4%	1.0%	1.8%	2.5%	1.2%	#N/A
16:00 - 19:00	Change over period	36.5%	17.0%	32.4%	24.7%	36.3%	31.6%	-116.7%
	Annual average change	1.1%	0.7%	1.4%	1.0%	1.5%	1.3%	-8.3%
00:00 - 23:00	Change over period	47.5%	-8.1%	24.7%	27.9%	62.8%	26.6%	-271.4%
	Annual average change	1.4%	-0.3%	1.0%	1.2%	2.6%	1.1%	-19.4%

(Lift from Historic Trend)

Five year adjustment factor	Total Vehicles	Cycling	Vehicle Occupants	Walking	Public Transport Users	Total People	Taxi
07:00 - 10.00	3.0%	-1.9%	5.0%	8.8%	12.7%	5.9%	#N/A
16:00 - 19:00	5.4%	3.5%	6.8%	5.2%	7.6%	6.6%	-41.7%
00:00 - 23:00	7.0%	-1.7%	5.1%	5.8%	13.1%	5.5%	-96.9%

Trips Adjusted for TRICS Historic Trends (extrapolated base)

Historic Trends	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Total
Vehicle	0.148	0.415	0.563	0.393	0.167	0.560	2.248	2.214	4.462
Walk	0.032	0.123	0.155	0.034	0.034	0.068	0.369	0.381	0.750
Cycling	0.003	0.015	0.018	0.011	0.005	0.015	0.048	0.047	0.095
Public Transport	0.000	0.024	0.024	0.018	0.003	0.021	0.098	0.103	0.201
Total People	0.180	0.569	0.749	0.450	0.206	0.657	2.804	2.785	5.589
Vehicle Occupants									
Taxi									

Development	2750
Unit	Per Dwelling

External trips 70%

Development Scenario Trips										
	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Totals	Mode split
Car	286	799	1085	756	322	1078	4327	4261	8589	80%
Walk	61	237	299	66	66	131	711	733	1443	13%
Cycling	6	29	35	20	9	30	92	90	182	2%
Public Transport	0	45	45	36	5	41	189	197	386	4%
Total People	346	1096	1442	867	397	1264	5398	5360	10759	100%
Vehicle Occupants										1%
Taxi										

D&P Trip Rates based on Trend Extrapolation and Trip Assumptions

D&P Trip Rates									
Vision Led	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Total
Vehicle	0.144	0.403	0.547	0.381	0.162	0.543	2.181	2.147	4.328
Walk	0.034	0.129	0.163	0.036	0.036	0.072	0.388	0.400	0.787
Cycling	0.004	0.019	0.023	0.013	0.006	0.019	0.060	0.058	0.118
Public Transport	0.000	0.026	0.026	0.020	0.003	0.023	0.108	0.113	0.221
Total People	0.176	0.558	0.734	0.441	0.202	0.644	2.748	2.729	5.477
Vehicle Occupants									
Taxi									

(Amend calcs to reflect assumptions)

BA1 Development Scenario Trips										
Vision Led	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Total	Mode split
Vehicle	237	663	900	638	272	910	3759	3701	7460	81%
Walk	54	209	263	55	55	111	610	628	1238	13%
Cycling	5	23	28	17	8	25	73	72	145	2%
Public Transport	0	42	42	31	5	35	176	184	359	4%
Total People	296	938	1234	741	340	1081	4617	4584	9202	100%
Vehicle Occupants										0%
Taxi										

BA3 Development Scenario Trips										
Vision Led	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Total	Mode split
Vehicle	44	124	169	120	51	171	705	694	1399	81%
Walk	10	39	49	10	10	21	114	118	232	13%
Cycling	1	4	5	3	1	5	14	13	27	2%
Public Transport	0	8	8	6	1	7	33	34	67	4%
Total People	56	176	231	139	64	203	866	860	1725	100%
Vehicle Occupants										0%
Taxi										

Total Residential Development Scenario Trips										
Vision Led	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Total	Mode split
Vehicle	282	788	1069	758	323	1081	4463	4395	8859	81%
Walk	64	248	313	66	66	131	724	746	1470	13%
Cycling	6	28	33	20	9	29	87	85	172	2%
Public Transport	0	50	50	37	5	42	209	218	427	4%
Total People	352	1113	1465	880	404	1284	5483	5444	10927	100%
Vehicle Occupants										0%
Taxi										

Assumptions (Amend assumptions to fit site)

Assumes to 2025 (note percentages are proportional and not percentage point increases)
25% increase in cycling to reflect Decarbonisation Plan and active deprioritisation of private cars. Given the low baseline for
Additional 10 percent increase in bus use to reflect the effects of the proposed bus service and the Decarbonisation Plan's
Additional 5% increase in walking to reflect works proposed to improve walking, and the Decarbonisation Plan's local travel
3% decrease in car trips to reflect modal shift to bus and cycle.
Additional 2% reduction in total people trips to reflect persistent home working/ hybrid working resulting from Covid period

	BA1	BA3
Development	2400	350
Unit	Per Dwelling	Per Dwelling
External trips	70%	90%

Rebased D&P with BAU mode share

	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Totals
Vehicle	0.153	0.428	0.581	0.415	0.177	0.592	2.417	2.380	4.797
Walk	0.035	0.135	0.17	0.036	0.036	0.072	0.392	0.404	0.796
Cycling	0.003	0.015	0.018	0.011	0.005	0.016	0.047	0.046	0.093
Public Transport	0	0.027	0.027	0.02	0.003	0.023	0.113	0.118	0.231
Total People	0.191	0.605	0.796	0.482	0.221	0.703	2.969	2.948	5.917
Vehicle Occupants									
Taxi									

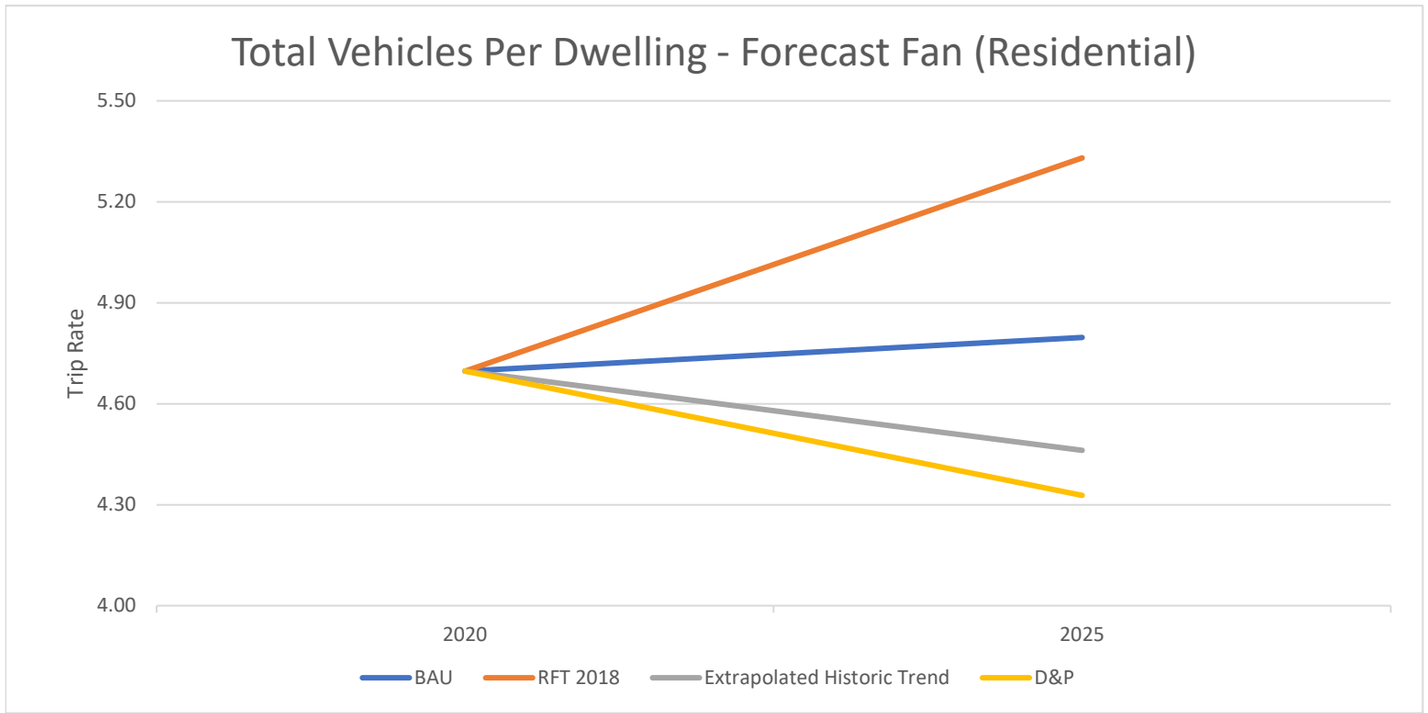
D&P Trip Rates									
Vision Led	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Total
Vehicle	0.141	0.395	0.536	0.380	0.162	0.542	2.237	2.203	4.440
Walk	0.032	0.125	0.157	0.033	0.033	0.066	0.363	0.374	0.737
Cycling	0.003	0.014	0.017	0.010	0.005	0.015	0.044	0.043	0.086
Public Transport	0.000	0.025	0.025	0.018	0.003	0.021	0.105	0.109	0.214
Total People	0.176	0.558	0.734	0.441	0.202	0.644	2.748	2.729	5.477
Vehicle Occupants									
Taxi									

Trip Forecast Fan

Vehicles Per Dwelling								Change over period	3.22
	Historic Trend	BAU	RFT 2018	Extrapolated	D&P	MSM	Historic Trend	Annual average change	53.67%
1990	7.92								
1995	7.38								
2000	6.84								
2005	6.31								
2010	5.77								
2015	5.23								
2020	4.70	4.70	4.70	4.70	4.70	4.70	4.70		
2025	4.16	4.80	5.33	4.46	4.33	3.99	4.16		

ITA MSM External Resi trips (70%)	7821
Dwellings	2800
Resultant 100% of trips	**11173**

NB: MSM have varying trip rates for various residential plots and anticipated tip distributions



Historic Trends - Change over Time

		Total Veh - MM	Cyc - MM	Veh Occ - MM	Peds - MM	Pub Tran - MM	Total People - MM	Taxi - MM
07:00 - 10:00	Change over period	-55.8%	27.5%	-4.6%	28.9%	47.2%	2.9%	-12.4%
	Annual average change	-1.6%	1.4%	-0.2%	1.4%	2.4%	0.1%	-1.2%
16:00 - 19:00	Change over period	-48.8%	18.9%	-12.6%	49.4%	49.6%	0.8%	15.0%
	Annual average change	-1.4%	0.9%	-0.6%	2.5%	2.5%	0.0%	1.5%
00:00 - 23:00	Change over period	-36.0%	31.8%	4.1%	42.5%	43.0%	12.7%	6.5%
	Annual average change	-1.1%	1.6%	0.2%	2.1%	2.1%	0.6%	0.7%

(Lift from Historic Trend)

Five year adjustment factor	Total Vehicles	Cycling	Vehicle Occupants	Walking	Public Transport Users	Total People	Taxi
07:00 - 10.00	-8.2%	6.9%	-1.2%	7.2%	11.8%	0.7%	-6.2%
16:00 - 19:00	-7.2%	4.7%	-3.1%	12.4%	12.4%	0.2%	7.5%
00:00 - 23:00	-5.3%	8.0%	1.0%	10.6%	10.7%	3.2%	3.3%

Trips Adjusted for TRICS Historic Trends (extrapolated base)

Historic Trends	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Total
Vehicle	0.663	0.117	0.780	0.084	0.472	0.556	3.154	3.212	6.365
Walk	0.043	0.012	0.055	0.015	0.042	0.057	0.376	0.385	0.761
Cycling	0.027	0.000	0.027	0.002	0.027	0.029	0.097	0.085	0.182
Public Transport	0.039	0.002	0.041	0.048	0.056	0.104	0.465	0.461	0.926
Total People	0.818	0.141	0.959	0.174	0.642	0.816	4.491	4.517	9.008
Vehicle Occupants									
Taxi									

Development	86500
Unit	Per sqm

External trips	80%

Development Scenario Trips

	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Totals	Mode split
Car	459	81	540	58	327	385	2182	2222	4405	71%
Walk	30	8	38	11	29	40	260	267	527	8%
Cycling	19	0	19	1	19	20	67	59	126	2%
Public Transport	27	2	28	33	39	72	322	319	641	10%
Total People	566	98	664	121	444	565	3108	3126	6233	100%
Vehicle Occupants										9%
Taxi										

D&P Trip Rates based on Trend Extrapolation and Trip Assumptions

D&P Trip Rates									
Vision Led	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Total
Vehicle	0.564	0.099	0.663	0.071	0.401	0.472	2.681	2.730	5.411
Walk	0.047	0.013	0.061	0.017	0.046	0.063	0.414	0.424	0.837
Cycling	0.040	0.000	0.041	0.003	0.041	0.044	0.145	0.128	0.273
Public Transport	0.041	0.002	0.043	0.051	0.059	0.109	0.488	0.484	0.972
Total People	0.777	0.134	0.911	0.166	0.610	0.775	4.267	4.291	8.558
Vehicle Occupants									
Taxi									

Development	86500
Unit	Per sqm
External trips	80%

(Amend calcs to reflect assumptions)

Development Scenario Trips											
Vision Led	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Total	Mode split	
Vehicle	390	69	459	49	278	327	1855	1889	3744	63%	72%
Walk	33	9	42	12	32	44	286	293	579	10%	79%
Cycling	28	0	28	2	28	30	100	89	189	3%	110%
Public Transport	28	2	30	35	41	76	338	335	673	11%	75%
Total People	538	93	631	115	422	537	2952	2969	5922	100%	74%
Vehicle Occupants										12%	
Taxi											

Assumptions (Amend assumptions to fit site)

Assumes to 2025 (note percentages are proportional and not percentage point increases)

50% increase in cycling to reflect Decarbonisation Plan and active deprioritisation of private cars. Given the low baseline for Cycling trips and the future Total People trips, this would represent a significant shortfall to the level identified by the DfT of 50% of all trips <5miles to be made by bike by 2030

Additional 5 percent increase in bus use to reflect the effects of the proposed bus service and the Decarbonisation Plan's mode shift targets

Additional 10% increase in walking to reflect works proposed to improve walking, and the Decarbonisation Plan's local travel mode shift targets

Commensurate 15% decrease in car trips to reflect modal shift to bus and cycle.

Additional 5% reduction in total people trips to reflect persistent home working/ hybrid working resulting from Covid period

BAU TRICS Method

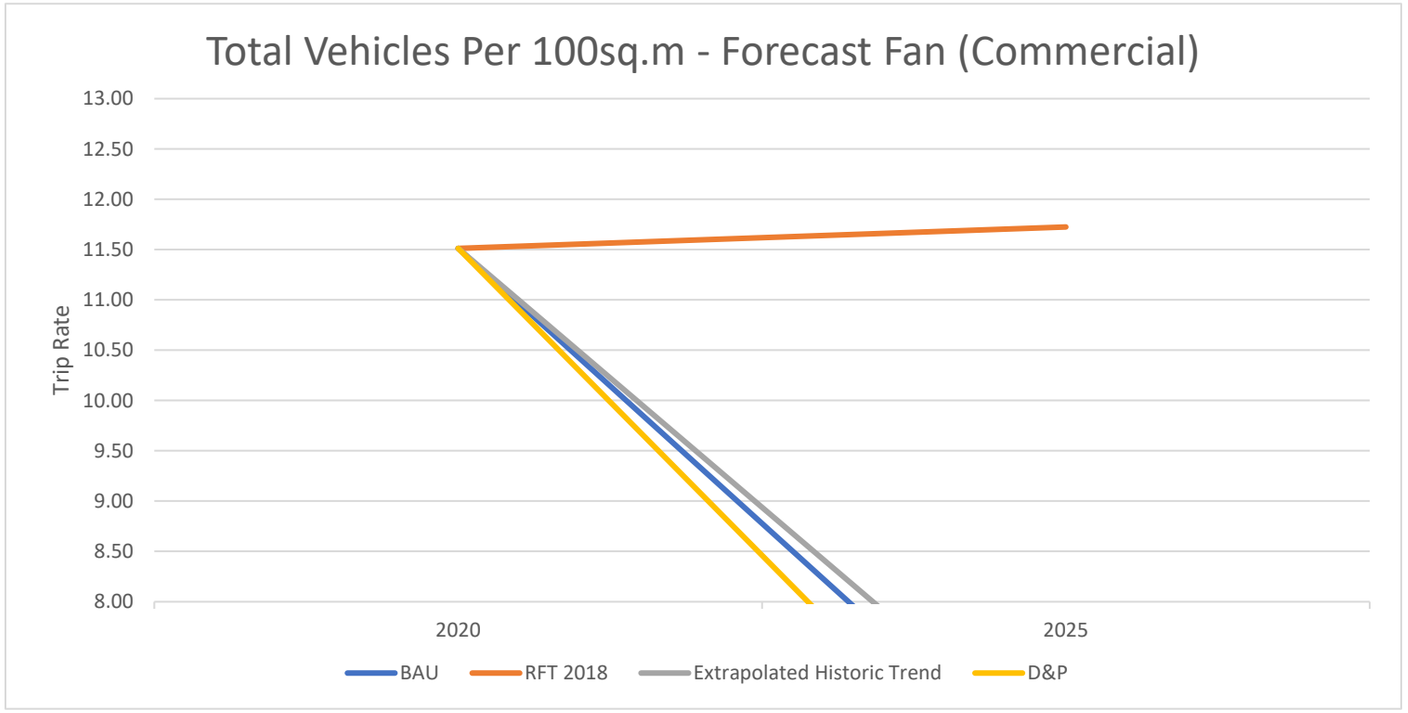
	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Totals
Vehicle	0.61	0.11	0.72	0.08	0.44	0.52	2.99	3.05	6.04
Walk	0.05	0.01	0.06	0.02	0.05	0.07	0.42	0.43	0.85
Cycling	0.03	0.00	0.03	0.00	0.03	0.03	0.10	0.09	0.20
Public Transport	0.04	0.00	0.05	0.05	0.06	0.12	0.52	0.52	1.04
Total People	0.82	0.14	0.97	0.17	0.64	0.82	4.64	4.67	9.30
Vehicle Occupants									
Taxi									

D&P Trip Rates									
Vision Led	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Total
Vehicle	0.578	0.102	0.680	0.074	0.417	0.492	2.755	2.805	5.560
Walk	0.044	0.012	0.056	0.017	0.045	0.062	0.387	0.396	0.783
Cycling	0.027	0.000	0.027	0.002	0.027	0.029	0.096	0.085	0.182
Public Transport	0.041	0.002	0.044	0.052	0.060	0.113	0.479	0.475	0.954
Total People	0.690	0.117	0.807	0.145	0.550	0.695	3.717	3.761	7.479
Vehicle Occupants									
Taxi									

D&P Trip Rates									
Vision Led	AM Arrival	AM Departure	AM Total	PM Arrival	PM Departure	PM Total	Daily Inbound	Daily Outbound	Daily Total
Vehicle	500	88	588	64	361	425	2383	2427	4809
Walk	38	11	49	14	39	54	335	343	678
Cycling	23	0	24	2	23	25	83	74	157
Public Transport	36	2	38	45	52	97	415	411	825
Total People	597	101	698	125	476	601	3216	3254	6469
Vehicle Occupants									
Taxi									

Trip Forecast Fan

Vehicles Per Dwelling								Change over period	-3.05
	Historic Trend	BAU	RFT 2018	Extrapolated	D&P	MSM	Historic Trend	Annual average change	-61.00%
1990	8.46								
1995	9.39								
2000	12.22								
2005	12.11								
2010	14.92								
2015	11.51								
2020	11.51	11.51	11.51	11.51	11.51	11.51	11.51		
2025	12.12	6.04	11.72	6.37	5.41	#DIV/0!	12.12		



Annex H: Approach to Deriving 'Vision-Led' Mode Shares and MSM Trip Rates

a company of Royal HaskoningDHV

File Note

HaskoningDHV UK Ltd.
Mobility & Infrastructure

To:	Internal Team
From:	Geoff Burrage
Date:	12 June 2024
Copy:	-
Our reference:	TP1035-ITP-FN-01
Classification:	Open
Checked by	GB

Subject: **Mode Shift Model - Theme Ratings Assumptions**

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1 Outline of decision points that influence Mode Shift Model outputs

An overview of how the Mode Shift Model (MSM) operates is set out in Appendix A. In broad terms the MSM is a tool that allows the potential impacts of a vision-led approach to be quantified for input into the Transport Assessment process. The core outputs are a set of trip rates, trip generation figures and mode share outcomes that can be used as part of understanding the impact of development proposals. The purpose of this note is to set out the input decisions made to the model in relation to the Growing Baldock scheme.

The key elements that influence the outputs of the model include:

1. The 'business as usual' trip rates input, making use of TRICS. For residential trip rates, the earlier rates used for the now withdrawn planning application have been used as it is assumed these were agreed through a scoping process with Hertfordshire County Council
2. The places selected to represent best practice for each of the four themes within the MSM (shown in the 'RAG Criteria and Mode Shifts' tab)
3. The rating (N/A, 1, 2, 3 or 4) given to each of the four themes for each allocation site

The rest of the note provides a record of the decision making for points 2 and 3. Point 1 is covered in detail in the TA Scoping Note, issued separately.

2 Record of decisions made

2.1 Themes and places selected

Four themes have been used in this iteration of the MSM, which are:

1. **Public transport**: E.g. bus services and bus priority; close proximity to halts; mobility hubs and MAAS with better services likely to reduce vehicle trips in favour of public transport trips
2. **Active travel**: E.g. traffic free cycle networks (on-site); traffic free cycle networks (off-site); traffic calmed / low speed / low traffic volume streets with good infrastructure likely to reduce car and possibly public transport trips in favour of active travel
3. **Traffic and Parking Management:** E.g. constrained car parking levels; robust parking controls; mix of on- and off-plot car parking; filtered permeability providing journey time advantage to walking, cycling and public transport with a strong combination of these measures likely to reduce vehicle trips in favour of public transport and active travel trips
4. **Placemaking and land use planning**: E.g. mix of day to day facilities including open spaces, education, ability to capture on-site trips through work hubs, retail lockers etc (new ways of working / shopping post pandemic) with a strong combination of these measures likely to reduce vehicle trips in favour of public transport and active travel trips

The MSM includes up to six places per theme. For each place mode shares are included for vehicle, public transport and active travel. The MSM then takes an average of the mode shares for each place. In comparison to the BAU trip rates, a minimum and maximum difference in mode share is identified per mode per theme, depending on the minimum and maximum BAU mode share for that mode for AM, PM and daily. The mid-point (average) of the difference is then taken as the basis for the maximum possible adjustment the MSM will make against the BAU trip rates, where the highest rating is given for the relevant theme. No adjustment is made where a '1' score is given.

It should be noted that through this process the MSM is making a calculation regarding the possible mode shift away from the car, drawing on the mode share outcomes for places that are best in class around the UK and Europe. Therefore, the mode share outcomes show a betterment of a BAU approach, on the assumption that providing the types of measures seen in the subject places will result in better travel behaviours, as seen in the subject places. The MSM does not allocate mode share from the subject places. The best possible mode share outcomes will be heavily influenced by the BAU trip rates that are input. The MSM includes several tiers of weighting and averaging that remove the influence of mode share outliers, ensuring that no one subject place unduly influences the outputs of the MSM.

The places selected for each theme and the rationale for each is set out in the table below.

Theme	Place	Rationale
Public transport	Helsinki (Finland)	Small city with high active travel and public transport mode share. Bus is the most widely used form of public transport.
	Riga (Latvia)	Small city with high public transport mode share. Around 83% of residential buildings are within 300m of public transport stops. Bus services are complemented by travel behaviour campaigns.

	Nottingham (UK)	Small city with higher public transport mode share than UK average. The city is served by high-quality bus services as well as a tram line.
	Hammarby Sjostad (Sweden)	Development site that achieves high levels of public transport mode share by ensuring a maximum distance to public transport stops of 300m and providing prioritised bus routes though the site, as well as a tram route.
Active Travel	Rostock (Germany)	Small city with high levels of active travel (particularly walking). A network of paved bike lanes are provided, with extensive bike parking and supporting measures such as e-scooter hire.
	Cambridge (UK)	Small city in the UK with higher than average active travel mode share (particularly cycling). The city is compact and has a culture of cycling, supported by cycle lanes and bike sharing schemes.
	Houten (Netherlands)	New town that achieves high active travel mode share (both walking and cycling). This is achieve through providing direct traffic-free walk and cycle routes, as well as journey time advantage through filtered permeability.
	Oxford (UK)	Small city in the UK with higher than average active travel mode share (both walking and cycling). The city is compact and has a culture of cycling, supported by cycle lanes and bike sharing schemes.
Traffic and Parking Management	Pontevedra (Spain)	A large town in Spain with low levels of car use and very high levels of active travel (predominantly walking). The city has implemented a comprehensive network of pedestrianised streets since the late 1990s, with limited car parking available in the town centre and extensive traffic calming measures.
	Brighton (UK)	A small city that achieves good levels of public transport and active travel mode share. The city has introduced a network of controlled parking zones to better manage car parking.
	Nottingham (UK)	Small city with higher public transport mode share than UK average. The city is the only place in the UK to introduce a workplace parking levy, which discourages commuting by car within the city boundary.
Placemaking and Land Use	Houten (Netherlands)	New town that achieves high active travel mode share (both walking and cycling). This is achieved through providing direct traffic-free walk and cycle routes, as well as journey time advantage through filtered permeability. There are a wide range of land uses on-site, providing day to day needs within a short walk or cycle of most homes.

	Poundbury (UK)	New town that achieves higher levels of active travel mode share than UK average. The place has been designed around a walkable street pattern and high quality public realm, with a good mix of land uses allowing for most day to day needs to be met on site.
	Rostock (Germany)	Small city with high levels of active travel (particularly walking). A network of paved bike lanes are provided, with extensive bike parking and supporting measures such as e-scooter hire. The town is walkable and provides a wide range of services for day to day needs.

It should be noted that it is rarely possible to determine the mode share impacts of individual schemes when considering travel behaviours at a settlement level. Our research suggests that the best mode share outcomes are realised when a range of interventions are delivered across themes in a place. The MSM acknowledges this by applying the median point of mode share impacts for each theme and modes to arrive at the vision-led mode share.

2.2 Themes ratings

For each theme a rating of N/A, 1, 2, 3 or 4 can be given, to reflect the package of interventions and masterplanning principles proposed. The ratings are described in headline in the table below.

Rating	Description
N/A	Not applicable – this theme will be excluded from the MSM calculations
1	The proposed measures will likely have an **insignificant impact** on mode share for this theme, and therefore BAU mode share outcomes can be expected
2	The proposed measures will likely have a **modest impact** for this theme, in comparison to a BAU scenario, and a third of the potential maximum mode shift is applied (i.e. if the maximum mode shift for the theme is a reduction of 28% against the BAU mode share, then a mode shift of 9% would be applied)
3	The proposed measures will likely have a **significant impact** for this theme, in comparison to a BAU scenario, and two-thirds of the potential maximum mode shift is applied (i.e. if the maximum mode shift for the theme is a reduction of 28% against the BAU mode share, then a mode shift of 18% would be applied)

4	The proposed measures will likely have a **transformational impact** for this theme, in comparison to a BAU scenario, and the maximum mode shift is applied (i.e. if the maximum mode shift for the theme is a reduction of 28% against the BAU mode share, then a mode shift of 28% would be applied)

A record of the themes ratings applied, and their rationale is set out in the table below.

Site	Trip length	Theme	Rating	Rationale
BA1	Internal trips (30% of trips)	Public transport	3	The majority of residents will be within a short walk of a bus stop, connecting them to the full range of on-site facilities. The bus service is expected to be high frequency (~every 10 minutes at peak times) but many short local trips will be quicker and more cost effective on foot and by bike. The impact of public transport on mode share for these trips is therefore expected to be significant, but not transformational in comparison to a BAU scenario.
		Active Travel	4	All residents will have access to high-quality walking and cycling routes, including traffic-free routes. Filtered permeability will make walking and cycling the quickest choice. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	4	The access road will have a 20mph design speed. All residential streets will have a 10mph design speed. Controlled parking zones will be investigated to manage on-street parking. Lower levels of car parking will be provided at points of higher connectivity, with a general principle of applying lower car parking levels than adopted standards across the whole site. A mix of off-plot and unallocated car parking will be provided, alongside on-plot parking. Where parking is off-plot it will be charged for annually. Filtered permeability will make walking and cycling the quickest choice. The impact of the traffic and parking management measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Placemaking and Land Use	4	A full range of day-to-day uses will be provided on-site, including primary schools, health, leisure and retail facilities. The public realm and landscaping will be exemplary, encouraging walking and cycling. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (30% of trips)	Public transport	4	The majority of residents will be within a short walk of a bus stop, connecting them to Baldock. The bus service is expected to be high frequency (~every 10 minutes at peak times). A range of on- and off-site bus priority measures are proposed in order to provide journey time advantage. A new access to the rail station is proposed, as well as improvements to the rail station building, which will encourage use of rail for trips to Letchworth and longer distance trips to destinations such as London and Cambridge. The impact of public transport on mode

				share for these trips is therefore expected to be transformational in comparison to a BAU scenario.
		Active Travel	4	A network of traffic-free and low traffic cycle routes is to be provided both on- and off-site, including a dedicated active travel bridge over the railway, with connections made to the town centre and Knights Templar school. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	The on-site street network will ensure result in it being quicker to get off the site and into Baldock by bike and bus than by car. The package of off-site highway interventions include a range of reductions in highway capacity and access restrictions in order to allow for reallocation of roadspace for improved walking, cycling and bus infrastructure. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	4	The proposed walking, cycling and public transport interventions will support safe and convenient access to Baldock town centre, with many facilities within 20 minutes of walk of much of the site. Baldock town centre is an attractive and vibrant centre with a full range of uses. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	2	The potential changes to vehicle access and capacity within and particularly for trips through Baldock, will influence mode choice for some longer distance trips. The impact of traffic and parking management measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.

		Placemaking and Land Use	N/A	The proposed placemaking and land use measures are not relevant to these trips.
BA3	Internal trips (10% of trips)	Public transport	N/A	The proposed public transport measures are not relevant to these trips, given the relatively small size of the site.
		Active Travel	3	All residents will have access to high-quality walking and cycling routes, including traffic-free routes. The impact of the active travel measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Traffic and Parking Management	3	The internal road network will be designed to encourage slow speeds (10mph to 20mph design speed, depending on the street). A general principle of applying lower car parking levels than adopted standards is proposed across the site. A mix of off-plot and unallocated car parking will be provided, alongside on-plot parking. Where parking is off-plot it will be charged for annually. The impact of the traffic and parking management measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
		Placemaking and Land Use	3	Given the scale of the site a relatively limited range of day-to-day uses will be provided on-site. The public realm and landscaping will be exemplary, encouraging walking and cycling. The impact of the placemaking and land use measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (50% of trips)	Public transport	3	The majority of residents will be within a short walk of a bus stop, connecting them to Baldock. The bus service is expected to be high frequency (~every 10 minutes at peak times). A range of on- and off-site bus priority measures are proposed in order to provide journey time advantage. Improvements to the rail station building are proposed, which will encourage use of rail for trips to Letchworth and longer distance trips to destinations such as London and Cambridge. The impact of public transport on mode share for these trips is therefore expected to be significant in comparison to a BAU scenario.
		Active Travel	3	The site will connect to a network of traffic-free and low traffic cycle routes, including to a dedicated active travel bridge over the railway, with new connections made to the town centre and station in particular. The impact of the active travel measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Traffic and Parking Management	3	The on-site street network will ensure result in it being quicker to get off the site and into Baldock by bike and bus than by car. The package of off-site highway interventions include a range of reductions in highway capacity and access restrictions in order to allow for

				reallocation of roadspace for improved walking, cycling and bus infrastructure. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	3	The proposed walking, cycling and public transport interventions will support safe and convenient access to Baldock town centre, with many facilities within 20 minutes of walk of much of the site. Baldock town centre is an attractive and vibrant centre with a full range of uses. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	While the changes to capacity and access could have some limited on long distance trip making on balance, the impact of traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Placemaking and Land Use	N/A	The proposed placemaking and land use measures are not relevant to these trips.
BA10	Internal trips (20% of trips)	Public transport	N/A	The proposed public transport measures are not relevant to these trips, given that the proposed bus service will not run within it.
		Active Travel	4	A traffic-free active travel route is proposed within the site, connecting the land uses and proposed green and social spaces. This, combined with filtered permeability will ensure that walking and cycling is the quickest mode within the site. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.

		Traffic and Parking Management	4	Parking levels below adopted levels are proposed. Vehicle access will be managed to individual plots accesses, while walking and cycling will be directly
		Placemaking and Land Use	3	A mix of uses will be provided on-site, as well as an active travel bridge to the local centre proposed in BA1. The quality of the public realm and landscaping will be exemplary. The impact of the placemaking and land use measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (40% of trips)	Public transport	4	The site will be well connected to the train station, including with proposed improved quality walking routes. The site will be served by the proposed bus service, supported by priority measures. The impact of the public transport measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Active Travel	4	The site will be directly connected to the proposed on- and off-site traffic walking and cycling routes to BA1, Clothall Common, the station and Baldock town centre. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	Changes to traffic access at the Whitehorse Street junction and speed restrictions (reduced speed limit along Royston Road), combined with enhanced walking and cycling routes and bus services will influence modal choice. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	4	The site will have access to BA1, Clothall Common, the station and Baldock town centre via high-quality traffic free and lightly trafficked routes, including via a new bridge. This provides access to a wide range of day to day uses that will be more quickly accessed by modes other than the car. This will complement the mix of uses on-site. The impact of the placemaking and land use management measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.

		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	While the changes to capacity and access could have some limited on long distance trip making on balance, the impact of traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Placemaking and Land Use	N/A	The proposed placemaking and land use measures are not relevant to these trips.

Annex I: ITP Mode Share Model

Vision-led

Internal trips

Site	Mode	AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	14	44	35	16	219	217
	Public transport	9	28	23	10	140	139
	Active travel	104	329	260	119	1620	1608
BA3	Vehicles	2	7	6	3	34	34
	Public transport	0	0	0	0	1	1
	Active travel	4	12	10	4	61	60
BA10	Vehicles	93	17	8	64	417	426
	Public transport	17	3	4	17	113	113
	Active travel	10	1	12	14	112	111
Whole site	Vehicles	109	68	49	83	670	678
	Public transport	26	32	27	27	255	253
	Active travel	117	342	282	138	1793	1780
BA10	HGVs	2	1	1	1	11	11

Trips to Baldock and Letchworth

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	67	164	191	77	1074	1050
	Public transport	6	42	32	10	191	194
	Active travel	54	196	94	59	714	721
BA3	Vehicles	21	55	59	24	340	333
	Public transport	2	11	8	2	48	49
	Active travel	8	32	10	9	93	96
BA10	Vehicles	137	25	8	90	579	594
	Public transport	43	7	11	41	273	273
	Active travel	60	8	32	60	433	434
Whole site	Vehicles	225	244	259	191	1993	1977
	Public transport	50	60	51	53	512	516
	Active travel	122	236	136	128	1241	1250
BA10	HGVs	4	2	1	2	22	22

Residual trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	135	379	365	156	2148	2115
	Public transport	0	24	18	3	100	105
	Active travel	34	133	41	36	390	400
BA3	Vehicles	20	55	53	23	313	308
	Public transport	0	3	3	0	15	15
	Active travel	5	19	6	5	57	58
BA10	Vehicles	200	35	26	144	953	971
	Public transport	25	4	6	25	167	167
	Active travel	14	1	18	21	166	164
Whole site	Vehicles	355	470	444	323	3414	3394
	Public transport	25	32	27	28	282	287
	Active travel	53	153	65	62	613	622
BA10	HGVs	4	2	3	2	22	22

Total external trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	202	543	556	232	3222	3165
	Public transport	6	66	50	12	291	299
	Active travel	88	329	136	96	1104	1121
BA3	Vehicles	41	111	112	47	653	641
	Public transport	2	14	11	3	63	64
	Active travel	13	51	16	14	150	154
BA10	Vehicles	337	60	34	234	1532	1565
	Public transport	67	12	17	66	441	440
	Active travel	74	9	50	80	599	598
Whole site	Vehicles	580	714	702	514	5407	5371
	Public transport	75	92	77	81	794	803
	Active travel	174	389	201	190	1854	1873
BA10	HGVs	8	4	4	3	45	45

Total trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	216	587	591	248	3441	3382
	Public transport	15	94	72	22	431	438
	Active travel	191	658	396	215	2724	2729
BA3	Vehicles	43	118	118	50	687	676
	Public transport	2	14	11	3	64	65
	Active travel	17	63	26	18	211	214
BA10	Vehicles	430	77	42	298	1950	1991
	Public transport	84	15	21	83	554	553
	Active travel	84	10	62	95	712	710
Whole site	Vehicles	689	782	751	596	6078	6049
	Public transport	100	123	104	108	1049	1057
	Active travel	292	731	483	328	3647	3653
BA10	HGVs	10	5	5	4	56	56

Appendix B – Transport Scoping Report Addendums

a company of Royal HaskoningDHV

Addendum

HaskoningDHV UK Ltd.
Mobility & Infrastructure

To:	HCC, NHDC
From:	Tom Hicks, Nicola Lodge
Date:	04 April 2025
Copy:	DLA, U&C
Our reference:	PC7029-ITP-TN-0002
Classification:	Project related
Checked by	Geoff Burrage

Subject: **Growing Baldock TSR Addendum**

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1 Introduction

1.1 Overview

1.1.1 This Transport Scoping Report (TSR) Addendum has been prepared by ITP on behalf of Urban & Civic (U&C) in association with a developing outline planning application for the proposed 'Growing Baldock' development.

1.1.2 The purpose of this TSR Addendum is to address comments provided by North Hertfordshire District Council (NHDC) and Hertfordshire County Council (HCC) regarding the TSR submitted by ITP in February 2025.

1.1.3 This Addendum report aims to secure agreement of the key assessment principles and to confirm the scope of transport planning deliverables required for the developing outline planning application (OPA), namely the Transport Assessment (TA), Travel Plan (TP) and Monitor and Manage Framework (MMF).

1.1.4 In the shorter term, many of the changes made in response to comments have informed the COMET proforma submitted to HCC on the 21st of March 2025, and therefore, agreement is sought relating to trip generation, internalisation and mode share assumptions to ensure that the modelling is undertaken on an agreed basis. The populated COMET proforma is included in **Appendix A** for reference.

1.1.5 The full comments provided by NHDC and HCC, with individual responses to each, are contained within **Appendix B**. This Addendum report summarises the responses to the key comments where a change to the approach is proposed, or where a comment is querying a fundamental element of the methodology and requires further explanation. Many minor comments are agreed and will be actioned through the ongoing development of the TA, as set out within **Appendix B**.

1.1.6 It should be noted that comments on the Environmental Impact Assessment (EIA) Scoping Report have also been received from NHDC and HCC. These comments are not addressed in this Addendum, however, most of them align with the TSR comments and will be actioned as the EIA and TA work develop.

2 Responses to Comments

2.1 Trip Generation

2.1.1 Several general changes have been made to the proposed trip generation since circulation of the TSR; some in response to comments and some which reflect the evolving development proposals. These are as follows:

- The trip generation for BA2 has been incorporated into the MSM. The updated MSM outputs for all scenarios and inclusive of BA2 are included in **Appendix C**.
- In an internal review, an error was noted with the 'lght industrial' land use TRICS search – the sites selected were in fact reflecting commercial warehousing rather than light industry. The resulting trip generation for this land use is lower. The TRICS outputs are included in **Appendix D**.
- The land use mix proposed at BA10 has been updated to what was indicated in the TSR; the proposed quanta are as follows (key changes emboldened):
    - 1,500sqm medical centre
    - **5,000sqm gym**
    - 5,000sqm waste transfer station and vehicle depot
    - **20,000sqm of office**
    - 26,500 of light industrial
    - 26,500 of B2 industrial

  In all cases the trip rates for the above were already derived, but the development quanta have been amended in the updated MSM.
- Inclusion of the secondary school trips to/from BA3 in the option where a 12 form entry school is developed on the site (Option 1). The trip generation for the secondary school is based on the information previously gathered from Knights Templar school (which would relocate to BA3 in this scenario). The updated MSM, which provides secondary school trips, is presented in **Appendix C**.
- Inclusion of special education needs and disability (SEND) school trips on BA3 in both final year scenarios (Option 1 and Option 2). The SEND school trip generation has been based on a recently consented school in Hemel Hempstead (REF: 23/02973/MFA), with permission granted in October 2024, for *"a Special Educational Needs (SEN) School (Class F1) alongside various supporting works".* The transport reports prepared to support the application included Manual Classified Count (MCC) surveys that had been undertaken at two operational SEND school sites within Hertfordshire, the results of which were used to calculate person trip rates arriving and departing the school. These same trip rates have been applied to the proposed SEND school at BA3, based on the indicative number of pupils and staff anticipated. The trip generation calculations associated with the SEND school are presented in **Appendix C**.

2.1.2 As above, the trip generation relating to each of these changes is reflected in the MSM in **Appendix C** and in the COMET proforma. The other responses to comments below build on these updates.

2.2 Baseline Trip Rates

HCC Comments

2.2.1 Regarding the D&P methodology, which has been used to inform the 'business-as-usual' (BAU) trip rates within the MSM model, key points raised by HCC are as follows:

- *"Please clarify whether the BAU trip rates (Employment) do actually reflect current trends in working from home."*
- *"it is not clear whether the trip rates and trips take into account TRICS extrapolation trends to reflect working from home. More generally I found the Decide and Provide methodology difficult to follow and the appendix would benefit from greater explanation."*

NHDC Comments

2.2.2 NHDC also requested clarification regarding the BAU trip rates and D&P:

- NHDC queried the business as usual trip rates within the TSR, which were taken from the TAs from the withdrawn planning applications for Baldock North and Baldock South: "*Are these relevant any longer? Wouldn't you take more up-to-date TRICS trip rates as the BaU scenario?"*
- Regards the D&P methodology*: "this could reflect the general economic backdrop ("cost of living crisis"), and not a trend to be extrapolated reliably.*
  Changing work patterns have not yet played out fully. Under-used office space will eventually be filled by workers (new businesses filling vacated premises; co-working spaces, perhaps with lower rates on Mondays and Fridays); or, office buildings/land will be redeveloped for other purposes, potentially residential.
  There is another trend beginning to be evident, of EV owners driving more because the marginal cost (principally, cost of electricity per mile) is lower.
  In short, I caution against extrapolating trends that may artificially diminish the scale of the transport challenge. I would rather start with something that we are fairly confident is towards the upper end of the likely range for background and generated trips (all modes) and be forced by that to consider more, bigger and more effective interventions to achieve higher modal shares for sustainable travel."

ITP Response

2.2.3 Responding to NHDC's first comment, the business-as-usual residential trip rates have firstly been updated to reflect the most recently available sites within the TRICS database (v.7.11.4). When compared with the trip rates presented within the TSR, which were derived from the TAs submitted to support the withdrawn planning applications for the development site, the updated total vehicle trip rates are lower. This results from the availability of more recently surveyed residential sites within the TRICS database, which reflect post-COVID-19 pandemic work and travel patterns. The full report outputs are presented in **Appendix D** and the revised BAU trip rates feed into the updated MSM and the COMET proforma.

2.2.4 With regard to the overall D&P methodology in the TSR, it provides a suitable basis for estimating the downward trend in trip-making over recent years. Every conceivable outcome cannot be tested. The methodology makes use of TRICS survey data derived from five-year time slices between 1990 and 2024. Based on the resulting trends, annual and five-year average changes to trip-making figures can be calculated. Therefore, the reduction in trips, resulting from the extrapolated D&P methodology, is derived from a five-year projection, which has been informed by historical trip-making trends.

2.2.5 The scenarios proposed and the COMET approach are not intended to test every possible outcome but rather to provide a sound rationale that trip rates have been declining. The TA will include a refined description of the D&P methodology and expand on the range of factors which could have, or will, influence declining trip making.

2.3 Model Shift Model

HCC Comments

2.3.1 Regarding the MSM methodology: *"The rational for the percentage [mode shifts] is unclear and it would be helpful to have an explanation and justification. Is there any local/ regional case study evidence of this level of mode shift from elsewhere, for example?"*

NHDC Comments

2.3.2 NHDC queried many of the theme ratings applied within the MSM, against which the BAU mode shares have been adjusted.

ITP Response

2.3.3 Justification for each of the MSM ratings behind the trip generation presented in the TSR (and which feeds into the COMET proforma) is provided in **Appendix E**.

2.3.4 The MSM output mode shares and trip rates are based on a rating of the proposed interventions against the key themes: public transport, active travel, traffic and parking management, and placemaking and land use planning. A higher rating indicates that intervention has very good potential to achieve mode shift away from the baseline. The level of potential modal shift is informed by UK and European case studies of good practice. A lower rating means that the proposals are likely to perpetuate the norm and achieve similar mode shares and trip rates to other historic developments in the UK (i.e. similar to the baseline in the BAU scenario). The TA will include narrative on the case studies which inform the MSM, and it is proposed that a demonstration of the MSM is given in a future Transport Working Group meeting.

2.3.5 In response to NHDC's comments around the MSM ratings applied, a sensitivity test has been undertaken to understand how the suggested changes would impact on the proposed trip generation and mode share. This is presented in **Appendix F**.

2.3.6 In summary, the MSM sensitivity test resulted in a 1% and 17% increase in total vehicle trips for sites BA1 and BA10, respectively. The assessment resulted in a 24% decrease in total vehicle trips for site BA3. Regarding the entire masterplan, the sensitivity test resulted in an 8% increase in total daily vehicle trips. The addition of BA2 to the MSM accounts for 5% of this increase. Therefore, the MSM sensitivity test would result in a net increase of 3% in total daily vehicle trips and 3% reduction in total daily active and sustainable transport trips.

2.3.7 The MSM sensitivity test would have a minimal impact on total vehicle trips when compared with the MSM presented as part of the TSR and the COMET proforma. Given this minor change, no further assessment of this scenario is necessary.

2.3.8 A further detailed table providing ITP's responses to individual comments provided by HCC and NHDC is provided within **Appendix B**. It is suggested that several comments querying how the MSM works are addressed through a demonstration in a future Transport Working Group meeting.

2.4 Trip Internalisation

HCC Comments

2.4.1 HCC's response to the TSR noted that the trip internalisation assumptions presented in the TSR were reasonable, albeit that *"ITP's research into trip internalisation methodologies from a number of large application sites shows substantial variation between developments, with no consistent agreed methodology for their calculation."*

NHDC Comments

2.4.2 NHDC queried several elements of the internalisation work presented, including commentary on the sites included, use of an average figure, and the extent of leisure and retail internalisation.

ITP Response

2.4.3 Following the submission of the TSR, the trip internalisation methodology has been refined based on site context, land use mix and the case study research presented in the TSR. This has been informed by splitting out proposed development trips into trip purposes, using National Travel Survey (NTS) data. Trip purposes can then be broadly attributed to the land uses proposed within each development site.

2.4.4 **Table 2-1** overleaf shows the calculation of proportion of trips made for each purpose in the peak hours.

Table 2-1: Daily and Peak Hour Proportion of Trips by Purpose

Car Trips	Journey Purpose		Proportion of Trips in Peak Hours		No. of Trips by Purpose		% of Trips by Purpose	
	No. Trips (Daily)	% Split	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
Commuting	117	**13%**	13%	13%	15	15	**9%**	**17%**
Business	20	**2%**	11%	7%	2	1	**1%**	**2%**
Education or Escort Education	121	**13%**	77%	4%	93	5	**57%**	**5%**
Shopping	169	**18%**	3%	6%	5	10	**3%**	**11%**
Other Escort/ Personal Business	158	**17%**	10%	9%	16	14	**10%**	**15%**
Leisure	330	**36%**	10%	14%	33	46	**20%**	**50%**
Other	0	**0%**	0%	0%	0	0	**0%**	**0%**
All purposes	**915**	**100%**	**-**	**-**	**164**	**92**	**100%**	**100%**
Source	*National Travel Survey Table 0409a*		*National Travel Survey Table 0502b*		*Yearly Trips * Proportion of Trips in Peak Hour*		*No. of Trips by Purpose as a Percentage*	

2.4.5 To derive the trip internalisation figures for each trip purpose for each development site, assumptions were made based on the land uses proposed for that site. For reference, the case study research which informs these assumptions is shown in **Table 2-2** (replicating the table in the TSR, but with the average values removed).

Table 2-2: Case Study Research Internalisation Ranges

Purpose	Minimum	Maximum
Commuting	7%	20%
Education or Escort Education	29%	100%
Shopping	50%	90%
Leisure	80%	100%
Other (nursery and healthcare)	10%	100%

2.4.6 The following assumptions were made for the final build out year Option 1 scenario (no secondary school on BA3) in the MSM:

- **Commuting** – some employment sites in BA1, school as employer in BA3. No employers in BA2 and no residential in BA10; therefore, no internal commutes.
- **Education** – BA1: assumed the majority of young children travel to primary school in BA1, so this is ~50% of all children on BA1 (seven years are spent at primary and five to seven at secondary). BA3 assumed to have no secondary school in this scenario. So internalisation on BA3 relates to 300 dwellings and the SEND school - assumed minimal direct internalisation from BA3 homes to the SEND school. National research suggests that 5-10% of children attend a SEND school.
- **Shopping** – Applied minimum internalisation rates to BA10 which may contain a shop and a gym. Higher assumption for BA1, which will have a local centre; however, it is not considered that BA1 will attract trips away from the offer of Baldock's town centre

- **Leisure** – Applied below minimum internalisation rates to BA1, BA3, BA10 which all contain leisure facilities. Whilst leisure trips (in this exercise) can also include dog walking, visiting friends and family, and going for a walk, it is recognised that trips to the cinema, swimming pool, and bowling, for instance, will be undertaken off-site.
- **Other** – Applied minimum or just above to BA1, BA10 (include nursery and health care, respectively). BA10 employees going to the health centre will constitute internal health trips. No relevant facilities are proposed at BA2 or BA3.

2.4.7 The combined trip internalisation factor for each site is a weighted average based on the proportion of trips made for each purpose in the peak hours, as shown in **Table 2-1**. For example, as education trips account for a high proportion of trips made in the morning peak hour, the internalisation of these trips is given a higher weighting.

2.4.8 The trip internalisation assumptions for the full build-out scenario Option 1 (no secondary school on BA3) is presented in **Table 2-3**. The resultant weighted average trip internalisation factors are show in **Table 2-4**, based on the peak hour and daily trip proportions from the NTS in **Table 2-1**.

Table 2-3: Full Build-Out Scenario (No School) Trip Internalisation Assumptions

Trip Purpose	BA1	BA2	BA3	BA10
Commuting	10%	0%	7%	0%
Education / Escort Education	50%	0%	5%	0%
Shopping	30%	0%	0%	10%
Leisure	60%	0%	20%	20%
Other (nursery and healthcare)	30%	0%	0%	10%

Table 2-4: Full Build-Out Scenario (No School) Weighted Average Trip Internalisation

Trip Length / Period	BA1	BA2	BA3	BA10
Internalisation - AM	45%	0%	8%	5%
Internalisation - PM	43%	0%	12%	13%
Internalisation - Daily	40%	0%	9%	11%
Trips within Baldock - AM	15%	60%	52%	55%
Trips within Baldock - PM	17%	60%	48%	47%
Trips within Baldock - Daily	20%	60%	51%	49%
Residual trips – all periods	40%	40%	40%	40%

2.4.9 Trip internalisation will vary with each assessment scenario from the opening year to the full build-out year. Therefore, using the same principles as outlined above, separate internalisation figures have been calculated for each assessment scenario (these are also clarified below in Section 2.5). The assumptions feed into each scenario in the MSM, which, in turn, informs the trip generation proposed in the COMET proforma. All trip internal figures for each scenario will be presented in detail as part of the planning application TA.

2.4.10 The trip internalisation assumptions for the full build-out scenario Option 2 (with BA3 school) are presented in **Table 2-5** and the weighted factors for the peak hour and daily periods are shown in **Table 2-6**.

Table 2-5: Full Build-Out Scenario (With School) Trip Internalisation Assumptions

Trip Purpose	BA1	BA2	BA3	BA10
Commuting	10%	0%	10%	0%
Education / Escort Education	50%	0%	55%	0%
Shopping	30%	0%	0%	10%
Leisure	60%	0%	20%	20%
Other (nursery and healthcare)	30%	0%	0%	10%

Table 2-6: Full Build-Out Scenario (With School) Weighted Average Trip Internalisation

Trip Length / Period	BA1	BA2	BA3	BA10
Internalisation - AM	45%	0%	36%	5%
Internalisation - PM	43%	0%	15%	13%
Internalisation - Daily	40%	0%	16%	11%
Trips within Baldock- AM	15%	60%	24%	55%
Trips within Baldock - PM	17%	60%	45%	47%
Trips within Baldock - Daily	20%	60%	44%	49%
Residual trips - all periods	40%	40%	40%	40%

2.4.11 To derive the figures above, the following assumptions were made:

- In general, internalisation figures reflect the ‘no school’ scenario, except for commuting and education in BA3.
- **Commuting** – The additional school in BA3 leads to increased internalisation as a result of additional employment.

- **Education** – it is assumed that the majority of young children will travel to the primary school in BA1, so this is c. 50% of all children in BA1 (seven years are spent at primary and five to seven at secondary). It is assumed that BA3 will provide a secondary school in this scenario, and, therefore, the majority of older children will travel to secondary school in BA3 (c. 50% of all children in BA3). It is assumed that there will be minimal direct internalisation from BA3 homes to the SEND school. National research suggests that 5-10% of children attend a SEND school.

2.4.12 The trip internalisation assumptions for the interim year are presented in **Table 2-7** and the weighted factors for the peak hour and daily periods are shown in **Table 2-8**.

Table 2-7: Interim Year Scenario Trip Internalisation Assumptions

Trip Purpose	BA1	BA2	BA3	BA10
Commuting	5%	0%	4%	0%
Education / Escort Education	50%	0%	0%	0%
Shopping	15%	0%	0%	8%
Leisure	30%	0%	10%	15%
Other (nursery and healthcare)	15%	0%	0%	8%

Table 2-8: Interim Year Scenario Weighted Average Trip Internalisation

Trip Length / Period	BA1	BA2	BA3	BA10
Internalisation - AM	37%	0%	2%	4%
Internalisation - PM	23%	0%	6%	10%
Internalisation - Daily	24%	0%	4%	8%
Trips within Baldock - AM	23%	60%	58%	56%
Trips within Baldock - PM	37%	60%	54%	50%
Trips within Baldock - Daily	36%	60%	56%	52%
Residual trips – all periods	40%	40%	40%	40%

2.4.13 The interim year internalisation figures work back from the full build-out (no school) scenario, with the following assumptions made regarding delivery at each site. It has been assumed that the secondary school would not be built in the interim scenario.

- **Commuting** – It has been assumed that the internalisation figure would be half that of the full build-out (no school) scenario.
- **Education** – It has been assumed that the primary school on BA1 would be built, while the secondary school and SEND school on BA3 would not be built.

- **Shopping, Leisure and Other** – It has been assumed this scenario would have half the level of internalisation of the full build-out (no school) scenario, except for BA10 at 75% internalisation. This is based on the shopping, leisure and medical facilities being delivered.

2.4.14 The trip internalisation assumptions for the opening year are presented in **Table 2-9** and the weighted factors for peak hour and daily periods are shown in **Table 2-10**.

Table 2-9: Opening Year Scenario Trip Internalisation Assumptions

Trip Purpose	BA1	BA2	BA3	BA10
Commuting	3%	0%	2%	0%
Education / Escort Education	0%	0%	0%	0%
Shopping	8%	0%	0%	4%
Leisure	15%	0%	5%	8%
Other (nursery and healthcare)	8%	0%	0%	4%

Table 2-10: Opening Year Scenario Weighted Average Trip Internalisation

Trip Length / Period	BA1	BA2	BA3	BA10
Internalisation - AM	4%	0%	1%	2%
Internalisation - PM	10%	0%	3%	5%
Internalisation - Daily	8%	0%	2%	4%
Trips within Baldock - AM	56%	60%	59%	58%
Trips within Baldock - PM	50%	60%	57%	55%
Trips within Baldock - Daily	52%	60%	58%	56%
Residual trips – all periods	40%	40%	40%	40%

2.4.15 The opening year internalisation figures have been derived based on the interim year scenario, with the following assumptions made regarding delivery in each site.

- **Commuting** – Half of the proposed levels of internalisation when compared to the interim year scenario, based on the initial occupation employment space.
- **Education** – No schools are built in this scenario.
- **Shopping, Leisure and Other** - Half the level of internalisation when compared to the interim year scenario, based on the initial occupation of employment space.

2.4.16 All of the above assumptions feed into the MSMs for each scenario (**Appendix C**), and the resultant trip generation presented in the COMET proforma for each site and each scenario (**Appendix A**).

2.5 COMET Approach

HCC Comments

2.5.1 HCC requested additional information relating to the scenarios and parameters to be assessed within the COMET model. The points raised by HCC include:

- *"Further discussions with HCC should take place, if not already done so, as part of the pre-application process, to determine the model's suitability for use and to clarify model assumptions, including the scenarios to be modelled."*
- *"The modelling methodology is generally unclear to me, including what strategic and local model runs are proposed to be carried out and how the strategic model will be used to interact / inform the local modelling. It is not clear whether it is intended to carry out COMET model runs for the BAU scenarios, to demonstrate the impacts of this or whether there are any up-to date existing COMET model runs available to represent these."*
- *"An interim test is needed, what I am not currently clear on is how we arrived at a 2033 interim test."*
- *"It is proposed that no COMET model run will be carried out for development option 3 (five form entry Secondary school plus residential), the justification being that the impacts will be lower than for either Options 1 or 2... I suggest that the trip generation assumptions are set out for all three of the school scenarios for HCC to gain agreement that this is the correct way forward."*

NHDC Comments

2.5.2 The key comments provided by NHDC are as follows:

- *"Aren't we starting from the assumption that the sites have already been tested through the Local Plan examination, and that what we are seeking to establish now is the scale of interventions needed to ensure that traffic levels are contained within safe and manageable bounds?"*
- "*'Decide & Provide methodology not clearly set out, baseline should be a realistic worst-case future scenario – not BaU or an arbitrarily doctored BaU, but a scenario where planned mitigations are, for plausible reasons, less effective than hoped. Don't understand the point of running BAU scenarios through COMET, since we are all agreed it is not a scenario we need to test. The purpose of a TA is to propose and test the effectiveness of a range of interventions and mitigations."*

ITP Response

2.5.3 For reference, the COMET model assessment scenarios, set out in the proforma, are shown in **Table 2-11** overleaf.

Table 2-11: COMET Scenarios

Ref	Year / Modelled Scenario to be run	Scenario to be run without proposed development included?	Scenario to be run with proposed development included?	Scenario to be run with proposed development and proposed mitigation measures included?
S1	2028, Opening Year – Business as Usual Assumptions	Yes	No[1]	No
S2	2033, Interim Phase (No Access Road) – Vision-led Assumptions	Yes	No[2]	Yes[3]
S3	2033, Interim Phase (No Access Road) – Business as Usual Assumptions		Yes	No[4]
S4-1	2040, Full Development Year – Vision-led Assumptions (BA3 School Option 1)	Yes	No[2]	Yes
S4-2	2040, Full Development Year – Vision-led Assumptions (BA3 School Option 2)		No[2]	Yes
S5-1	2040, Full Development Year – Business as Usual Assumptions (BA3 School Option 1)		Yes	No[4]
S5-2	2040, Full Development Year – Business as Usual Assumptions (BA3 School Option 2)		Yes	No[4]

Model Suitability

2.5.4 HCC's modelling team have been engaged for several months in discussions around how COMET can be best used to support the OPA, including the flexibility of its inputs and outputs to align with the vision-led approach. The updated COMET model will reflect better local validation and improved usability and flexibility, and is therefore well suited to model development impacts at a high level. Regular meetings will be held with HCC and their consultants to agree the detail of inputs before the Growing Baldock run is undertaken.

2.5.5 Regards the use of previous COMET runs to inform the OPA, the Local Plan run did not account for the specific land use mix, quantum of development and mode share / trip generation assumptions currently proposed. The model is being used in preparation of the OPA to understand residual impact on the local highway network, once all opportunities for sustainable travel have been maximised.

BAU and Vision-Led Scenarios

2.5.6 The TSR sets out the range of factors that a scenario could be built from and proposes one vision-led scenario at each future year. This takes into account a mix of factors, inclusive of interventions necessary to deliver the vision (essentially, embedded mitigation). BAU scenarios are not proposed as part of assessing a range of worst-case outcomes.

[1] The opening year comprises only five dwellings so there is no need to model dedicated 'with development' scenarios
[2] Vision-led trip rates are not achieved without proposed mitigation measures
[3] This will not be all mitigation proposed, aligning with the phasing of infrastructure up to the interim year
[4] Trip rates not compatible with mitigation being in place

2.5.7 In the scenarios shown in Table 2-11 above, with and without 'mitigation' model runs are proposed. In the ‘without mitigation’ scenarios, BAU trip rates are be used for development trips because those journeys will not be influenced by the embedded mitigation proposed in the vision-led scenarios (such as the shuttle working and banned turns on the A507). It is necessary to test this ‘without mitigation’ scenario to establish how the vision-led approach and interventions improve the residual impacts of the development; the two sets of results will be compared.

Interim Scenario

2.5.8 An exercise has been undertaken to establish a suitable interim year to consider in the TA and model in COMET. This has been informed by a VISSIM model which was initially built to test the impacts of banning turns at the B656 / A507 signal-controlled crossroads in Baldock.

2.5.9 The aim of the interim year testing was to identify the point at which the crossroads junction would become unacceptably congested as a result of development traffic and background traffic growth. It is assumed that at this point the BA1 access road would need to be constructed to link together the A507 and B656, and the turns banned at the crossroads junction. Therefore, the interim year would represent a tipping point in terms of development trip generation.

2.5.10 The VISSIM model used for this exercise includes:

- The crossroads junction in its current layout.
- The shuttle working under the rail bridge on Station Road, as an early intervention necessary to manage traffic demand on the A507 corridor.
- The BA1 site access junction.
- Background traffic based on the 2022 traffic surveys commissioned by ITP.

2.5.11 **Appendix G** includes a note which details the inputs to four VISSIM model runs to identify the interim year threshold. These are informed by information provided by the client and from the emerging planning strategy and development specification. The note also includes a summary of the results of each run.

2.5.12 The second run of the model (Run 2) represents the optimal balance of maximising development quantum and minimising significant highway impacts on the local network, in particular at the B656 / A507 crossroads. This reflects a 2033 future year and comprises the following:

- 650 homes on BA1 and 200 homes at BA2, no development on BA3.
- 36,650sqm (657,505sqft) floorspace on BA10, assumed to comprise a mix of the land uses proposed for BA10 (office, light industrial, industrial, medical centre, gym, waste transfer station and depot).
- The same non-residential assumptions on the residential sites as set out in Section 2.4 for the interim scenario (a primary school, shop and leisure / community centre on BA1).
- Background traffic growth from 2022 to 2033 using the TEMPro v8.1 ‘mode balanced decarboniation’ scenario.

- Icnkield Way and Football Close are closed at their junctions with Station Road in the model.
- Assumption that the shuttle working system on Station Road results in a displacement of **30%** of background traffic on the A507, due to vehicle trips retiming, rerouteing, changing mode or not taking place.

2.5.13 The note in **Appendix G** shows the results of Run 2. The maximum average queues in the morning peak hour were on Station Road, extending 125m north. This does not result in blocking back through the shuttle working system. The maximum delay per vehicle is ~90 seconds, on Royston Road. In the evening peak hour, the maximum average queue is ~90m on Royston Road, with a maximum delay of ~60 seconds per vehicle, on Clothall Road. Again, queues do not block back through the shuttle working or other adjacent junctions.

2.5.14 This level of queueing in Run 2 is occurring in the busiest, peak hour. It does not suggest any safety issues, and, whilst it is a minor delay (which could result in some drivers reassigning or retiming their journeys), it is unlikely to lead to significant driver frustration.

2.5.15 Other runs resulting in more or less significant impacts reflected different assumptions about development quanta and displacement of background traffic. Run 3, which assumed no traffic displaces from the A507, was the worst performing. Run 4 comprised of a later future year (2034) and therefore more development on the sites, but re-introduced the assumption of displaced traffic on the A507. The network performed satisfactorily despite greater development included, which suggests that the level of background traffic has a greater influence on performance.

2.5.16 Therefore Run 2, which has in a lower development quantum and performs relatively well, leaves room for uncertainty about how much background traffic displaces from the A507 in practice. The development assumptions in Run 2 are adopted in the 2033 Interim Year scenario in the COMET proforma.

School Option Scenarios

2.5.17 Three options will be presented in the OPA in relation to the secondary school:

- Option 1: 10-12 form entry secondary school on BA3 (replacing the existing Knights Templar school in Baldock), plus a SEND school.
- Option 2: 248 dwellings on BA3, plus a SEND school.
- Option 3: a 4-5 form entry secondary school on BA3 (with Knights Templar remaining operational on its current site), plus 86 dwellings and a SEND school.

2.5.18 The total trip generation is likely to be similar across all development options, but the traffic impacts will be more spatially focused in Options 1 and 2, and as a result, these two options form the COMET scenarios. For completeness, however, trip generation figures for all school development options will be detailed in the TA.

2.6 Local Modelling

HCC Comment

2.6.1 In relation to local modelling, HCC said:

- *"A VISSIM model has been built and will be used to test the implications of the development on the Station Road corridor. Anecdotally it appears from google street view that the whole of B656 Royston Road/ White Horse Street/ Hitchin Street corridor, together with the North Road/ Station Road/ Clothall Road corridor is subject to congestion."*
- *"The modelling methodology is generally unclear to me, including what strategic and local model runs are proposed to be carried out and how the strategic model will be used to interact / inform the local modelling."*

NHDC Comment

2.6.2 In relation to development impacts at Junction 9 of the A1(M), NHDC said that *"a stronger commitment than "investigate" is probably needed here. There is also some congestion in the AM peak at the London Road roundabout on going southbound on the A505."*

ITP Response

2.6.3 The local modelling assessments will test in further detail the operation of the network where interventions are proposed and / or where COMET suggests capacity issues. COMET is not likely to give accurate estimations of delay or queue lengths, but available outputs include stress plots, volume capacity ratio plots and absolute delay / flow changes. Thresholds will be agreed with HCC to determine which junctions require detailed modelling, for example junctions which are shown to experience >60 seconds additional delay in the peak hours.

2.6.4 It is proposed that, as a minimum, the following junctions would be included in local modelling assessment:

- **Development Access Junctions**
  - Proposed BA1 site access at Royston Road / A505 roundabout
  - Proposed BA1 site access on A507 North Road
  - Proposed BA2 site access on Clothall Road
  - Proposed BA3 site access on Wallington Road
  - Proposed BA10 site accesses on Royston Road (two total)

- **Off-site Junctions**
  - A507 Station Road j/w Royston Road, Whitehorse Street and Clothall Road
  - Clothall Road j/w Wallington Road

2.6.5 It is also likely that COMET will confirm assessment is needed at Junctions 9 and 10 of the A1(M) and other local junctions, such as the London Road/South Road/High Street Roundabout. These will be tested where they exceed the agreed thresholds in the COMET outputs.

2.6.6 Junction capacity assessments will be undertaken using Junctions 10 and LinSig software. Validation of the models will be informed by the queue surveys commissioned by ITP in 2022, and they will be compared at a high level with the operation and capacity suggested by COMET.

2.6.7 As noted by HCC and previously in this Addendum, a VISSIM model has been built and will be used to test the impacts of the development on the Station Road corridor. The VISSIM model is based on vehicle counts and queue surveys from 2022, and does show an existing level of congestion on the A507 corridor (and the section of the B656 corridor it covers). Whilst average maximum queues in each five-minute period is generally the metric adopted to report VISSIM results, VISSIM also gives maximum queues across the entire period modelled. The model for the existing A507 / B656 crossroads layout confirms that maximum queues can sometimes exceed 200m or even 300m on some arms. This reflects the anecdotal evidence of the corridors becoming congested during peak times. The traffic volumes which are able to pass through the junction within the peak hour also validate very well with those recorded during the traffic surveys – GEH[5] values are all less than 1, which indicates a very good likeness.

2.7 Public Transport Strategy

HCC Comments

2.7.1 Regards the proposed bus service, HCC noted: *"Operating a 10 min frequency bus service from first occupation is unrealistic but some level of provision would need to be agreed. Ultimately all these factors (this comment and previous) come together to inform an interim mode share assumption for the interim test. These will ultimately be monitored."*

NHDC Comments

2.7.2 The key points raised by NHDC are as follows:

- *"The aim should be for all homes to be within 400m of a bus stop. Although people are prepared to walk further to catch a high frequency service, it is unlikely that such a service will be viable for this development."*
- *"Need to consider access to Letchworth station too, which offers a faster and more frequent service to London."*
- To clearly define public transport, suggest setting out "*the assumed number of rail trips and the modal split for the first/last mile legs (walk, cycle, bus, car). I think splitting active travel into walking and cycling is important here because we need to know how much cycle parking will be needed at the station. Analysis of rail trips should also make reasonable assumptions about which station people will travel from"*
- The *"proposed bus service is not described, and therefore it is unclear what destinations it will serve directly. The proposed 10-minute frequency of service is unprecedented in the UK outside of metropolitan areas and Park & Rides, and therefore would likely to require a high level of long-term subsidy. The added complication of the bus service having to use North/Station Road to serve BA1 in the early years will not make it an attractive service for early occupiers."*

[5] The GEH statistic is a measure of goodness of fit used in traffic modelling to compare two sets of traffic volumes.

ITP Response

2.7.3 The proposed bus service frequency and routing has been further refined for the purposes of the COMET proforma, albeit that additional detail will be developed through the public transport strategy in the TA.

2.7.4 The proposed bus route plan is presented in **Appendix H**. This shuttle bus would route through the town centre and existing areas of Baldock, ensuring that the existing town and proposed development are well connected and conveniently accessed by public transport. The bus service would also be supported by an interchange at Baldock station to connect existing and future residents to rail services. Connection to Letchworth Station is not a current priority because this undermines the excellent proximity of the application sites to Baldock station – a bus connection to Baldock has been prioritised.

2.7.5 The provision of this service across the build out of the proposed development is currently being developed. The indicative strategy is as follows:

- **Interim Year** - Prior to the multi-modal bridge being in place in BA1, the bus route would be formed as a horseshoe with buses travelling back and forth, extending further into BA1 as the buildout progresses. On Royston Road, bus stops would only be required on the northern side of the carriageway in this arrangement. This could be delivered with a 15-minute frequency using two buses.
- **Full Build Out** - Once the multi-modal bridge and Yeomanry Drive bus link are in place then the route can become a loop. Initially, it is proposed that this is operated by two buses, undertaken as a one-way loop and with a 15-minute frequency. There is potential to add in further buses towards the end of the build-out if future demand requires.

2.7.6 Before the employment at BA10 commences development, the bus is not required to extend along Royston Road. This means that between 2029 and 2031 a 15-minute frequency could be delivered by one bus.

2.7.7 NHDC raised several queries with regard to how the MSM deals with bus trips, rail trips and the first/last mile active travel trips as part of public transport journeys. Further clarification will be provided in the suggested MSM demonstration at a future Transport Working Group.

3 Summary

3.1.1 This Transport Scoping Report Addendum has been prepared by ITP on behalf of Urban & Civic in association with a developing outline planning application for the proposed ‘Growing Baldock’ development.

3.1.2 The purpose of this TSR Addendum has been to address comments provided by North Hertfordshire District Council (NHDC) and Hertfordshire County Council (HCC) regarding the TSR submitted by ITP in February 2025. Key comments which have resulted in a change in approach or trip generation have been addressed in this Addendum. All comments are individually addressed in **Appendix B**.

3.1.3 Many of the changes made in response to comments have informed the COMET proforma submitted to HCC on the 21st of March 2025, and therefore, agreement is sought relating to trip generation, internalisation and mode share assumptions to ensure that the modelling is undertaken on an agreed basis. All points of agreement will be carried forward to the Transport Assessment submitted to support the outline planning application.

Appendix A – COMET Model Proforma

Hertfordshire Strategic Transport Model (COMET) Proforma: – Transport Assessment of a Single Development

Introduction

This form is to be used to specify model runs of the Hertfordshire County Wide Model of Transport (COMET). Applicants are expected to complete the relevant sections in this form and refer to the Checklist at the end of the document.

Prior to completing this form, it is advisable to confirm with Development Management Team and the Transport Planning Data Team HCC (Hertfordshire County Council) that COMET is the most suitable model to assess your development proposal (see more details in HCC modelling pages; www.hertfordshire.gov.uk/transportmodelling).

In order to ensure accurate modelling of the development a number of inputs are required from the developer. These are as follows:

- *Location of development (plan to be provided showing context with existing transport network;*
- *Information on size and type of development;*
- *Trip rates to be used; (these should be agreed with the Highways Development Management Case officer);*
- *Proposed site access junctions (location and form, ideally with a layout);*
- *Any other proposed junction modifications or offsite mitigation measures including cycle and walk schemes (location, type and ideally layout);*
- *Master Plan, if available;*
- *Plan showing any bus routes proposed for all relevant time periods (frequencies; entire route with direction of travel indicated if available;*

If this information is not yet available, we may recommend delaying the modelling work to a later stage.

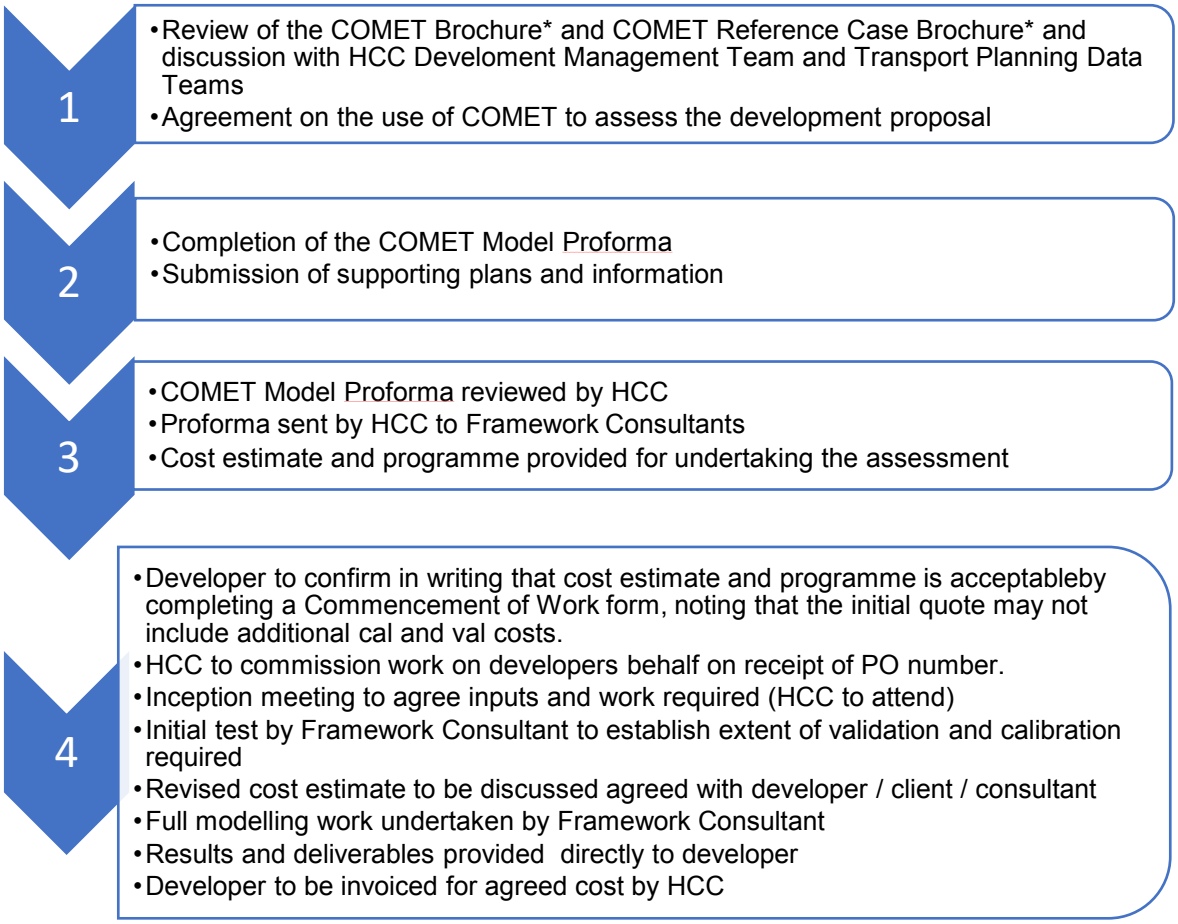
Please note, before a model test can be carried out a validation test must take place to test the performance of the COMET model in the relevant area. Depending on the results of the validation test, a calibration and validation exercise may be required to improve the performance of the model. The costs of this calibration and validation exercise are not necessarily included in the initial quote provided by HCC.

Modelling work would be commissioned by HCC using one of our Transport Planning framework consultants (AECOM, Systra or WSP) using a competitive bidding process although a direct award arrangement is available for small elements of work (less than £10,000 value) where there is a clear benefit in using a particular consultant (e.g. continuity of previous work).

The process for undertaking a model run is shown in below.

COMET Process Chart

Note:* see the HCC modelling webpage for brochures;



www.hertfordshire.gov.uk/transportmodelling

HCC and Framework Consultants commit to providing a cost estimate and fee proposal to an applicant within 10 working days of receiving a completed Model Proforma form. Please note, the quote supplied by HCC on the basis of this form may not include the cost of additional validation and calibration work needed.

If you wish to use COMET to help inform other modelling works (e.g. microsimulation, junction modelling) or undertake the strategic testing of a scenario, this form should not be used and a

standalone request is required. Please seek HCC advice. See the webpage: www.hertfordshire.gov.uk/transportmodelling

Applicant Contact Details

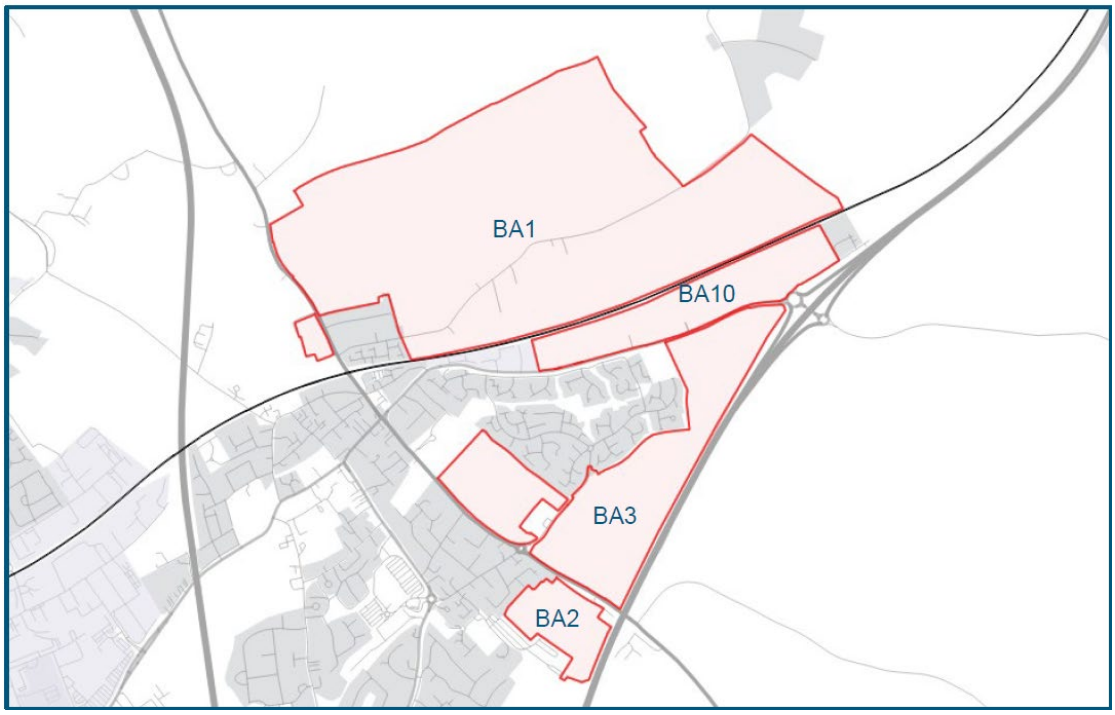
The applicant should complete **Table 1** to confirm their contact details

Table 1: Project Approval Agreement

Details	ITP, a company of Royal HaskoningDHV, has been commissioned by Urban & Civic to develop the transport and movement vision and strategy for the Growing Baldock project. We seek to undertake a Strategic Model run to support the Growing Baldock planning application targeted for submission in Autumn 2025.
Name	Geoff Burrage
Organisation	HaskoningDHV UK Limited (trading as Integrated Transport Planning Limited)
Address	WestPoint Business Park Lynch Wood Peterborough PE2 6FZ
Telephone	+44 7388 955 230
Email	geoff.burrage@itp.rhdhv.com
Role of Applicant in the Project	Project Manager
Date of Application	21/03/2025
If representing a client as a consultant, please state name and key contact details of your main client	Kitty Eyres Urban&Civic plc 50 New Bond Street London W1S 1BJ

Development Details

Table 2 the proposed development

Development name: Growing Baldock
Proposed Development brief description (size and type of development e.g. GFA, no of units, including the existing land use): The Growing Baldock development comprises of the Local Plan allocation sites BA1, BA2, BA3 and BA10 in Baldock, Hertfordshire. The development proposed delivery of up to 3,198 residential units, 93,000 sqm of employment and other land uses and up to three new schools across all four allocations. (Further detail to be provided in Table 4)
Is the development a Local Plan allocation? Yes / ~~No~~ If so, what is its Local Plan reference: Allocation BA1, BA2, BA3 and BA10 in the North Hertfordshire District Council (NHDC) Local Plan   
Development Location: Baldock, Hertfordshire
Town/City/District: Baldock, Hertfordshire
Access point(s) onto Highway Network: **Plot BA1** • Realigned North Road through new signal junction (PC3381-RHD-CE-BN-DR-D-0110) • Signal controlled bus-only link onto North Road (PC3381-RHD-CE-BN-DR-D-0111) • Southern Access onto Roundabout junction of A505 and Royston Road (Priority Controlled Roundabout) **(not available in opening year or interim scenarios)** (PC3381-RHD-CE-BN-DR-D-0112)

Plot BA2

- Site Access Road with Clothall Road (Simple Priority)

Plot BA3

- Site Access Road with Wallington Road (Simple Priority)

Plot BA10

- Southern Access onto Roundabout junction of A505 and Royston Road (Priority Controlled Roundabout)
- Direct Accesses along Royston Road (2no. simple priority/footway crossover)

Are there any areas / key links / junctions which you need to modelling work to focus on?

Development Access Junctions

- **A505 j/w Royston Road + Proposed BA1 Southern Access**
- **A507 North Road j/w Proposed BA1 Northern Access**
- **Proposed BA2 Site Access Road with Clothall Road**
- **Proposed BA3 Site Access Road with Wallington Road**

Intervention Junctions

- **A507 Station Road j/w Royston Road, Whitehorse Street and Clothall Road**
- **Station Road j/w Icknield Way/Football Close**
- **Clothall Road j/w Wallington Road**
- **London Road/South Road/High Street Roundabout**

Strategic Junctions

- **A1 (M) Junction 9**
- **A1 (M) Junction 10**

Other Key Junctions

- **A505 j/w London Road**
- **A505 Southbound Slip Roads j/w Wallington Road**
- **A507 j/w Baldock Services Access (in vicinity of A1 (M) Junction 10)**
- **Icknield Way j/w Norton Road**
- **Icknield Way j/w Station Road**
- **Football Close j/w Station Road**
- **North Road j/w Bygrave Road**
- **Norton Mill Lane j/w North Road**
- **Norton Road j/w Letchworth Road**
- **Newnham Road j/w Ashwell Road**
- **Newnham Road j/w Bygrave Road**
- **Letchworth Road j/w Weston Way**
- **High Street j/w Mansfield Road**

Key routes

- **B656 (Letchworth Garden City to A505 via Baldock)**
- **A1(M) junction 10 to A505 at junction with B656**

Indicative Opening Year(s): 2028

Please attach location site plan/master plan, proposed access/es plan; a plan showing area of interest, and list below any key links / junctions that require particular attention

Application of COMET

Existing Scenarios

There are three planning Scenarios currently available in COMET:

1. **2014 Base Year:** This is based on traffic surveys carried out in 2013/2014, existing housing and employment sites in 2014 and the highway network as it was in 2014. HCC does not recommend updating the base year to a more recent year.

2. **2036 NTEM Constrained Scenario:** This includes near certain and highly likely forecast planning data (i.e. employment and dwelling growth) by COMET zone for all 10 Hertfordshire districts. In practice this means the planning data provided contains two elements:
    - Completions (completed sites between the COMET base year of 2014 and the current year of 2022);
    - Permissions (planning data with a high level of certainty- Near Certain TAG A2 Classification of Future inputs). and
    - An adjustment to NTEM projections to 2036.

    The NTEM Constrained Scenario also contains near certain and highly likely transport schemes across the county.

    The NTEM Scenario provides the most appropriate base for individual development tests.

3. **2036 Local Plan Run 7:** this includes developments and transport schemes which are currently included within Hertfordshire Districts Local Plans and HCC transport strategies regardless of their level of certainty. HCC use this forecast to ensure that the cumulative impacts of growth are fully considered. It is however difficult to isolate the impacts of individual developments using this forecast. The latest available version is Local Plan Run 7 growth which is based on Local Plan allocations to 2036 (as of Autumn 2022).

Model Structure

For the forecast year scenarios, the COMET model suite is comprised of three components as shown in below:

Depending on the size and location of the development / scheme tested in COMET, it may not be essential to run the entire model suite. For smaller developments (e.g. less than 250 dwellings) in less sensitive locations, we recommend existing outputs are analysed around the proposed development to help determine its impact. For most developments a test using the Highways model is likely to sufficient but for larger developments or those involving significant

new transport infrastructure a run of the full model suite may be appropriate. Please refer to Figure 3 to determine how COMET should be used to assess your proposal.

COMET Highway Model

- The Saturn based highway model assigns the highway demand onto the highway network, to produce traffic flows, link time, congestion and routeing information.

COMET Public Transport Model

- The EMME based public transport model assigns the public transport demand onto the public transport network, which includes highway, rail, bus, and walk links. This produces passenger flows by route and operator for bus and rail trips.

COMET Variable Demand Model

- The EMME based variable demand model is designed to estimate the effect of changes in transport infrastructure and travel cost upon patterns of demand. That is, the way travellers respond to changes other than choosing different routes which is forecast by the highway and public transport assignment models.

Full COMET Model Suite

- Significant scheme / multiple or individual major site(s) or site / scheme in key area with mode shift potential or significant new transport infrastructure.

COMET Highway Assignment Models Only

- Individual developments with over 250 dwellings outside key areas
- More minor scheme with little impact on other modes / time of travel

COMET Model Output Analysis

- Use of model flows/counts/distribution to support evidence and/or transport assessments. For use in smaller developments (typically less than 250 dwellings) in non sensitive locations

Please complete **Table 3** to select the analysis year(s) required and the level of modelling required. This will be reviewed by HCC.

Table 3: COMET Assessment Scenario Requirements

	Year, Scenario	Full COMET Model Suite	COMET Assignment Models Only	COMET Model Output Analysis
S1	2028, Opening Year – Business as Usual Assumptions	Yes		
S2	2033, Interim Phase (No Access Road) – Vision-led Assumptions	Yes		
S3	2033, Interim Phase (No Access Road) – Business as Usual Assumptions	Yes		
S4	2040, Full Development Year – Vision-led Assumptions	Yes		
S5	2040, Full Development Year – Business as Usual Assumptions	Yes		

This has to accord with the forecast year available unless a further bespoke model run year is to be developed which will involve additional cost

Table 3a: COMET Assessment Scenario School Variations

	Year, Scenario	Option 1: 12-form secondary school and SEND school delivered on BA3	Option 2: Housing and SEND school delivered on BA3
S1	2028, Opening Year – Business as Usual Assumptions	**S1** – no variation required in scenario	
S2	2033, Interim Phase (No Access Road) – Vision-led Assumptions	**S2** – no variation required in scenario	
S3	2033, Interim Phase (No Access Road) – Business as Usual Assumptions	**S3** – no variation required in scenario	
S4	2040, Full Development Year – Vision-led Assumptions	**S4-1**	**S4-2**
S5	2040, Full Development Year – Business as Usual Assumptions	**S5-1**	**S5-2**

There are nine scenarios in total to be modelled.

Development Land Use and Implementation Characteristics

Please provide development details in **Table 4**, covering the size/type of land use, and number of dwellings/employment for each of the sub-categories below. If a Full COMET Model Suite* run is not being undertaken, trip rates require agreement from HCC

For employment sites where the number of jobs is not known, floorspace can be provided instead. If floorspace is given, please give the area in the correct units for each category (shown in the table). Framework Consultant will apply employment floorspace density assumptions to derive the number of jobs (based on Employment Density Guide V3) https://www.gov.uk/government/publications/employment-densities-guide).

If dwelling type (e.g. houses, flats etc) is known, this information should be provided.

Table 4: Development Land Use Classification

Land Use Type	Land Use	2033			2040		
		Floorspace	Dwellings	Other	Floorspace	Dwellings	Other
BA1							
Dwellings	C3		650			2,750	
Shops	A1-A3	350m²			700 m²		
Financial & Professional Services							
Restaurants & Cafes							
Drinking Establishments	A4-A5	400m²			800 m²		
Hot Food Takeaways							
Office	B1(a)/ B1(b)	0m²			550 m²		
Hotel / Residential Institutions	C1-C2	0m²			3,500 m²		
Leisure	D2	575m²			1,150 m²		
Pub	Sui Generis	0m²			750 m²		
Education – Primary School	F1			1no. 3-form			2no. 3-form
Community	F2	500m²			500 m²		
Nursery	E(f)	550m²			550 m²		
BA2							
Dwellings	C3		200			200	
BA3 (Option 1)							
Education – Secondary School	F1						1no. 12-form
Education – SEND School	F1						150 pupils 50 staff

BA3 (Option 2)							
Dwellings	C3					248	
Education – SEND School							150 pupils 50 staff
BA10							
Medical Centre	E	1,500m^2			1,500 m^2		
Vehicle depot	Sui generis	-			1,500 m^2		
Waste transfer station	B2	-			3,500 m^2		
Office	E	12,500m^2			20,000 m^2		
Light Industrial	E	13,250m^2			26,500 m^2		
Industrial	B2	9,400m^2			26,500 m^2		
Gym	E(d)	-			5,000m^2		

Projected Trip Rates & Trip Distribution

Trip Rates and Trip Generation/ Attraction

Development trip rates and trip generation / attraction estimates should be stated in **Table 5**. These are provisional estimates and need to be agreed with HCC before the model test can be carried out.

Table 5a: Trip Generation (Cars)

Land Use Type	2033, Interim Phase (No Access Road) – Vision-led Assumptions				2033, Interim Phase (No Access Road) – Business as Usual Assumptions				2040, Full Development Year – Vision-led Assumptions				2040, Full Development Year – Business as Usual Assumptions			
	AM Peak (8–9)		PM Peak (17–18)		AM Peak (8–9)		PM Peak (17–18)		AM Peak (8–9)		PM Peak (17–18)		AM Peak (8–9)		PM Peak (17–18)	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
BA1																
North Access	50	130	142	65	52	137	151	69	-	-	-	-	-	-	-	-
North and South Access[1]	-	-	-	-	-	-	-	-	152	393	375	170	167	439	413	189
BA2																
Site Access Road	23	59	54	25	25	67	60	27	22	57	53	24	25	67	60	27
BA3 (Option 1)																
Site Access Road	0	0	0	0	0	0	0	0	508	26	3	162	508	26	3	162
BA3 (Option 2)																
Site Access Road	0	0	0	0	0	0	0	0	101	95	65	61	103	103	69	63
BA10																
Site Access Road (West)	114	23	20	74	122	25	24	81	229	43	29	143	283	56	58	189
Site Access Road (East)	37	8	7	24	40	8	8	27	75	14	9	47	93	18	19	62
Waste Access	11	2	2	7	12	3	2	8	23	4	3	14	28	6	6	19
Total BA10	163	33	29	106	175	36	34	115	327	62	41	204	405	79	82	269

[1] Assignment to be determined by COMET once junctions are joined internally

Table 5b: Trip Generation (HGVs)

Land Use Type	2033, Interim Phase (No Access Road) – Vision-led Assumptions				2033, Interim Phase (No Access Road) – Business as Usual Assumptions				2040, Full Development Year – Vision-led Assumptions				2040, Full Development Year – Business as Usual Assumptions			
	AM Peak (8–9)		PM Peak (17–18)		AM Peak (8–9)		PM Peak (17–18)		AM Peak (8–9)		PM Peak (17–18)		AM Peak (8–9)		PM Peak (17–18)	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
BA1																
North Access	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North and South Access[2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BA2																
Site Access Road	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BA3 (Option 1)																
Site Access Road	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BA3 (Option 2)																
Site Access Road	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BA10																
Site Access Road (West)	3	2	2	2	3	2	2	2	8	8	0	0	8	8	0	0
Site Access Road (East)	1	1	1	1	1	1	1	1	3	3	0	0	3	3	0	0
Waste Access	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0
Total BA10	4	3	2	3	4	3	2	3	12	12	0	0	12	12	0	0

[2] Assignment to be determined by COMET once junctions are joined internally

Trip Distribution

In addition to development trip rates and trip totals, COMET also requires a trip distribution for travel demand. The distribution can be derived in one of the three following ways, and should be agreed by the applicant/HCC:

1) **The development is loaded into the existing model zone based on the site's geographical location. The development trips take the distribution of that existing model zone.**

2) **If a different distribution is required, the development should be allocated to a specific "development zone". The distribution can be based on modelling assumptions within the COMET model suite.**

3) **The distribution can be specified by the applicant/HCC.**

Table 6: Trip Distribution methodology (please tick)

Method	Please tick one option	Information source
Existing zone – based on COMET distribution		**COMET**
New development zone - based on COMET distribution	✓	**COMET**
New development zone – applicant distribution**		**Applicant/HCC**

Note ** Select an existing zone near to the development which is likely to have a similar distribution as close as possible.

Development Highway Network and Access

Please provide a location and access plan for the development to be tested in the model. This is required to ensure correct coding. It should be as detailed as possible and include any restrictions (e.g. heavy vehicle bans) on accesses and highlight the amount of development served from each access.

Table 7: Development Accesses

Access Location	Type of access	Drawing / Plan number	Link Road /Through routes within the development	Notes***
Proposed BA1 Northern Access j/w A507 North Road	Signalised 3-arm junction	PC7029-RHD-CE-GB-DR-D-0110	Proposed Access Road for BA1. This will link through to BA1/BA10 southern access by 2040 but not in 2033 scenarios.	
North Road (South of BA1 Northern Access Road Junction)	Signalised 3-arm junction (Bus and cycle access only on minor arm)	PC7029-RHD-CE-GB-DR-D-0111	This will link through to BA1 southern access by 2024 but not in 2033 scenarios, dependent on bus service demand.	
Proposed BA1/BA10 Southern Access at A505 j/w Royston Road Roundabout	Priority controlled roundabout	PC7029-RHD-CE-GB-DR-D-0112		
Proposed BA10 Site Access Road (West) with Clothall Road	Simple priority junction	PC7029-RHD-CE-GB-DR-D-0113		
Proposed BA10 Site Access Road (East) with Clothall Road	Simple priority junction	PC7029-RHD-CE-GB-DR-D-0113		
Proposed BA2 Site Access Road with Clothall Road	Simple priority junction	In progress – to follow shortly		
Proposed BA3 Site Access Road with Wallington Road	Simple priority junction	In progress – to follow shortly		

*Note***; (eg speed limit assumptions / reference to signal timing assumptions / amount of development served from access / presumed opening year)*

Overall access plan attached – **yes / ~~no~~** - see draft parameter plan

The COMET model has been calibrated and validated to comply with WebTAG standards for the purposes of a strategic model. However, it is normal for a model of this size to sometimes require further, more localised calibration/validation in order to undertake more detailed assessment work, such as looking at the impacts of individual developments. If additional calibration / validation is needed this can impact the price of the model run.

Please provide details of any recent year traffic count information in the local area if available, please add this information to **Table 7.1.** Types of survey including: turning counts, link counts, saturation flows, journey time data and roadside interview data are of particular use.

If you need further details please refer to the Local Model Validation Report (available from HCC), or seek HCC for advice on local validation for the area of interest.

Table 7.1 Recent Traffic Count Information in the Local Area (Optional)

Location	Year of survey	Type of traffic surveys	Drawing/plan/spreadsheet number	Coordinates
We have a very large amount of survey data from 2022 covering Baldock including junction turning counts, ANPR surveys, parking surveys and PRoW surveys. We would be happy to share with the COMET consultant off the back of a discussion as to what would be useful / relevant to this exercise – the file size is too large to share all at once.				

Any traffic surveys stated in Table 7.1 should be provided separately as part of the supporting information.

Transport Network Mitigation Proposals

Please provide details of all proposed development mitigation schemes and any other transport schemes the development is dependent on in the form of supporting plans and drawings for coding into the model (including road type, speed limit and junction arrangements) in **Table 8**. Please supply a diagram, and any junction model results (ARCADY, LINSIG, etc.) if available. Mitigation may have to be agreed with HCC prior to commencing mitigation tests. Please use **Table 9** to confirm the scenarios to be modelled:

Table 8: Individual mitigation measures to be modelled:

Location	Type of measure	Drawing / Plan number	Present in		Notes***
			2033	2040	
Junction of A507 Station Road / Royston Road / Whitehorse Street / Clothall Road	• Managing traffic demand through banned turns (with exceptions for buses) • Simplifying junction signal phasing, reducing conflicting movements and providing dedicated pedestrian phase • Reallocating road space to improve pedestrian access	PC7029-RHD-CE-GB-DR-D-0115	No	Yes	This is intended to support the rerouting of through trips from the centre of Baldock to more appropriate routes (i.e. A505)
Icknield Way and Football Close	• Closure of vehicle links with North Road	PC7029-RHD-CE-GB-DR-D-0115	Yes	Yes	Required in combination with above measure to prevent rerouting along Icknield Way and to deliver segregated cycle track.
North Road	• One-way shuttle working under rail bridge on North Road with bus priority	PC7029-RHD-CE-GB-DR-D-0115	Yes	Yes	Required to provide sufficient space to two-way segregated cycle track. Also to act as a point of friction on the A507, to discourage through trips in Baldock.
Royston Road	• Gateway feature to slow traffic and new parallel crossing	PC7029-RHD-CE-GB-DR-D-0113	Yes	Yes	Provided in combination to access to employment parcel in BA10
Royston Road	• Signalised bus-only link from Royston Road to Yeomanry Drive	PC7029-RHD-CE-GB-DR-D-0113	No	Yes	Not required until multimodal bridge is delivered over the railway line.

Royston Road	• New mini roundabout to reduce speeds and improve safety at existing business centre • New parallel crossing to provide access to cycle track	PC7029-RHD-CE-GB-DR-D-0114	Yes	Yes	Provides access to the cycle track for existing businesses, helping to offset trip generation and local changes to road network.
Royston Road and Yeomanry Drive	• New parallel crossings to improve active travel links to BA1 via railway underpass	PC7029-RHD-CE-GB-DR-D-0114	No	Yes	Underpass will be delivered at the same time as multi-modal bridge over the railway line.
Icknield Way East	• Closure of vehicle link with Royston Road	PC7029-RHD-CE-GB-DR-D-0114	Yes	Yes	Required in combination with other measures to prevent rerouting along Icknield Way East.
Connection between North Road and Royston Road	• Multi-modal bridge over railway line • Creation of a new traffic-calmed link through BA1 and BA10	PC7029-RHD-CE-GB-DR-D-0118	No	Yes	This route is not intended to cater for significant volumes of through traffic and will be designed as a residential street with significant traffic calming so that it does not become a favoured route for drivers travelling between the A505 and A1(M). Once delivered BA1 trips will be able to use either access.
North Road	• Segregated cycle track	PC7029-RHD-CE-GB-DR-D-0110 PC7029-RHD-CE-GB-DR-D-0111 PC7029-RHD-CE-GB-DR-D-0115	Yes	Yes	Will likely require narrowing of carriageway leading to slower vehicle speeds

Royston Road	• Segregated cycle track	PC7029-RHD-CE-GB-DR-D-0112 PC7029-RHD-CE-GB-DR-D-0113 PC7029-RHD-CE-GB-DR-D-0114	No	Yes	Delivered largely through verge so less impact on vehicle speeds.
Various	• Shuttle bus service connecting BA1 – Baldock railway station – Baldock Town Centre – BA10	Figure 7029-A-1 (interim scenario) Figure 7029-B-1 (full build out scenario)	Yes	Yes	15-minute frequency

*Notes***;(eg speed limit assumptions / reference to signal timing assumptions / amount of development served from access / presumed opening year)*

Table 9: Mitigation Scenarios to be Modelled

	Year/ Modelled Scenario to be run	Scenario to be run without proposed development included? (Yes/No)	Scenario to be run with proposed development included? (Yes/No)	Scenario to be run with proposed development and proposed mitigation measures included? (Yes/No)
S1	2028, Opening Year – Business as Usual Assumptions	Yes	No	No
S2	2033, Interim Phase (No Access Road) – Vision-led Assumption	Yes	No[3]	Yes[4]
S3	2033, Interim Phase (No Access Road) – Business as Usual Assumptions		Yes	No[5]
S4-1	2040, Full Development Year – Vision-led Assumption (Option 1)	Yes	No[3]	Yes
S4-2	2040, Full Development Year – Vision-led Assumption (Option 2)		No[3]	Yes
S5-1	2040, Full Development Year – Business as Usual Assumptions (Option 1)		Yes	No[5]
S5-2	2040, Full Development Year – Business as Usual Assumptions (Option 2)		Yes	No[5]

COMET Outputs Required

Table 10 lists the typical types of outputs available from COMET. Specific or additional outputs can usually be provided on request. If outputs not listed in the table below are required, please submit details in an appendix to this document.

It should be noted that the appropriateness of outputs is caveated as COMET is a strategic transport model covering the whole of Hertfordshire. Therefore, outputs such as queues or

[3] Vision-led trip rates are not achieved without proposed mitigation measures
[4] Not all mitigation will be delivered by 2033
[5] Trip rates not compatible with mitigation being in place

delays may not be calibrated/validated at specific points and are purely indicative. The use of other, more detailed models should be used if in-depth analysis at individual locations is required.

Please tick the outputs required and specify the format required in **Table 10**.

Table 10: COMET Output Options

Output	Large Development >500 Dwellings	Format (e.g. Saturn / GIS / PowerPoint / excel
Highway Flow Changes (absolute)****	Yes	GIS / Excel
Highway Delay Changes (absolute)****	Yes	GIS / Excel
Area of 5% Flow Change	Yes	GIS / Excel
Forecast flows (PCUs or veh/hr)	Yes	GIS / Excel
Area stress plots (volume capacity ratios)	Yes	GIS / Excel / Powerpoint
Individual Junction Plots & Volume Capacity Ratios	Yes	GIS / Excel / Powerpoint
Change in Travel Time, Distances & Speeds on link	Yes	GIS / Excel
Travel Time Changes Along Key Routes	Yes	GIS / Excel
Distribution Analysis/Diagrams of Development Traffic Routes	Yes	GIS / Excel/ Powerpoint
Public Transport Passenger Changes (Full Suite only)	Yes	Excel / Powerpoint
Mode Share Reporting: Car, Public Transport (Full Suite only)	Yes	Excel / Powerpoint
Impacts on Highways England Network, AQMAs & Key Junctions	Yes	GIS / Excel
Select Links of Development Traffic (link based)	Yes	GIS / Excel
Routeing Changes of Non-Development Traffic	Yes	GIS / Excel
Trip Distance, 24-Hour Trip Making	Yes	Excel
Household, Employment Change (Full Suite only)	Yes	Excel
Provision of Hourly Flow Data (Junction Turning flow) for Junction Design/Assessment	Yes – see Table 2	Excel

*If yes, please see the additional details section below		
Mitigation Impact Assessment	Yes	Excel / Powerpoint
Cordon matrices	Yes	Excel
Other (please specify)		

Note:**** (Outputs required for the COMET Run)

The applicant should also confirm what level of analysis (and formats) they require HCC/Framework Consultant to undertake on the modelling outputs. Please indicate using

If you have stated above that "Provision of Hourly Flow Data for Junction Design/Assessment" is needed. Please give details of the junction or junctions that this data is needed for

Please give details of the junction/s. These details could include but are not limited to:

- The road name and road number of each arm of the junction
- A map with the relevant junctions highlighted
- The name of the junction, for example "M25 J25" or "The Plough Roundabout, Hemel Hempstead"

Table 11: COMET Output Formats

Output	Description	Yes/No
Standard Saturn plots	Saturn output files	Yes
GIS Shapefiles	.shp GIS file(s) including tables with the required outputs from the table above. A user guide detailing the shapefile contents will be supplied.	Yes
PowerPoint Potential Options: Without Teleconference (~~Yes~~/No) With Teleconference (Yes/~~No~~) With Face-to-Face Meeting (~~Yes~~/No)	PowerPoint presentation of the modelling undertaken and outputs as specified, including details of how the trip demand of the new development was processed. Commentary about the outputs seen will be provided in the Notes section of the PowerPoint and in the teleconference/meeting (if held). The applicant will be provided with the presentation in PowerPoint and .pdf format. The scope will allow for one round of comments from the applicant before the final presentation is issued.	Yes

Technical Note	Technical Note detailing the initial model appropriateness checks, modelling undertaken and outputs as specified, including details of how the trip demand of the new development was processed. Commentary about the outputs seen will be provided in detail. The scope will allow for one round of comments from the applicant before the final Technical Note is issued. The format of the Technical Note will be confirmed by HCC/AECOM following review of this application. The Technical Note will be provided in .pdf format.	Yes

All outputs and presentations/reports will be supplied in electronic format only.

Inception Meeting

An inception meeting / teleconference is essential to run through the proposal and better understand the information supplied. Inception meetings can be held either by a MS Teams call or at the HCC (Hertford) offices. Please indicate your preferred inception meeting location in **Table 12**.

Table 12: Inception Meeting Options

Option	Yes/No
Face-to-face inception meeting – HCC County Hall in Hertford	No
MS teams call inception meeting	Yes

Application Checklist

The applicant should use the checklist in **Table 13** to confirm they have provided all the required information in this Proforma.

Table 13: Application Checklist

Item	Proforma Location	Comments (e.g. filenames etc)
Project Approval Agreement	Table 1	Complete
Development Details	Table 2	Complete
COMET assessment requirements	Table 3	Complete
Development land use classification	Table 4	Complete
Expected development trip totals	Table 5	Complete
Trip Distribution	Table 6	Complete
Development access/es	Table 7	Complete
Individual mitigation measures to be modelled	Table 8	Complete
Mitigation scenarios to be modelled	Table 9	Complete
COMET output options	Table 10	Complete
COMET output formats	Table 11	Complete
Inception meeting	Table 12	Complete

Once complete, please send this proforma to Transport Planning and Data Team:

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Appendix B – ITP TSR Comment Review

Authority	Format	Date Received	Comment	Suggested Resolution from Comments	TSR Page	TSR Reference	Topic	ITP Response
North Herts	In Report	10/02/2025	Significance of "study area links"?		21	Referring to Insert 4.4: Proposed Highway Safety Study Area	Collision analysis	To be updated in TA
North Herts	In Report	11/02/2025	BSUE = Baldock Sustainable Urban Extension		49	Insert 7.1, mode shift model approach	Trip generation	Noted
North Herts	In Report	11/02/2025	Plot a gap rather than a dip for missing data.		Annex C Transport and Movement Baseline, page 22	Annual passenger entries/exits to Baldock Station	Errors and typos	Noted, will be updated for TA
North Herts	In Report	11/02/2025	Why?		Annex C, Transport and Movement Baseline Appendix A, page 52	"The AM peak is missing" - movements around proposed development site	Errors and typos	Issues with data collection
North Herts	In Report	14/02/2025	As discussed, this could reflect the general economic backdrop ("cost of living crisis"), and not a trend to be extrapolated reliably. Changing work patterns have not yet played out fully. Under-used office space will eventually be filled by workers (new businesses filling vacated premises; co-working spaces, perhaps with lower rates on Mondays and Fridays); or, office buildings/land will be redeveloped for other purposes, potentially residential. There is another trend beginning to be evident, of EV owners driving more because the marginal cost (principally, cost of electricity per mile) is lower. See: https://www.rac.co.uk/drive/news/electric-vehicles-news/what-range-anxiety-ev-drivers-rack-up-more-miles-than-those-using-tradition/ Although government should and could introduce some form of road pricing to replace fuel duty, it has no intention of doing so in the current Parliament. (I have this on good authority – road pricing is my specialist topic!) In short, I caution against extrapolating trends that may artificially diminish the scale of the transport challenge. I would rather start with something that we are fairly confident is towards the upper end of the likely range for background and generated trips (all modes) and be forced by that to consider more, bigger and more effective interventions to achieve higher modal shares for sustainable travel.		47	TRICS decide and provide rates	Trip generation	The D&P trends are extrapolated from data reaching back to the 1990s. We are not proposing testing every conceivable outcome. Given the endorsement of TRICS and the research supporting it, we are confident in adopting the D&P approach. The TSR is seeking to agree one set of reasonable scenarios that reflect the vision-led ambition for the site, and a range of DfT forecasts re background traffic growth.
North Herts	In Report	14/02/2025	I'm not clear what the word "mathematically" is adding to this sentence?		47	"It is noted that while mathematically there has been a reduction in vehicle trips over the period…."	Trip generation	Noted
North Herts	In Report	14/02/2025	Would be good to have a demo/walk-through of this.		48	Referring to MSM spreadsheet tool	Trip generation	Agreed, TWG would be an appropriate forum
North Herts	In Report	14/02/2025	I'm all in favour of ambitious targets, but Gilston is not yet a demonstration case of achieving an ambitious target.		Annex A scoping meeting minutes, page 4	Use of Gilston as an example of targets		Noted
North Herts	In Report	14/02/2025	This needs to set out the methodology, not just the inputs and outputs.		Annex G	Decide and provide methodology, referring to the whole annex	Decide and provide	Noted, data will be provided in TA
North Herts	In Report	14/02/2025	What data is this comparing?		Annex G	Historic trends - change over time (resi)	Decide and provide	Trip generation data
North Herts	In Report	14/02/2025	What does "total vehicles" mean. In this context, it should mean vehicle drivers (as opposed to passengers), otherwise it's mixing vehicle-trips and people-trips?		Annex G	Historic trends - change over time (resi)	Decide and provide	Agreed, this is what it's showing
North Herts	In Report	14/02/2025	Vehicle passengers or does it include drivers?		Annex G	Historic trends - change over time (resi)	Decide and provide	Vehicle occupants includes drivers and passengers
North Herts	In Report	14/02/2025	What are these percentages based on?		Annex G	External trips (resi)	Decide and provide	Assumptions re internalisation that will be updated as part of TA, based on method set out in TSR
North Herts	In Report	14/02/2025	If I understood correctly from our discussion, PT includes only bus, not rail. For rail trips, it is the first/last mile connection mode that is counted? In which case say "bus" not "public transport".		Annex G	D&P Trip rates based on trend extrapolation (resi)	Decide and provide	To review in context of request for clarification on MSM methodology
North Herts	In Report	14/02/2025	…?		Annex G	Resi assumptions	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	14/02/2025	These all look quite low assumptions because of the low baseline for sustainable modes. Does this fit with the masterplan target of 50% of trips being by sustainable modes?		Annex G	Resi assumptions	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	14/02/2025	Vehicle-trips per household?		Annex G	Trip forecast fan table (resi)	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	14/02/2025	Is this limited to sites similar to Baldock, or at least excluding large metropolitan areas?		Annex G	Trip forecast fan table (resi)	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	14/02/2025	vehicle trips		Annex G	Trip forecast fan graph(resi)	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	14/02/2025	What time period, and is this based on a best-fit trend line (not just the difference between two years)?		Annex G	historic trends - change over time (commercial)	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	17/02/2025	I think this is quoting CoMoUK's research.		36	Parking strategy, Car Clubs, Zipcar statistics research	Car Club	To note in TA
North Herts	In Report	17/02/2025	This assumes that commercial space will continue to be underused, which is unlikely in the long run. It is more likely that more businesses will use less space, and landlords will find ways to incentivise use on Mondays and Fridays (e.g. with lower rates on co-working spaces).		62	Table 7-19 Commercial use resultant trip gen comparison	Decide and provide	To review in context of request for clarification on MSM methodology
North Herts	In Report	17/02/2025	This presumably should have been deleted?		Annex G	Resi assumptions	Decide and provide	An updated method, drawing on refined assumptions, will be included in TA
North Herts	In Report	17/02/2025	I think a stronger commitment than "investigate" is probably needed here. There is also some congestion in the AM peak at the London Road roundabout on going southbound on the A505.		34	"Investigating" highway capacity improvements at Junction 9 of A1(M)	Local modelling	Agreed, this is likely to be a hotspot in COMET, requiring further analysis and mitigation in the local junction modelling in the TA
North Herts	In Report	17/02/2025	Is this the national Transport Decarbonisation Plan? This is heavily reliant on switching from ICEVs to BEVs (with little if any consideration of the embodied carbon); is severely underfunded (small and inconsistent grants for active travel and buses that are far from being transformative); and, crucially, the plan does not set a target for reducing vehicle-miles (by ~25% to be in line with 1.5C, which is now well beyond reach, so a deeper reduction is probably necessary). As a result, the plan is way off track.		Annex G	Resi assumptions	Decide and provide	Noted. An updated method, drawing on refined assumptions, will be included in TA
North Herts	In Report	17/02/2025	Needs clarifying		34	**Referring to:** The access road and the access junctions at either end of it, on Royston Road and North Road and its role in allowing interventions on- and off-site to be completed by providing additional connections around the town	Interventions	To be updated in TA
North Herts	In Report	17/02/2025	Need to be clear that these bans are only possible once the all-modes railway bridge is open. There may need to be some accounting for trips that miss the turning to the new access road, and therefore have to divert around Baldock to get through the junction. The left turn from Whitehorse St has less support from HCC as well as residents and members, so will need to be tested separately.		34	Banning turns from Station Road to Royston Road (and vice versa) and from Whitehorse Street to Station Road	Interventions	To note in TA, and TP / MMF regards the threshold and process for introducing the left turn ban
North Herts	In Report	17/02/2025	Presumably internalisation means internal to each allocated site (i.e. doesn't include trips between, say, BA1 and BA3)?		38	Definition of trip internalisation	Trip internalisation	Internalisation involves trips within each site and not between the individual application sites, these are effectively treated as external
North Herts	In Report	17/02/2025	It is unclear how these percentages have been derived. It would be helpful to see a table like 7-1, showing the sites that have been used to inform these percentages.		38	Percentage of trips internalised	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
North Herts	In Report	17/02/2025	Cambourne is in South Cambridgeshire, 13km west of Cambridge. It is also not a poster child for sustainable transport. Its nickname is "Carborne".		38	Use of Cambourne as a comparable development	Trip internalisation	This is noted in the refined internalisation process
North Herts	In Report	17/02/2025	A mean is only meaningful if the distribution is symmetrical. In some of these cases, the distribution will be skewed by outliers or non-normal patterns of distribution (e.g. where comparing developments with/without a secondary school). It would be better to use judgement to either pick or exclude rates, based on similarity to this development.		41	Trip containment factor, Table 7-3	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
North Herts	In Report	17/02/2025	The shopping and leisure figures look exceptionally high, given that few developments include supermarkets and popular leisure venues (cinemas, restaurants, gyms, etc.). Therefore, I am unclear if some of the sites considered are relevant comparators.		41	Trip containment factor, Table 7-3	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario

Authority	Format	Date Received	Comment	Suggested Resolution from Comments	TSR Page	TSR Reference	Topic	ITP Response
North Herts	In Report	17/02/2025	I don't see a link between the benchmarking study and these percentages.		41	Assumed internalisation percentages	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
North Herts	In Report	17/02/2025	Are these relevant any longer? Wouldn't you take more up-to-date TRICS trip rates as the BaU scenario?		41	TRICS trip rates adopted in the TAs from withdrawn applications	Trip generation	The BAU trip rates have been updated based on a new TRICS search, and these rates are in the MSMs that feed into the COMET proforma
North Herts	In Report	17/02/2025	Wrong table reference. Table 7.7?		49	Vehicle mode share for pupil trips , table reference	Errors and typos	Noted
North Herts	In Report	17/02/2025	BA2 is missing, even though it is now to be included in the outline application.		59	Table 7-14 Vision led scenario internal trips	Errors and typos	To be captured in TA
North Herts	In Report	17/02/2025	Is there double-counting here? Does it exclude residents of BA1/2/3 commuting to work in BA10?		59	Table 7-14 Vision led scenario internal trips	Trip generation	Clarification to be provided. Run through of MSM to be provided at TWG
North Herts	In Report	17/02/2025	Internal trips for "public transport" (bus?) seem unlikely given the relatively short distances involved.		59	Table 7-14 Vision led scenario internal trips	Trip generation	Clarification to be provided. Run through of MSM to be provided at TWG
North Herts	In Report	17/02/2025	These are big changes. What is the probability that the actual rates will be at or better than these forecasts? The threshold probability should be at least 50%.		61	Table 7-18 Residential use resultant trip gen comparison	Trip generation	We are not proposing a separate statistical analysis of certainty in relation mode shift percentages
North Herts	In Report	17/02/2025	Where will LG1 and Central Beds developments fit into this?		66	Table 8-1 Indicative modelling scenario overview - Interim phase	COMET	COMET will include relevant committed and allocated sites - ITP to confirm with HCC in COMET scoping discussions
North Herts	In Report	17/02/2025	Isn't this what we are moving away from doing? Aren't we starting from the assumption that the sites have already been tested through the Local Plan examination, and that what we are seeking to establish now is the scale of interventions needed to ensure that traffic levels are contained within safe and manageable bounds? Given the cost and complexity of running COMET model runs, it would seem far better to focus on testing instead permutations of phasing of development and interventions, including the most radical that may be unpalatable now but may be more palatable and/or necessary in future.		66	Table 8-1 Indicative modelling scenario overview - full development	COMET	The MSM captures the impact of interventions on mode share, based on our vision-led approach. COMET may reassign some trips between modes, depending on network performance but it is being used primarily to understand residual impact on highway network - i.e. whether traffic levels are 'safe and manageable'. This is a different use of the model in comparison to the Local Plan. We are undertaking initial testing now regarding phasing and permutations of infrastructure. This will inform, in particular, the Interim Phase forecast test in COMET. It will allow us to provide clarity on phasing of infrastructure, fine tuned by the local modelling exercise described in the TSR.
North Herts	In Report	17/02/2025	Hitchin and Stevenage are in different directions.		Annex C, page 66	Annex C - Key movements	Errors and typos	Diagram is indicative
North Herts	In Report	17/02/2025	What data is this plotting?		Annex C, page 67	Annex C - Figure 4-17: key movements summary	Errors and typos	Mobile phone data - it will be labelled / updated in TA
North Herts	In Report	17/02/2025	The standards don't need to be challenged, as the policy already allows for providing fewer parking spaces than the standards state if evidence supports it.		34	NHC parking standards	Non-resi parking provision	Noted
North Herts	In Report	17/02/2025	Are there no intermediate years available. Very dangerous to imply a trend from two points!		Annex G	Trip forecast fan graph (resi)	Trip generation	More detail will be provided. The method, as set out in TRICS, draws on data from 1990s.
North Herts	In Report	17/02/2025	As discussed in the context of the masterplan, the aim should be for all homes to be within 400m of a bus stop. Although people are prepared to walk further to catch a high frequency service, it is unlikely that such a service will be viable for this development. Also need to consider the equality impact of not providing bus stops within 400m.		33	We imply that not EVERY house will be within 400m of a bus stop	Public transport	PT assumptions have been further refined regards routing and phasing and this feeds into the COMET proforma. Additional refinement will come through the public transport strategy in the TA
North Herts	In Report	17/02/2025	Need to consider access to Letchworth station too, which offers a faster and more frequent service to London.		34	Rail access from the sites	Public transport	PT assumptions have been further refined regards routing and phasing and this feeds into the COMET proforma. Additional refinement will come through the public transport strategy in the TA
North Herts	In Report	17/02/2025	The difference is stark: for a train to King's Cross, the fastest from Letchworth is 29 minutes, from Baldock 55 minutes. Faster options are possible from Baldock, but only with a change at Stevenage onto an already crowded train. The timetable will change again in December 2025, adding another fast AM service from Letchworth. Season tickets to London are also slightly cheaper from Letchworth.		Annex C, page 21	Time of train journey comparing Letchworth or Baldock to Kings X	Public transport	Noted, we will reflect on this in the revise PT strategy developed as part of the TA and TP
North Herts	In Report	17/02/2025	This can be updated to 2023-24. See https://railstats.co.uk/BDK/Baldock_station Given the point made in §2.47, it would make sense to also provide stats for Letchworth station.		Annex C, page 22	Updated passenger entries/exits to Baldock station	Public transport	Noted, will be updated for TA
North Herts	In Report	17/02/2025	Most services are sporadic, not just low frequency.		Annex C, page 67	Key findings on local bus routes	Public transport	Noted
North Herts	In Report	17/02/2025	Don't overlook the greater attraction of Letchworth station for journeys to London.		Annex C, page 68	Key findings, rail service	Public transport	Noted
North Herts	In Report	17/02/2025	Need designated loading bays as well as restrictions.		37	Servicing strategy restrictions	Servicing strategy	To note in TA
North Herts	In Report	17/02/2025	This is a major undertaking with financial implications. Note that Zedify, the leading provider of last-mile freight services using e-cargo bikes, recently called in the receivers.		37	last mile' consolidation points	Servicing strategy	To consider in TA / TP / MMF
North Herts	By Email	18/02/2025	A circuitous route for the primary road may be (and, in my view, is likely to be) insufficient to deter A1–A505 through-traffic.	We may need to consider, for instance, gating traffic on the link	N/A	Interventions for BA1	Interventions	To be coded into COMET, noting design principles, with method to be agreed with HCC
North Herts	In Report	18/02/2025	And also non-vehicular - e.g. active travel crossing of Royston Road.		69	Road safety audits for intersection of access points to development	Interventions	Agreed, we will test active travel crossing (and active travel proposals on Station Road)
North Herts	In Report	18/02/2025	Clarify that this is a DMRB document (GG 142), and the EqIA screening referred to is the one recommended in GG 101. May want to refer to GG 104 too (Requirements for safety risk assessment).		69	Audits and ancillary assessments	Interventions	Noted, we will apply the relevant guidance
North Herts	In Report	18/02/2025	Is this the demand from Letchworth pupils that will be displaced? in which case the demand is not "created", but changed.		70	Demand for 2FE "created" to existing KTS	Interventions	Agreed
North Herts	In Report	18/02/2025	Need to be clear what measures are required, and what will be held in reserve.		71	Measures and obligations	Interventions	Agreed, this will be detailed in the TA, TP and MMF
North Herts	By Email	18/02/2025	Decide & Provide methodology not clearly set out, baseline should be a realistic worst-case future scenario – not BaU or an arbitrarily doctored BaU, but a scenario where planned mitigations are, for plausible reasons, less effective than hoped. Don't understand the point of running BAU scenarios through COMET, since we are all agreed it is not a scenario we need to test. The purpose of a TA is to propose and test the effectiveness of a range of interventions and mitigations.	If we are agreed that the baseline scenario is one in which the phasing of interventions is suboptimal and background policies are unhelpful, these are some ideas for discussion about what that scenario might be based on: 1.The active travel underpass and all-modes bridges are opened, say, two years later than would be ideal. 2.Shuttle running on North/Station Road negatively impacts bus timetabling because northbound traffic has to be prioritised at all times to avoid traffic blocking back to the Whitehorse crossroads. 3.Trip rates stabilise rather than decline. Or a more complex assumption is made that BEV mileage increases and ICEV mileage continues to decline. 4.A bus service links BA1 to Baldock station, Letchworth station, Hitchin station and Hitchin town centre every 20 minutes at peak times (Mon to Sat) and hourly off-peak (inc	N/A	Setting out of Decide and Provide met	COMET	We are not proposing running a set of alternative BAU scenarios through COMET. Rather we have set out the range of factors that a scenario could be built up from and are proposing one scenario at each future year that takes into account a mix of factors. For clarity in the interim and full development future year scenarios, a with and without 'mitigation' scenario are included in the COMET pro-forma. In the without mitigation scenario, BAU trip rates will be used for development trips.
North Herts	By Email	18/02/2025	Confusion about BA2. Understanding was that BA2 will be part of the outline application, and therefore needs to be included in the TA.	none	N/A	BA2 inclusion in outline app	Errors and typos	BA2 will be included in OPA
North Herts	In Report	18/02/2025	To avoid ambiguity, title as "Additional school on BA3"		27	Retitling Insert 5.4	Errors and typos	Noted, will capture in TA as needed
North Herts	In Report	18/02/2025	I understood that the outline application will include BA2?		41	BA2 inclusion in outline app	Errors and typos	Yes, it will
North Herts	In Report	18/02/2025	Would be useful to see the land uses set out separately to the trip rate tables with footprint areas and percentages of BA10 land occupied (to be able to sense-check the figures).		42	non-resi land uses	Trip generation	This is now set out in the COMET proforma and will be detailed in the TA
North Herts	In Report	18/02/2025	Where does the 80% come from? I cannot see, for instance, how 20% of waste transfer trips would be internal to BA10.		44	Trip internalisation	Trip generation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
North Herts	In Report	18/02/2025	What about pupils leaving after-school activities? In the paragraph above, it states that "most" pupils will leave between 3-4pm, but not that all would leave before 5pm.		47	Education BAU trip rates	Trip generation	These trips are likely to be modest but this will be clarified in the TA
North Herts	In Report	18/02/2025	Where - other than in London? According to the county's Traffic and Transport Data Report 2024, cycling activity in Hertfordshire has been essentially flat for the past 20 years (excepting the COVID blip).		47	Claimed substantial increase in cycling	Trip generation	This relates to TRICS D&P methodology and hasn't been adopted in our trip generation work
North Herts	In Report	18/02/2025	Given the relatively short distances involved, the bus frequency and cost is unlikely to be an attractive alternative to walking or cycling. This would be a '1' by my estimation.		51	Table 7-13: Theme ratings applied - public transport - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	A '3' would be more realistic because of entrenched car-dependent lifestyles.		51	Table 7-13: Theme ratings applied - Traffic and parking management - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions

Authority	Format	Date Received	Comment	Suggested Resolution from Comments	TSR Page	TSR Reference	Topic	ITP Response
North Herts	In Report	18/02/2025	A '2' would be more realistic given that the provision on-site will be limited (some provision on BA10 is being included, even though travel to BA10 is only 'internal' if walking or cycling). There is some double-counting of active travel provision.		51	Table 7-13: Theme ratings applied - Placemaking and landuse - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	A 10-minute frequency would be costly and unprecedented in North Herts (and rare anywhere outside a major metropolitan area or Park & Ride). Need therefore to be clear (a) whether "public transport" includes and rail journeys; (b) what destinations it is assumed the bus service will reach; (c) whether the fare revenue could plausibly cover the operating cost; (d) what the subsidy requirement would be during the early years and, potentially, long-term; (e) what the financial risk and mitigation are if patronage does reach the forecast level.		52	Table 7-13: Theme ratings applied - Public transport - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	When considering bus services, I think a '2' would be more appropriate.		52	Table 7-13: Theme ratings applied - Public transport - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	It is confusing to consider longer distance rail trips here and not the "residual trips" section. Here I would consider only rail trips to Letchworth (of which there will be a few, but bus or car will generally be more convenient).		52	Table 7-13: Theme ratings applied - Public transport - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	A '3' would be more realistic because weaknesses will remain in cycling routes within Baldock and Letchworth (i.e. there will be on-road sections that are not suitable for all ages and abilities).		52	Table 7-13: Theme ratings applied - Active travel - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	At best, this would be a '2' because road access will be good, parking will be minimally reduced with ample free and relatively cheap parking in Baldock and Letchworth remaining.		52	Table 7-13: Theme ratings applied - Traffic and parking management - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	I think this is an 'N/A' as there is no place-making being applied in Baldock or Letchworth. Off-site transport improvements are already accounted for under 'Public transport' and 'Active Travel'.		53	Table 7-13: Theme ratings applied - Placemaking and landuse - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	This is confusing! It would be easier to understand this as relating to destinations beyond Baldock and Letchworth, for which rail will play an important role.		53	Table 7-13: Theme ratings applied - Public transport - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	Because of the proximity to Baldock (and Letchworth) stations, I think this should be a 3 or 4.		53	Table 7-13: Theme ratings applied - Public transport - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	I think this is 'N/A'.		53	Table 7-13: Theme ratings applied - Traffic and parking management - BA1	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	See comments above in reviewing these.		53	Table 7-13: Theme ratings applied - BA3	Trip generation	We will undertake a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	I'm unclear if this is committing to creating a new baseline? That would probably be unrealistic because I don't see how you can recalibrate a strategic model based on only a partially updated set of traffic counts (and I assume there is no intention to gather a more widespread set of traffic counts).		66	Table 8-1 Indicative modelling scenario overview - opening year	COMET	HCC have confirmed COMET model can be rebased as required
North Herts	In Report	18/02/2025	HCC need to set some parameters on what is unacceptable.		67	Creating unacceptable impact on development	COMET	Agree, this should be discussed at future working groups
North Herts	In Report	18/02/2025	Below? Isn't this meant to read "Option 2"?		67	Development option 2	Errors and typos	Correct
North Herts	In Report	18/02/2025	Superseded by the Place & Movement Planning and Design Guidance: https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx#designguide		69	Roads in Hertfordshire guidance superseded	Errors and typos	Noted
North Herts	In Report	18/02/2025	This position has changed now?		Annex A, page 1	BA2 inclusion in outline app	Errors and typos	It has, BA2 now forms part of the OPA
North Herts	By Email	18/02/2025	General confusion in the TA about what “public transport” means. If the “public transport” mode share forecasts are just bus, then the numbers are difficult to believe. In our discussion, Geoff said he thought that, for train trips, it was the first/last mile leg that is counted as the operative mode for modelling and forecasting purposes.	To provide more clarity on this, I suggest setting out the assumed number of rail trips and the modal split for the first/last mile legs (walk, cycle, bus, car). I think splitting active travel into walking and cycling is important here because we need to know how much cycle parking will be needed at the station. Analysis of rail trips should also make reasonable assumptions about which station people will travel from – London commuters will tend to	N/A	Definition of public transport	Public transport	Clarification to be provided. Run through of MSM to be provided at TWG
North Herts	By Email	18/02/2025	Bus as the main trip mode is simpler to deal with because the first leg is almost always an internal walking trip. However, the ”proposed bus service” is not described, and therefore it is unclear what destinations it will serve directly. The proposed 10-minute frequency of service is unprecedented in the UK outside of metropolitan areas and Park & Rides, and therefore would likely to require a high level of long-term subsidy. The added complication of the bus service having to use North/Station Road to serve BA1 in the early years will not make it an attractive service for early occupiers.	For these reasons, I think we need to temper expectations of the mode share attributable to bus.	N/A	Proposed bus routes	Public transport	Clarification to be provided. Run through of MSM to be provided at TWG
HCC	By Email	19/02/2025	There needs to be an in-principle agreement that active and sustainable travel connections to key destinations would need to be made prior to the occupation of that phase.		N/A	Phasing of development and critical infrastructure	Interventions	Agreed, this will form part of the TA / TP / MMF
HCC	By Email	19/02/2025	Parking Strategy section requires more nuance. North Herts are reviewing their approach to parking in the context of strategic sites. The level of parking provision also needs to be considered alongside how that provision is allocated to properties and how it is designed, the design of properties and the use of things like parking barns can all influence the use of the private car without necessarily impacting on the number of parking spaces.	We need some more specific references to the design and allocation of parking.	N/A	Parking strategy	Parking strategy	To note in TA
HCC	By Email	19/02/2025	Operating a 10 min frequency bus service from first occupation is unrealistic but some level of provision would need to be agreed. Ultimately all these factors (this comment and previous) come together to inform an interim mode share assumption for the interim test. These will ultimately be monitored.		N/A	Public transport, proposed bus service frequencies	Public transport	PT assumptions have been further refined regards routing and phasing and this feeds into the COMET proforma. Additional refinement will come through the public transport strategy in the TA
HCC	By Email	19/02/2025	Roads in Herts Design Guide has been superseded by the Place Movement and Planning Design Guide (PMPDG)	Ensure that you are referencing and working to the most up to date			Errors and typos	To note in TA
HCC	By Email	19/02/2025	An interim test is needed, what I am not currently clear on is how we arrived at a 2033 interim test, my initial view is arriving at an appropriate interim year test needs to be a much more iterative process informed initially by the phasing of the development and the initial view on timing of critical infrastructure.		N/A	Why was 2033 chosen as interim test year?	COMET	We have undertaken an exercise to establish the trigger point for needing to introduce the multi-modal bridge, based on the development phasing. This was based on our Vissim model of the Station Road corridor and focussed primarily on when the A507 / B656 crossroads exceeds capacity. This identified an interim year of 2033, when 650 homes would be delivered on BA1 and 200 homes on BA2, alongside some initial education and community uses on BA1. Around half of the BA10 floorspace would be delivered by this point.
HCC	By Email	19/02/2025	I am slightly confused about the outputs of the internalisation work and cannot quite get my head around where the methodology needs to be tweaked, my fear is that the approach might be overly simplistic for the specific geography we have in Baldock whereby this is in effect a collection of sites rather than a single site which is often the case. For example in reality BA2 is relatively small and wont be able to internalise a huge amount, it might still be reasonable to assume many of the external trips can still be made sustainably, but internalisation might be being over egged if it has been arrived at as if this was a single site of 3200 homes etc.		N/A	Simplicity of internalisation methodology	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
HCC	By Email	19/02/2025	In the Monitor and Manage section I think we need to be setting out the principle of monitoring against a set of mode share targets both interim and permanent, potentially broken down to phases.		N/A	Monitor and Manage		Agreed, this will form part of the TA / TP / MMF
HCC	Word doc	07/03/2025	There is no mention of how the impacts of construction traffic and traffic management will be assessed.		64	8.2 Capacity Assessment Methodology	Construction	A high level summary will be set out in the TA, regarding construction logistics, traffic management and phasing. We envisage the detail will be reserved by condition
HCC	Word doc	07/03/2025	Within the BAU scenario, the TRICS Decide and Provide methodology will be employed to derive trip rates that reflect current trends regarding working from home, but without affecting overall mode share.	Please clarify whether the BAU trip rates in Table 7-4 (Residential) and Table 7-5 (Employment) take into account do actually reflect current	38	Section 7.1	Trip generation	Table 7-4 and Table 7-5 do not include working from home trends. Clarification will be added.
HCC	Word doc	07/03/2025	The initial estimation of trip generation of trip generation assumes 30% of residential trips and 20% employment trips would be internal to the site.	This seems reasonable, noting that ITP’s research into trip internalisation methodologies from a number of large application sites shows substantial variation between developments, with no consistent	39	Section 7.2	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
HCC	Word doc	07/03/2025	Table 7-4 residential BAU residential trip rate and trip calculations assumes that 70% of BA1 trips and 90% of BA3 (rather than 70%) residential trips are external. This seems reasonable, given the location and size of site BA3. Similarly, Table 7-5 and 7-6 employment trip rates and trips assume that 80% of BA10 trips are external.	As the above comment to 7.1, it is not clear whether the trip rates and trips in these tables take into account TRICS extrapolation trends to reflect working from home. More generally I found the Decide and Provide methodology in Appendix G difficult to follow and the appendix would benefit from greater	41	Section 7.3	Trip generation	Noted, the appendix will be updated in the TA.

Authority	Format	Date Received	Comment	Suggested Resolution from Comments	TSR Page	TSR Reference	Topic	ITP Response
HCC	Word doc	07/03/2025	The school staff mode share of 19% walk in Table 7-8 seems high given the comment that anecdotal information suggests that most staff drive and come from a reasonable distance away. The total education trip generations are robust, given non 100% pupil attendance on any given day, in reality.		46	Section 7.3.1	Trip generation	The majority of staff - 76% - are still shown to drive in the mode shares presented (taken from the Census). There will be very local staff who, if not teachers, could be in supporting roles such as dinner duties, administration, business management. They may walk because they don't have the burden of books and marking teachers sometimes cite. In the absence of any other relevant data to represent commuting trips in Baldock, this feels like the right approach, as opposed to manipulating the data based on judgement.
HCC	Word doc	07/03/2025	Table 7-10 and 7-11 show residential and non-residential Decide and Provide extrapolated residential and commercial trip rates and trips. Both tables show a 7% decrease in total trips, compared with Tables 7-4 and 7-6, reflecting a 7% reduction in trip rates, although it is unclear what time period this is over.		48	Section 7.3.1	Trip generation	We will add clarification in TSR
HCC	Word doc	07/03/2025	Table 7-12 shows a set of suggested mode share changes, presumably compared with car, representing a range of proposed scenarios of 0%. 9%, 18% and 28%. The rational for the percentage is unclear and it would be helpful to have an explanation and justification.	Is there any local/ regional case study evidence of this level of mode shift from elsewhere, for example?	50	Section 7.3.2	Trip generation	The figures cited in Table 7-12 are indicative, the actual mode shift is dependent on case studies used - the mode shift is shown in Section 7.4. We will run through the operation of the MSM at a future Transport Working Group meeting. The model does not rely on local or regional examples, given the relative paucity of best practice case studies in the UK. However, we will included case studies in the final TA.
HCC	Word doc	07/03/2025	Table 7-13 shows how it is intended to apply the theme ratings by mode, according to broad trip length category. The methodology appears sound but the rationale for the assumptions should be more broadly agreed. For example, it appears optimistic to assume that a 10 minute bus frequency at peak times is deliverable. The traffic and parking management proposals are ambitious.		51	Table 7-13	Trip generation	We are reviewing the bus strategy on the basis of comments received and will update the MSM as needed. Agreed that the traffic and parking management proposal on-site are ambitious.
HCC	Word doc	07/03/2025	The trip generation comparisons by mode between BAU, Decide and Provide and Vision-led trip generations in table 7-18 (residential) and table 7-19 (commercial) seem reasonable. The mode split BAU and Vision-led comparisons in table 7-20 (residential) and 7-21 (commercial) seem intuitive. The assumptions around changes in mode share for school pupils, compared to existing are set out in table 7-22. These seem reasonable. I agree with the decision not to apply any material shift in mode share for		61	7.4 Total Trip Generation and Mode Split Comparison	Trip generation	Noted
HCC	Word doc	07/03/2025	More detail should be provided on how trip distribution and assignment for localised modelling will be informed by relevant outputs from the COMET model.		63	7.5 Trips Distribution and Assignment for Development Trips	Trip generation	More detail will be provided in the TA, and the methodology will continue to be refined and discussed collaboratively with the councils, once there is greater clarity on the form of outputs from the new COMET model
HCC	Word doc	07/03/2025	It is envisaged that the COMET model will provide a basis for the assignment of highway and public transport trips.	As stated, further discussions with HCC should take place, if not already done so, as part of the pre-application process, to determine the model's suitability for use and to clarify model assumptions, including the scenarios to be modelled. Considerations include the level of detail of the model in the geographical area of interest and whether the model will adequately	64	8.2 Capacity Assessment Methodology	COMET	Extensive discussions have been had with HCC on the use of the COMET model. We have discussed with HCC (DT, GB) the network coverage of the model. We will provide survey data for validation.
HCC	Word doc	07/03/2025	A VISSIM model has been built and will be used to test the implications of the development on the Station Road corridor. Anecdotally it appears from google street view that the whole of B656 Royston Road/ White Horse Street/ Hitchin Street corridor, together with the North Road/ Station Road/ Clothall Road corridor is subject to congestion.		64	8.2 Capacity Assessment Methodology	Local modelling	Noted
HCC	Word doc	07/03/2025	How will the potential impact of the development on rail and bus capacity and infrastructure provision be assessed?		64	8.2 Capacity Assessment Methodology	COMET	The TA will review the impact of the development on bus and rail, making use of our trip generation work and outputs from COMET. This will inform S106 negotiations to ensure appropriate service and improvements are provided.
HCC	Word doc	07/03/2025	Indicative modelling scenarios are set out in Table 8-1. As stated, the modelling scenarios will need to be agreed with HCC.		64	8.2 Capacity Assessment Methodology	COMET	Agreed, this is being refined based on the comments received. Further refinement can be undertaken once the COMET pro-forma is submitted
HCC	Word doc	07/03/2025	The modelling methodology is generally unclear to me, including what strategic and local model runs are proposed to be carried out and how the strategic model will be used to interact/ inform the local modelling. It is not clear whether it is intended to carry out COMET model runs for the BAU scenarios, to demonstrate the impacts of this or whether there are any up-to date existing COMET model runs available to represent these. BAU model runs would assist in demonstrating the importance of active mode interventions set out in the Vision led scenarios.		64	8.2 Capacity Assessment Methodology	COMET	We are not proposing running a set of alternative BAU scenarios through COMET. Rather we have set out the range of factors that a scenario could be built up from (Table 8-1 in TSR) and are proposing one scenario at each future year that takes into account a mix of factors. For clarity in the interim and full development future year scenarios, a with and without 'mitigation' scenario are included in the COMET pro-forma. In the without mitigation scenario, BAU trip rates will be used for development trips.
HCC	Word doc	07/03/2025	It is proposed that no COMET model run will be carried out for development option 3 (five form entry Secondary school plus residential), the justification being that the impacts will be lower than for either Options 1 or 2. However, this may only be true if Option 2 (expansion of existing Knights Templar School to 8-12 form entry) plus residential is to be modelled. I suggest that the trip generation assumptions are set out for all three of the school scenarios for HCC to gain agreement that this is the correct way forward.		64	8.2 Capacity Assessment Methodology	COMET	Overall trip generation is likely to be similar across all options. However, the impacts will be far more spatially focused in Options 1 and 2. The modelling will test the impacts of this. For completeness we will included trip generation figures for all options within the TA.

Appendix C – Updated MSM Outputs

23/02973/MFA | Change of Use of the site and buildings from the existing Boys Brigade Head Quarters to a Special Educational Needs (SEN) School (Class F1) alongside various supporting works namely; a minor extension to the Thurso Centre, a car park extension, new perimeter fencing and gates and replacement of various windows across buildings. | Felden Lodge Felden Lane Hemel Hempstead Hertfordshire HP3 0BL

Table 5.2 Existing Traffic Generation & Trip Rates – Donor Sites (Ref: 23/02973/MFA, Transport Statement)

	Lakeside School (83 no. persons)			Abbeywood School (89 no. persons)		
Time Range	Arrive	Depart	Two-way	Arrive	Depart	Two-way
Traffic Movements						
Network / School AM Peak Period (08:00 – 09:00)	39	15	54	29	9	38
School PM Peak Period (15:00 – 16:00)	3	27	30	4	13	17
Network PM Peak (17:00 – 18:00)	2	20	22	1	12	13
Person Trip Rates						
Network / School AM Peak Period (08:00 – 09:00)	0.470	0.181	0.651	0.326	0.101	0.427
School PM Peak Period (15:00 – 16:00)	0.036	0.325	0.361	0.045	0.146	0.191
Network PM Peak (17:00 – 18:00)	0.024	0.241	0.265	0.011	0.135	0.146

Table 5.3 Average Donor Person Trip Rates (Ref: 23/02973/MFA, Transport Statement)

	Average Person Trip Rates		
Time Range	Arrive	Depart	Two-way
Network / School AM Peak Period (08:00 – 09:00)	0.398	0.141	0.539
School PM Peak Period (15:00 – 16:00)	0.041	0.236	0.276
Network PM Peak (17:00 – 18:00)	0.018	0.188	0.206

SEND School, BA3, Baldock - Anticipated number of pupils and assumed staff numbers

Staff Numbers	50
Student numbers	150
TOTAL	200

SEND School, BA3, Baldock - Proposed Trip Generation

	Trip Generation		
Time Range	**Arrive**	**Depart**	**Two-way**
Network / School AM Peak Period (08:00 – 09:00)	80	28	108
School PM Peak Period (15:00 – 16:00)	8	47	55
Network PM Peak (17:00 – 18:00)	4	38	41

Table 5-2: Future staff and pupil trips by mode, by route

Origin		Route		Total trips by mode by route				
				Walk	Cycle	Car	Bus	Total
Ashwell		A	Ashwell Road via Station Road	11	9	96	57	173
Within Baldock	Salisbury Road / Larkins Close / BA1	A1	Bygrave Road via Station Road	296	45	50	63	454
	BA1 development site	A2	Bridge / Icknield Way East / Icknield Way	322	49	0	0	371
	Clothall Common, BA2, BA3	B	Wallington Road via South Road	230	35	40	49	353
	Icknield Way / Norton Road and West Avenue	C	Norton Road	159	24	36	33	252
	Pinnocks Lane / South Road	D	Via Mansfield Road and High Street	79	12	17	17	125
	Weston Way	E	Weston Way	203	31	59	42	334
	London Road South	F	Via Mansfield Road and High Street	79	12	17	17	125
	Simpson Drive	G	Via Pepper Alley	64	0	0	0	64
	Park Drive	H	Via Mansfield Road	40	6	10	8	64
Hinxworth		I	North Road	9	3	45	11	67
Hitchin and Letchworth (east)		J	Letchworth Road	9	3	46	11	69
Sandon, Slip End, Wallington, Royston,Cambridgesh		K	A505 via Royston Road	7	4	48	20	79
Rushden, East Herts		L	A507 South	1	1	8	3	14
Total				1513	232	470	331	2545

ITP_3712_Knights Templar Expansion Feasibility Note_v2-0.pdf

Walk	Cycle	Car	Bus	Total
1513	232	470	331	2545
Walk	**Cycle**	**Car**	**Bus**	**Total**
48	7	146	4	205

Future Staff Trips and Mode Share

Broad destination	Route		Trips by mode by route			
			Walk	Cycle	Car	Bus
Ashwell	A	Ashwell Road via Station Road	1	0	5	0
Salisbury Road / Larkins Close / BA1	A1	Bygrave Road via Station Road	1	0	5	0
BA1	A2	Bridge / Icknield Way East / Icknield Way	6	1	0	0
Clothall Common	B	Wallington Road via South Road	1	0	5	0
Icknield Way / Norton Road and West Avenue	C	Norton Road	3	0	12	0
Pinnocks Lane / South Road	D	Via Mansfield Road and High Street	1	0	5	0
Weston Way	E	Weston Way	8	1	29	1
London Road South	F	Via Mansfield Road and High Street	1	0	5	0
Simpson Drive	G	Via Pepper Alley	5	0	0	0
Park Drive	H	Via Mansfield Road	1	0	4	0
Hinxworth	I	North Road	7	1	28	1
Hitchin and Letchworth (east)	J	Letchworth Road	8	1	30	1
Sandon, Slip End and Wallington	K	A505 via Royston Road	4	1	15	0
Rushden	L	A507 South	1	0	3	0
			48	7	146	4

Knights Templar Trip Model_v3-0.xlsx

Future number of staff

204

Vision-led & BAU	AM Peak		PM Peak		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Internal trips	36	0	0	17	42	42
Trips to Baldock and Letchworth	246	0	0	71	240	240
Residual trips	188	0	0	58	188	188
Total external trips	434	0	0	129	428	428
Total trips	470	0	0	146	470	470

Full build out (assume 2040)
225
dwellings

Public transport
Active travel
Traffic and parking management
Placemaking and land use planning

CHANGED TO MEDIAN FROM AVERAGE

Internal trips and mode shares Trips made within each allocation site

| Site | Scale | Unit | Theme rating | | | | Mode | BAU Two-Way Trip Rates | | | | | | BAU Mode Share | | | | | | BAU Internal Trip Generation | | | | | | BAU CO2e emissions - Tonnes (2040 fleet mix assumptions) | | | | Mode Shift by Theme - AM Peak | | | | | | | | Mode Shift by Theme - PM Peak | | | | | | | | Mode Shift by Theme - Daily | | | | | | | | median | | | | | | Vision-led Mode Share | | | | | | Vision-led Trip Rates | | | | | | Vision-led Internal Trip Generation | | | | | | Vision-led CO2e emissions - Tonnes | | | | Mode | Difference in trips between BAU and vision-led scenarios | | | | CO2e savings between BAU and ambitious scenarios - Tonnes | | | |
|---|---|---

Business as Usual

Internal trips

Site	Scale	Mode	AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	25	Vehicles	0	0	0	0	2	2
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	3	3
BA2	200	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
Whole site		Vehicles	0	0	0	0	2	2
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	3	3
BA10	0	HGVs	0	0	0	0	0	0

Trips to Baldock and Letchworth

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	25	Vehicles	2	5	4	2	24	25
		Public transport	0	0	0	0	1	1
		Active travel	0	1	1	0	5	5
BA2	200	Vehicles	15	40	36	16	228	229
		Public transport	0	4	0	0	13	13
		Active travel	4	11	5	4	46	47
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
Whole site		Vehicles	17	45	40	18	253	253
		Public transport	0	4	0	0	14	14
		Active travel	4	12	5	4	51	52
BA10	0	HGVs	0	0	0	0	0	0

Residual trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	25	Vehicles	1	3	3	1	19	19
		Public transport	0	0	0	0	1	1
		Active travel	0	1	0	0	4	4
BA2	200	Vehicles	10	27	24	11	152	152
		Public transport	0	2	0	0	8	8
		Active travel	2	7	3	2	31	31
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
Whole site		Vehicles	11	30	27	12	171	172
		Public transport	0	3	0	0	9	9
		Active travel	3	8	4	3	34	35
BA10	0	HGVs	0	0	0	0	0	0

Total external trips

			AM Peak		PM Peak		Daily		
			Arr	Dep	Arr	Dep	Arr	Dep	
BA1	25	Vehicles	3	8	7	3	44	44	80%
		Public transport	0	1	0	0	2	2	4%
		Active travel	1	2	1	1	9	9	16%
BA2	200	Vehicles	25	67	60	27	380	381	80%
		Public transport	1	6	1	1	21	21	4%
		Active travel	6	18	8	6	76	78	16%
BA3	0	Vehicles	0	0	0	0	0	0	#DIV/0!
		Public transport	0	0	0	0	0	0	#DIV/0!
		Active travel	0	0	0	0	0	0	#DIV/0!
BA10	0	Vehicles	0	0	0	0	0	0	#DIV/0!
		Public transport	0	0	0	0	0	0	#DIV/0!
		Active travel	0	0	0	0	0	0	#DIV/0!
Whole site		Vehicles	29	75	67	31	424	425	80%
		Public transport	1	7	1	1	23	23	4%
		Active travel	7	21	9	7	85	87	16%
BA10	0	HGVs	0	0	0	0	0	0	

Total trips

			AM Peak		PM Peak		Daily		
			Arr	Dep	Arr	Dep	Arr	Dep	
BA1	25	Vehicles	3	8	7	3	46	46	77%
		Public transport	0	1	0	0	2	2	4%
		Active travel	1	2	1	1	11	12	19%
BA2	200	Vehicles	25	67	60	27	380	381	80%
		Public transport	1	6	1	1	21	21	4%
		Active travel	6	18	8	6	76	78	16%
BA3	0	Vehicles	0	0	0	0	0	0	#DIV/0!
		Public transport	0	0	0	0	0	0	#DIV/0!
		Active travel	0	0	0	0	0	0	#DIV/0!
BA10	0	Vehicles	0	0	0	0	0	0	#DIV/0!
		Public transport	0	0	0	0	0	0	#DIV/0!
		Active travel	0	0	0	0	0	0	#DIV/0!
Whole site		Vehicles	29	75	67	31	426	427	79%
		Public transport	1	7	1	1	23	23	4%
		Active travel	7	21	10	7	88	89	16%
			0	0	0	0	0	0	
BA10	0	HGVs	0	0	0	0	0	0	

Vision-led

Internal trips

Site	Mode	AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	0	0	0	0	2	2
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	3	3
BA2	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
Whole site	Vehicles	0	0	0	0	2	2
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	3	3
BA10	HGVs	0	0	0	0	0	0

Trips to Baldock and Letchworth

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	2	4	3	2	22	22
	Public transport	0	1	0	0	2	2
	Active travel	1	2	1	1	7	7
BA2	Vehicles	15	38	35	16	220	221
	Public transport	0	4	2	0	13	13
	Active travel	4	13	6	4	54	55
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
Whole site	Vehicles	16	43	38	18	242	243
	Public transport	0	4	2	0	15	15
	Active travel	5	14	7	5	60	62
BA10	HGVs	0	0	0	0	0	0

Residual trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	1	3	3	1	19	19
	Public transport	0	0	0	0	1	1
	Active travel	0	1	0	0	4	4
BA2	Vehicles	10	27	24	11	152	152
	Public transport	0	2	1	0	8	8
	Active travel	2	7	3	2	31	31
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
Whole site	Vehicles	11	30	27	12	171	172
	Public transport	0	3	2	0	9	9
	Active travel	3	8	4	3	34	35
BA10	HGVs	0	0	0	0	0	0

Total external trips

		AM Peak		PM Peak		Daily		
		Arr	Dep	Arr	Dep	Arr	Dep	
BA1	Vehicles	3	7	6	3	41	41	75%
	Public transport	0	1	0	0	3	3	6%
	Active travel	1	3	1	1	10	11	19%
BA2	Vehicles	25	65	59	27	372	373	78%
	Public transport	1	6	4	1	21	21	4%
	Active travel	6	20	9	7	84	86	18%
BA3	Vehicles	0	0	0	0	0	0	#DIV/0!
	Public transport	0	0	0	0	0	0	#DIV/0!
	Active travel	0	0	0	0	0	0	#DIV/0!
BA10	Vehicles	0	0	0	0	0	0	#DIV/0!
	Public transport	0	0	0	0	0	0	#DIV/0!
	Active travel	0	0	0	0	0	0	#DIV/0!
Whole site	Vehicles	28	73	65	30	413	414	78%
	Public transport	1	7	4	1	24	24	5%
	Active travel	7	23	11	7	95	97	18%
BA10	HGVs	0	0	0	0	0	0	

Total trips

		AM Peak		PM Peak		Daily		
		Arr	Dep	Arr	Dep	Arr	Dep	
BA1	Vehicles	3	8	7	3	44	44	73%
	Public transport	0	1	0	0	3	3	5%
	Active travel	1	3	2	1	13	13	22%
BA2	Vehicles	25	65	59	27	372	373	78%
	Public transport	1	6	4	1	21	21	4%
	Active travel	6	20	9	7	84	86	18%
BA3	Vehicles	0	0	0	0	0	0	#DIV/0!
	Public transport	0	0	0	0	0	0	#DIV/0!
	Active travel	0	0	0	0	0	0	#DIV/0!
BA10	Vehicles	0	0	0	0	0	0	#DIV/0!
	Public transport	0	0	0	0	0	0	#DIV/0!
	Active travel	0	0	0	0	0	0	#DIV/0!
Whole site	Vehicles	28	73	66	30	416	417	77%
	Public transport	1	7	4	1	24	24	4%
	Active travel	7	23	11	8	97	99	18%
BA10	HGVs	0	0	0	0	0	0	

Difference

Internal trips

Site	Mode	AM	PM	Daily
BA1	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA2	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
Whole site	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	HGVs	0	0	0

Trips to Baldock and Letchworth

		AM	PM	Daily
BA1	Vehicles	-1	0	-5
	Public transport	0	0	1
	Active travel	1	0	3
BA2	Vehicles	-2	-2	-16
	Public transport	0	2	0
	Active travel	2	2	16
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
Whole site	Vehicles	-3	-2	-21
	Public transport	0	2	2
	Active travel	3	2	19
BA10	HGVs	0	0	0

Residual trips

		AM	PM	Daily
BA1	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA2	Vehicles	0	0	0
	Public transport	0	1	0
	Active travel	0	0	0
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
Whole site	Vehicles	0	0	0
	Public transport	0	1	0
	Active travel	0	0	0
BA10	HGVs	0	0	0

Total external trips

		AM	PM	Daily
BA1	Vehicles	-1	0	-5
	Public transport	0	0	1
	Active travel	1	0	3
BA2	Vehicles	-2	-2	-16
	Public transport	0	3	0
	Active travel	2	2	16
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
Whole site	Vehicles	-3	-2	-21
	Public transport	0	3	2
	Active travel	3	2	19
BA10	HGVs	0	0	0

Total trips

		AM	PM	Daily
BA1	Vehicles	-1	0	-5
	Public transport	0	0	1
	Active travel	1	0	3
BA2	Vehicles	-2	-2	-16
	Public transport	0	3	0
	Active travel	2	2	16
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
Whole site	Vehicles	-3	-2	-21
	Public transport	0	3	2
	Active travel	3	2	19
		0	0	0
BA10	HGVs	0	0	0

2033 Interim Year
850
dwellings

Public transport
Active travel
Traffic and parking management
Placemaking and land use planning

CHANGED TO MEDIAN FROM AVERAGE

Internal trips and mode shares Trips made within each allocation site

| Site | Scale | Unit | Theme rating 1 | 2 | 3 | 4 | Mode | BAU Two-Way Trip Rates AM Peak Arr | AM Peak Dep | PM Peak Arr | PM Peak Dep | Daily Arr | Daily Dep | BAU Mode Share AM Peak Arr | AM Peak Dep | PM Peak Arr | PM Peak Dep | Daily Arr | Daily Dep | BAU Internal Trip Generation AM Peak Arr | AM Peak Dep | PM Peak Arr | PM Peak Dep | Daily Arr | Daily Dep | BAU CO2e emissions - Tonnes (2040 fleet mix assumptions) AM Peak | PM Peak | Daily | Annually | Mode Shift by Theme - AM Peak Arr 1 | 2 | 3 | 4 | Dep 1 | 2 | 3 | 4 | Mode Shift by Theme - PM Peak Arr 1 | 2 | 3 | 4 | Dep 1 | 2 | 3 | 4 | Mode Shift by Theme - Daily Arr 1 | 2 | 3 | 4 | Dep 1 | 2 | 3 | 4 | median AM Peak Arr | AM Peak Dep | PM Peak Arr | PM Peak Dep | Daily Arr | Daily Dep | Vision-led Mode Share AM Peak Arr | AM Peak Dep | PM Peak Arr | PM Peak Dep | Daily Arr | Daily Dep | Vision-led Trip Rates AM Peak Arr | AM Peak Dep | PM Peak Arr | PM Peak Dep | Daily Arr | Daily Dep | Vision-led Internal Trip Generation AM Peak Arr | AM Peak Dep | PM Peak Arr | PM Peak Dep | Daily Arr | Daily Dep | Vision-led CO2e emissions - Tonnes AM Peak | PM Peak | Daily | Annually | Mode | Difference in trips between BAU and vision-led scenarios AM Peak | PM Peak | Daily | CO2e savings between BAU and ambitious scenarios - Tonnes AM Peak | PM Peak | Daily | Annually |
|---|---|---

Business as Usual

Internal trips

Site	Scale	Mode	AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	650	Vehicles	18	51	25	12	172	173
		Public transport	0	1	1	0	4	4
		Active travel	20	57	27	13	190	191
BA2	200	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	36650.22	Vehicles	7	2	4	12	87	88
		Public transport	1	0	5	4	29	29
		Active travel	1	0	1	2	16	15
Whole site		Vehicles	25	53	28	24	258	260
		Public transport	1	1	5	4	33	33
		Active travel	21	57	28	15	205	206
BA10	36650.22	HGVs	0	0	0	0	2	2

Trips to Baldock and Letchworth

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	650	Vehicles	19	50	73	33	451	452
		Public transport	0	5	1	1	25	25
		Active travel	4	14	10	8	90	92
BA2	200	Vehicles	15	40	36	16	228	229
		Public transport	0	4	0	0	13	13
		Active travel	4	11	5	4	46	47
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	36650.22	Vehicles	104	23	20	66	556	562
		Public transport	11	1	25	19	185	189
		Active travel	13	4	5	13	99	98
Whole site		Vehicles	139	113	129	116	1235	1242
		Public transport	11	9	26	20	223	226
		Active travel	21	29	20	24	236	237
BA10	36650.22	HGVs	2	2	2	2	2	2

Residual trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	650	Vehicles	33	87	78	36	494	496
		Public transport	1	8	1	1	27	27
		Active travel	8	24	11	8	99	101
BA2	200	Vehicles	10	27	24	11	152	152
		Public transport	0	2	0	0	8	8
		Active travel	2	7	3	2	31	31
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	36650.22	Vehicles	75	16	16	52	429	433
		Public transport	8	1	20	15	143	146
		Active travel	9	3	4	10	77	76
Whole site		Vehicles	118	130	118	99	1075	1081
		Public transport	9	11	21	16	178	181
		Active travel	19	35	18	21	206	208
BA10	36650.22	HGVs	2	1	0	1	10	10

Total external trips

			AM Peak		PM Peak		Daily		
			Arr	Dep	Arr	Dep	Arr	Dep	
BA1	650	Vehicles	52	137	151	69	945	947	80%
		Public transport	1	13	1	1	52	52	4%
		Active travel	12	38	21	16	190	194	16%
BA2	200	Vehicles	25	67	60	27	380	381	80%
		Public transport	1	6	1	1	21	21	4%
		Active travel	6	18	8	6	76	78	16%
BA3	0	Vehicles	0	0	0	0	0	0	#DIV/0!
		Public transport	0	0	0	0	0	0	#DIV/0!
		Active travel	0	0	0	0	0	0	#DIV/0!
BA10	36650.22	Vehicles	179	39	36	118	985	994	66%
		Public transport	18	2	44	34	328	335	22%
		Active travel	22	8	8	23	176	174	12%
Whole site		Vehicles	257	243	247	215	2310	2323	73%
		Public transport	20	21	46	36	401	407	13%
		Active travel	40	64	37	45	442	445	14%
BA10	36650.22	HGVs	4	3	2	3	12	12	

Total trips

			AM Peak		PM Peak		Daily		
			Arr	Dep	Arr	Dep	Arr	Dep	
BA1	200	Vehicles	70	189	175	81	1117	1120	72%
		Public transport	2	14	2	2	56	56	4%
		Active travel	32	95	48	29	379	385	25%
BA2	200	Vehicles	25	67	60	27	380	381	80%
		Public transport	1	6	1	1	21	21	4%
		Active travel	6	18	8	6	76	78	16%
BA3	0	Vehicles	0	0	0	0	0	0	#DIV/0!
		Public transport	0	0	0	0	0	0	#DIV/0!
		Active travel	0	0	0	0	0	0	#DIV/0!
BA10	36650.22	Vehicles	186	41	40	131	1072	1082	66%
		Public transport	19	2	49	38	357	364	22%
		Active travel	23	8	9	26	192	189	12%
Whole site		Vehicles	282	296	275	239	2569	2583	70%
		Public transport	21	22	51	40	434	441	12%
		Active travel	61	121	65	61	647	652	18%
			0	0	0	0	0	0	
BA10	36650.22	HGVs	4	3	2	3	14	14	

Vision-led

Internal trips

Site	Mode	AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	12	36	17	8	119	120
	Public transport	2	5	2	1	16	16
	Active travel	24	69	33	16	231	232
BA2	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	6	1	3	10	73	73
	Public transport	1	0	1	3	16	16
	Active travel	2	0	6	5	42	43
Whole site	Vehicles	19	37	20	19	192	193
	Public transport	3	5	3	4	32	32
	Active travel	26	69	39	21	273	275
BA10	HGVs	0	0	0	0	2	2

Trips to Baldock and Letchworth

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	17	43	65	29	395	395
	Public transport	1	7	8	2	46	46
	Active travel	6	18	15	10	125	127
BA2	Vehicles	13	34	31	14	196	196
	Public transport	1	6	4	1	24	24
	Active travel	5	15	8	5	67	68
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	93	20	15	56	473	478
	Public transport	13	5	5	13	104	102
	Active travel	22	4	30	28	265	269
Whole site	Vehicles	122	97	110	100	1063	1069
	Public transport	16	18	16	17	174	172
	Active travel	33	37	53	43	457	464
BA10	HGVs	2	2	2	2	2	2

Residual trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	33	87	78	36	494	496
	Public transport	1	8	5	1	27	27
	Active travel	8	24	11	8	99	101
BA2	Vehicles	10	25	23	11	145	145
	Public transport	0	3	2	0	10	10
	Active travel	3	8	4	3	36	36
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	75	16	16	52	429	433
	Public transport	9	3	4	10	77	76
	Active travel	8	1	20	15	143	146
Whole site	Vehicles	117	128	117	99	1068	1074
	Public transport	10	14	10	11	114	113
	Active travel	18	33	34	26	278	283
BA10	HGVs	2	1	0	1	10	10

Total external trips

		AM Peak		PM Peak		Daily		
		Arr	Dep	Arr	Dep	Arr	Dep	
BA1	Vehicles	50	130	142	65	889	891	75%
	Public transport	2	15	12	3	73	74	6%
	Active travel	14	42	26	18	224	228	19%
BA2	Vehicles	23	59	54	25	341	341	71%
	Public transport	1	9	5	1	34	34	7%
	Active travel	8	24	12	8	103	105	22%
BA3	Vehicles	0	0	0	0	0	0	#DIV/0!
	Public transport	0	0	0	0	0	0	#DIV/0!
	Active travel	0	0	0	0	0	0	#DIV/0!
BA10	Vehicles	167	36	31	109	902	910	61%
	Public transport	22	8	8	24	180	178	12%
	Active travel	29	5	50	43	408	415	27%
Whole site	Vehicles	240	226	227	199	2131	2142	68%
	Public transport	26	32	26	28	288	286	9%
	Active travel	51	71	87	69	734	748	23%
BA10	HGVs	4	3	2	3	12	12	

Total trips

		AM Peak		PM Peak		Daily		
		Arr	Dep	Arr	Dep	Arr	Dep	
BA1	Vehicles	62	166	159	73	1008	1011	65%
	Public transport	4	20	14	4	89	89	6%
	Active travel	38	111	59	34	455	460	29%
BA2	Vehicles	23	59	54	25	341	341	71%
	Public transport	1	9	5	1	34	34	7%
	Active travel	8	24	12	8	103	105	22%
BA3	Vehicles	0	0	0	0	0	0	#DIV/0!
	Public transport	0	0	0	0	0	0	#DIV/0!
	Active travel	0	0	0	0	0	0	#DIV/0!
BA10	Vehicles	174	38	33	119	974	984	60%
	Public transport	23	8	9	26	197	194	12%
	Active travel	31	5	55	49	450	458	28%
Whole site	Vehicles	259	263	247	217	2323	2335	64%
	Public transport	28	37	29	32	320	317	9%
	Active travel	77	140	126	91	1007	1022	28%
BA10	HGVs	4	3	2	3	14	14	

Difference

Internal trips

Site	Mode	AM	PM	Daily
BA1	Vehicles	-21	-11	-105
	Public transport	5	3	24
	Active travel	16	9	81
BA2	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	-1	-3	-28
	Public transport	0	-5	-26
	Active travel	1	8	54
Whole site	Vehicles	-22	-14	-134
	Public transport	5	-2	-2
	Active travel	17	17	136
BA10	HGVs	0	0	0

Trips to Baldock and Letchworth

		AM	PM	Daily
BA1	Vehicles	-10	-12	-112
	Public transport	4	8	43
	Active travel	6	7	69
BA2	Vehicles	-9	-7	-65
	Public transport	3	4	22
	Active travel	6	5	43
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	-14	-15	-168
	Public transport	6	-26	-169
	Active travel	8	41	336
Whole site	Vehicles	-33	-34	-345
	Public transport	13	-13	-103
	Active travel	20	53	448
BA10	HGVs	0	0	0

Residual trips

		AM	PM	Daily
BA1	Vehicles	0	0	0
	Public transport	0	4	0
	Active travel	0	0	0
BA2	Vehicles	-2	-2	-14
	Public transport	1	2	4
	Active travel	1	1	10
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	0	0	0
	Public transport	4	-21	-136
	Active travel	-4	21	136
Whole site	Vehicles	-2	-2	-14
	Public transport	4	-15	-132
	Active travel	-2	22	146
BA10	HGVs	0	0	0

Total external trips

		AM	PM	Daily
BA1	Vehicles	-10	-12	-112
	Public transport	4	12	43
	Active travel	6	7	69
BA2	Vehicles	-10	-9	-80
	Public transport	3	6	27
	Active travel	7	6	53
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	-14	-15	-168
	Public transport	10	-46	-305
	Active travel	5	61	472
Whole site	Vehicles	-34	-36	-360
	Public transport	17	-28	-235
	Active travel	17	75	595
BA10	HGVs	0	0	0

Total trips

		AM	PM	Daily
BA1	Vehicles	-31	-23	-218
	Public transport	8	15	67
	Active travel	22	16	151
BA2	Vehicles	-10	-9	-80
	Public transport	3	6	27
	Active travel	7	6	53
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	-16	-18	-196
	Public transport	10	-51	-331
	Active travel	5	69	527
Whole site	Vehicles	-57	-50	-493
	Public transport	22	-31	-237
	Active travel	35	91	730
		0	0	0
BA10	HGVs	0	0	0

Full build out (assume 2040)
2848
dwellings

Public transport
Active travel
Traffic and parking management
Placemaking and land use planning

CHANGED TO MEDIAN FROM AVERAGE

Internal trips and mode shares Trips made within each allocation site

| Site | Scale | Unit | Theme rating | | | | Mode | BAU Two-Way Trip Rates | | | | | | BAU Mode Share | | | | | | BAU Internal Trip Generation | | | | | | BAU CO2e emissions - Tonnes (2040 fleet mix assumptions) | | | | Mode Shift by Theme - AM Peak | | | | | | | | Mode Shift by Theme - PM Peak | | | | | | | | Mode Shift by Theme - Daily | | | | | | | | median | | | | | | Vision-led Mode Share | | | | | | Vision-led Trip Rates | | | | | | Vision-led Internal Trip Generation | | | | | | Vision-led CO2e emissions - Tonnes | | | | Mode | Difference in trips between BAU and vision-led scenarios | | | | CO2e savings between BAU and ambitious scenarios - Tonnes | | | |
|---|---|---

Business as Usual

Internal trips

Site	Scale	Mode	AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2400	Vehicles	81	233	172	82	1090	1096
		Public transport	2	5	4	2	23	23
		Active travel	90	258	190	91	1206	1212
BA2	200	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA3	248	Vehicles	7	6	5	7	33	35
		Public transport	0	0	0	0	1	1
		Active travel	2	4	5	3	27	28
BA10	86500	Vehicles	23	5	12	39	273	275
		Public transport	2	0	15	11	91	93
		Active travel	3	1	3	8	49	48
Whole site		Vehicles	106	242	188	124	1387	1396
		Public transport	4	5	18	13	115	117
		Active travel	94	263	198	101	1282	1288
BA10	86500	HGVs	1	1	0	0	15	15

Trips to Baldock and Letchworth

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2400	Vehicles	45	118	126	58	891	893
		Public transport	1	11	1	1	49	49
		Active travel	10	33	17	13	179	183
BA2	200	Vehicles	15	40	36	16	228	229
		Public transport	0	4	0	0	13	13
		Active travel	4	11	5	4	46	47
BA3	248	Vehicles	58	58	38	35	288	299
		Public transport	0	4	0	0	13	13
		Active travel	4	12	5	4	48	49
BA10	86500	Vehicles	241	53	45	146	1245	1257
		Public transport	24	3	55	42	415	423
		Active travel	29	10	10	29	223	220
Whole site		Vehicles	317	254	242	237	2605	2620
		Public transport	26	21	57	44	490	498
		Active travel	47	66	37	49	495	498
BA10	86500	HGVs	7	7	0	0	70	70

Residual trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2400	Vehicles	122	321	287	132	1825	1830
		Public transport	3	29	3	3	100	100
		Active travel	28	89	40	30	366	374
BA2	200	Vehicles	10	27	24	11	152	152
		Public transport	0	2	0	0	8	8
		Active travel	2	7	3	2	31	31
BA3	248	Vehicles	44	44	31	29	225	234
		Public transport	0	3	0	0	10	10
		Active travel	3	9	4	3	38	39
BA10	86500	Vehicles	176	38	38	124	1012	1021
		Public transport	18	2	46	36	337	344
		Active travel	22	7	8	24	181	178
Whole site		Vehicles	321	419	379	280	3178	3193
		Public transport	21	37	49	39	456	463
		Active travel	55	113	55	60	615	622
BA10	86500	HGVs	5	0	0	0	57	57

Total external trips

			AM Peak		PM Peak		Daily		
			Arr	Dep	Arr	Dep	Arr	Dep	
BA1	2400	Vehicles	167	439	413	189	2716	2723	80%
		Public transport	4	40	4	4	149	149	4%
		Active travel	39	121	57	43	545	557	16%
BA2	200	Vehicles	25	67	60	27	380	381	80%
		Public transport	1	6	1	1	21	21	4%
		Active travel	6	18	8	6	76	78	16%
BA3	248	Vehicles	103	103	69	63	513	533	83%
		Public transport	1	7	1	1	24	24	4%
		Active travel	7	21	9	7	86	88	14%
BA10	86500	Vehicles	416	91	82	270	2256	2278	66%
		Public transport	42	5	101	77	752	767	22%
		Active travel	51	18	19	53	404	398	12%
Whole site		Vehicles	638	673	621	517	5783	5813	74%
		Public transport	47	58	106	82	946	961	12%
		Active travel	102	178	93	109	1111	1121	14%
BA10	86500	HGVs	12	7	0	0	126	126	

Total trips

			AM Peak		PM Peak		Daily		
			Arr	Dep	Arr	Dep	Arr	Dep	
BA1	2400	Vehicles	249	672	585	272	3806	3819	66%
		Public transport	5	45	7	6	173	173	3%
		Active travel	129	379	247	134	1751	1769	31%
BA2	200	Vehicles	25	67	60	27	380	381	80%
		Public transport	1	6	1	1	21	21	4%
		Active travel	6	18	8	6	76	78	16%
BA3	248	Vehicles	110	109	74	70	546	568	80%
		Public transport	1	7	1	1	24	24	3%
		Active travel	8	26	14	9	114	116	16%
BA10	86500	Vehicles	440	96	94	309	2529	2554	66%
		Public transport	45	5	116	89	843	859	22%
		Active travel	54	19	21	60	452	446	12%
Whole site		Vehicles	744	915	809	640	7170	7209	67%
		Public transport	51	63	124	95	1061	1077	10%
		Active travel	197	442	291	210	2393	2409	23%
			0	0	0	0	0	0	
BA10	86500	HGVs	13	7	0	0	141	142	

Vision-led

Internal trips

Site	Mode	AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	20	56	41	20	263	264
	Public transport	11	31	23	11	144	145
	Active travel	143	409	301	144	1912	1922
BA2	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA3	Vehicles	7	5	4	6	27	29
	Public transport	0	0	0	0	1	1
	Active travel	2	5	6	3	33	33
BA10	Vehicles	21	5	6	32	223	225
	Public transport	4	1	4	10	66	65
	Active travel	3	0	20	15	123	126
Whole site	Vehicles	42	64	51	54	505	509
	Public transport	15	32	26	21	211	211
	Active travel	148	415	327	162	2068	2081
BA10	HGVs	1	1	0	0	15	15

Trips to Baldock and Letchworth

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	30	72	87	39	592	591
	Public transport	4	20	15	4	108	109
	Active travel	23	69	48	29	419	425
BA2	Vehicles	13	31	30	14	187	188
	Public transport	2	10	7	2	42	42
	Active travel	4	14	6	5	57	59
BA3	Vehicles	56	51	34	33	255	266
	Public transport	1	8	5	1	30	30
	Active travel	5	16	7	5	64	65
BA10	Vehicles	163	35	3	81	669	676
	Public transport	50	16	17	45	362	359
	Active travel	81	15	89	91	851	864
Whole site	Vehicles	220	174	153	147	1656	1663
	Public transport	57	53	44	53	543	540
	Active travel	114	114	149	129	1391	1413
BA10	HGVs	7	7	0	0	70	70

Residual trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	122	321	287	132	1825	1830
	Public transport	3	29	17	3	100	100
	Active travel	28	89	40	30	366	374
BA2	Vehicles	10	25	23	11	145	145
	Public transport	0	3	2	0	10	10
	Active travel	3	8	4	3	36	36
BA3	Vehicles	44	44	31	29	225	234
	Public transport	0	3	2	0	10	10
	Active travel	3	9	4	3	38	39
BA10	Vehicles	176	38	38	124	1012	1021
	Public transport	22	7	8	24	181	178
	Active travel	18	2	46	36	337	344
Whole site	Vehicles	320	417	378	280	3171	3185
	Public transport	25	43	29	27	302	300
	Active travel	52	108	94	71	777	793
BA10	HGVs	5	5	0	0	57	57

Total external trips

		AM Peak		PM Peak		Daily		
		Arr	Dep	Arr	Dep	Arr	Dep	
BA1	Vehicles	152	393	375	170	2417	2421	71%
	Public transport	6	50	32	7	209	209	6%
	Active travel	51	158	87	59	785	799	23%
BA2	Vehicles	22	57	53	24	332	333	69%
	Public transport	3	12	8	3	52	52	11%
	Active travel	7	22	10	7	93	95	20%
BA3	Vehicles	101	95	65	61	480	500	77%
	Public transport	2	11	6	2	41	41	6%
	Active travel	8	25	11	8	102	104	16%
BA10	Vehicles	339	74	41	204	1680	1697	49%
	Public transport	71	23	26	70	543	537	16%
	Active travel	99	17	135	126	1188	1208	35%
Whole site	Vehicles	541	592	530	427	4827	4849	61%
	Public transport	82	96	73	81	845	840	11%
	Active travel	166	222	243	200	2168	2206	28%
BA10	HGVs	12	12	0	0	126	126	

Total trips

		AM Peak		PM Peak		Daily		
		Arr	Dep	Arr	Dep	Arr	Dep	
BA1	Vehicles	172	449	416	190	2680	2685	47%
	Public transport	17	80	55	18	353	354	6%
	Active travel	194	567	388	203	2697	2721	47%
BA2	Vehicles	22	57	53	24	332	333	69%
	Public transport	3	12	8	3	52	52	11%
	Active travel	7	22	10	7	93	95	20%
BA3	Vehicles	108	100	69	67	507	530	75%
	Public transport	2	11	6	2	41	41	6%
	Active travel	10	30	17	11	135	137	20%
BA10	Vehicles	361	78	47	237	1904	1923	50%
	Public transport	75	24	29	80	609	603	16%
	Active travel	102	17	155	141	1312	1334	34%
Whole site	Vehicles	583	656	581	481	5331	5357	50%
	Public transport	96	128	99	102	1056	1050	10%
	Active travel	314	636	570	363	4236	4287	40%
BA10	HGVs	13	12	0	0	141	142	

Difference

Internal trips

Site	Mode	AM	PM	Daily
BA1	Vehicles	-239	-193	-1658
	Public transport	35	28	242
	Active travel	204	164	1416
BA2	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA3	Vehicles	-1	-2	-12
	Public transport	0	0	0
	Active travel	1	2	12
BA10	Vehicles	-2	-13	-100
	Public transport	3	-12	-52
	Active travel	0	25	152
Whole site	Vehicles	-242	-207	-1,770
	Public transport	37	16	190
	Active travel	205	191	1,580
BA10	HGVs	0	0	0

Trips to Baldock and Letchworth

		AM	PM	Daily
BA1	Vehicles	-61	-58	-602
	Public transport	12	18	119
	Active travel	49	46	483
BA2	Vehicles	-11	-8	-82
	Public transport	8	8	58
	Active travel	4	2	23
BA3	Vehicles	-10	-6	-66
	Public transport	5	5	34
	Active travel	5	3	31
BA10	Vehicles	-95	-107	-1157
	Public transport	38	-34	-116
	Active travel	56	141	1273
Whole site	Vehicles	-177	-179	-1,906
	Public transport	63	-3	95
	Active travel	114	192	1,811
BA10	HGVs	0	0	0

Residual trips

		AM	PM	Daily
BA1	Vehicles	0	0	0
	Public transport	0	14	0
	Active travel	0	0	0
BA2	Vehicles	-2	-2	-14
	Public transport	1	2	4
	Active travel	1	1	10
BA3	Vehicles	0	0	0
	Public transport	0	1	0
	Active travel	0	0	0
BA10	Vehicles	0	0	0
	Public transport	9	-49	-322
	Active travel	-9	49	322
Whole site	Vehicles	-2	-2	-14
	Public transport	10	-32	-317
	Active travel	-8	50	332
BA10	HGVs	0	-5	0

Total external trips

		AM	PM	Daily
BA1	Vehicles	-61	-58	-602
	Public transport	12	32	119
	Active travel	49	46	483
BA2	Vehicles	-13	-10	-96
	Public transport	8	10	63
	Active travel	5	3	33
BA3	Vehicles	-10	-6	-66
	Public transport	5	7	34
	Active travel	5	3	31
BA10	Vehicles	-95	-107	-1157
	Public transport	47	-83	-438
	Active travel	47	190	1595
Whole site	Vehicles	-179	-181	-1920
	Public transport	72	-35	-222
	Active travel	107	242	2142
BA10	HGVs	0	-5	0

Total trips

		AM	PM	Daily
BA1	Vehicles	-300	-250	-2260
	Public transport	47	60	362
	Active travel	253	211	1898
BA2	Vehicles	-13	-10	-96
	Public transport	8	10	63
	Active travel	5	3	33
BA3	Vehicles	-11	-8	-77
	Public transport	5	7	34
	Active travel	6	4	43
BA10	Vehicles	-97	-120	-1257
	Public transport	50	-95	-490
	Active travel	47	215	1747
Whole site	Vehicles	-421	-388	-3690
	Public transport	110	-19	-32
	Active travel	311	433	3722
		0	0	0
BA10	HGVs	0	-5	0

Full build out (assume 2040)
2600
dwellings

Public transport
Active travel
Traffic and parking management
Placemaking and land use planning

CHANGED TO MEDIAN FROM AVERAGE

Internal trips and mode shares Trips made within each allocation site

Site	Scale	Unit	Theme rating 1	2	3	4	Mode	BAU Two-Way Trip Rates AM Peak Arr	AM Peak Dep	PM Peak Arr	PM Peak Dep	Daily Arr	Daily Dep	BAU Mode Share AM Peak Arr	AM Peak Dep	PM Peak Arr	PM Peak Dep	Daily Arr	Daily Dep	BAU Internal Trip Generation AM Peak Arr	AM Peak Dep	PM Peak Arr	PM Peak Dep	Daily Arr	Daily Dep	BAU CO2e emissions - Tonnes (2040 fleet mix assumptions) AM Peak	PM Peak	Daily	Annually
BA1	2,400	dwellings	3	4	4	4	Vehicles	0.075	0.215	0.168	0.080	1.122	1.128	47%	47%	47%	47%	47%	47%	81	233	172	82	1090	1096	0.25	0.21	1.77	530
							Public transport	0.002	0.005	0.004	0.002	0.024	0.024	1%	1%	1%	1%	1%	1%	2	5	4	2	23	23				
							Active travel	0.083	0.237	0.186	0.089	1.241	1.248	52%	52%	52%	52%	52%	52%	90	258	190	91	1206	1212				
BA2	200	dwellings	1	3	3	4	Vehicles	0.075	0.005	0.168	0.080	1.122	1.128	47%	47%	47%	47%	47%	47%	0	0	0	0	0	0	0.00	0.00	0.00	0
							Public transport	0.002	0.005	0.004	0.002	0.024	0.024	1%	1%	1%	1%	1%	1%	0	0	0	0	0	0				
							Active travel	0.083	0.237	0.186	0.089	1.241	1.248	52%	52%	52%	52%	52%	52%	0	0	0	0	0	0				
BA3	-	dwellings	1	3	2	2	Vehicles	0.075	0.215	0.168	0.080	1.122	1.128	47%	47%	47%	47%	47%	47%	0	0	0	0	0	0	0.00	0.00	0.00	0
							Public transport	0.002	0.005	0.004	0.002	0.024	0.024	1%	1%	1%	1%	1%	1%	0	0	0	0	0	0				
							Active travel	0.083	0.237	0.186	0.089	1.241	1.248	52%	52%	52%	52%	52%	52%	0	0	0	0	0	0				
BA10	86,500	sqm	1	4	3	3	Vehicles	0.508	0.111	0.109	0.357	2.924	2.952	82%	80%	41%	67%	66%	66%	23	5	12	39	273	275	0.02	0.04	0.44	133
							Public transport	0.052	0.006	0.134	0.103	0.975	0.993	10%	15%	9%	13%	12%	12%	2	0	15	11	91	93				
							Active travel	0.062	0.021	0.025	0.070	0.523	0.516	8%	4%	50%	19%	22%	22%	3	1	3	8	49	48				

Mode Shift by Theme - AM Peak Arr 1	2	3	4	Dep 1	2	3	4	Mode Shift by Theme - PM Peak Arr 1	2	3	4	Dep 1	2	3	4	Mode Shift by Theme - Daily Arr 1	2	3	4	Dep 1	2	3	4	median AM Peak Arr	AM Peak Dep	PM Peak Arr	PM Peak Dep	Daily Arr	Daily Dep
15%	4%	8%	15%	4%	8%	15%	4%	8%	15%	4%	8%	15%	4%	8%	15%	15%	4%	8%	15%	15%	4%	8%	15%	15%	15%	11%	11%	11%	11%
24%	7%	11%	3%	24%	7%	11%	3%	24%	7%	11%	3%	24%	7%	11%	3%	24%	7%	11%	3%	24%	7%	11%	3%	6%	6%	6%	6%	6%	6%
52%	8%	15%	3%	52%	8%	15%	3%	52%	8%	15%	3%	52%	8%	15%	3%	52%	8%	15%	3%	52%	8%	15%	3%	82%	82%	82%	82%	82%	82%
47%	18%	21%	14%	47%	18%	21%	13%	47%	18%	21%	13%	47%	18%	21%	13%	47%	18%	21%	13%	47%	18%	21%	13%	29%	29%	29%	29%	29%	29%
1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	3%	3%	3%	3%	3%	3%
52%	52%	58%	52%	52%	52%	58%	52%	52%	52%	58%	52%	52%	52%	58%	52%	52%	52%	58%	52%	52%	52%	58%	52%	68%	68%	68%	68%	68%	68%
4%	1%	1%	1%	4%	1%	1%	1%	4%	1%	1%	1%	4%	1%	1%	1%	4%	1%	1%	1%	4%	1%	1%	1%	1%	1%	1%	1%	1%	1%
43%	14%	16%	4%	43%	14%	16%	4%	43%	14%	16%	4%	43%	14%	16%	4%	43%	14%	16%	4%	43%	14%	16%	4%	38%	38%	38%	38%	38%	38%
61%	22%	25%	22%	61%	22%	25%	22%	61%	22%	25%	22%	61%	22%	25%	22%	61%	22%	25%	22%	61%	22%	25%	22%	61%	61%	61%	61%	61%	61%
66%	26%	29%	26%	66%	26%	29%	26%	66%	26%	29%	26%	66%	26%	29%	26%	66%	26%	29%	26%	66%	26%	29%	26%	76%	74%	22%	57%	55%	55%
11%	6%	66%	26%	29%	29%	11%	6%	66%	26%	29%	29%	11%	6%	66%	26%	29%	29%	11%	6%	66%	26%	29%	29%	11%	6%	66%	26%	29%	29%

Vision-led Mode Share AM Peak	PM Peak	Daily	Vision-led Trip Rates AM Peak	PM Peak	Daily	Vision-led Internal Trip Generation AM Peak	PM Peak	Daily	Vision-led CO2e emissions - Tonnes AM Peak	PM Peak	Daily	Annually
11%	11%	11%	0.018	0.052	0.041	0.019	0.271	0.272	20	56	41	20	263	264	0.06	0.05	0.43	128
6%	6%	6%	0.010	0.028	0.022	0.011	0.148	0.149	11	31	23	11	144	145				
82%	82%	82%	0.132	0.376	0.295	0.141	1.968	1.979	143	409	301	144	1912	1922				
29%	29%	29%	0.046	0.132	0.103	0.049	0.689	0.693	0	0	0	0	0	0	0.00	0.00	0.00	0
3%	3%	3%	0.005	0.014	0.011	0.005	0.072	0.072	0	0	0	0	0	0				
68%	68%	68%	0.109	0.311	0.244	0.117	1.626	1.635	0	0	0	0	0	0				
38%	38%	38%	0.061	0.174	0.136	0.065	0.908	0.913	0	0	0	0	0	0	0.00	0.00	0.00	0
1%	1%	1%	0.002	0.005	0.004	0.002	0.026	0.026	0	0	0	0	0	0				
61%	61%	61%	0.097	0.278	0.218	0.104	1.453	1.461	0	0	0	0	0	0				
76%	74%	22%	57%	55%	55%	0.472	0.102	0.058	0.302	2.443	2.467	22	5	6	33	228	230	0.02	0.03	0.37	111
13%	20%	12%	17%	16%	15%	0.082	0.028	0.032	0.092	0.691	0.681	4	1	4	10	64	64				
11%	6%	66%	26%	29%	29%	0.068	0.008	0.177	0.136	1.288	1.313	3	0	19	15	120	122				

Mode	Difference in trips between BAU and vision-led scenarios AM Peak	PM Peak	Daily	Annually	CO2e savings between BAU and ambitious scenarios - Tonnes AM Peak	PM Peak	Daily	Annually
Vehicles	-239	-193	-1,658		-0.2	-0.2	-1.3	-402
Public transport	35	28	242					
Active travel	204	164	1,416					
Vehicles	0	0	0		0.0	0.0	0.0	0
Public transport	0	0	0					
Active travel	0	0	0					
Vehicles	0	0	0		0.0	0.0	0.0	0
Public transport	0	0	0					
Active travel	0	0	0					
Vehicles	-2	-12	-90		0.0	0.0	-0.1	-22
Public transport	2	-12	-56					
Active travel	0	24	146					

All residential BAU internal trips	2,600	dwellings + empl	Vehicles	47%	47%	47%	47%	47%	47%	81	233	172	82	1,090	1,096	0.25	0.21	1.77	530
			Public transport	1%	1%	1%	1%	1%	1%	2	5	4	2	23	23				
			Active travel	52%	52%	52%	52%	52%	52%	90	258	190	91	1,206	1,212				
Whole site BAU internal trips	2,600	dwellings + empl	Vehicles	56%	55%	45%	52%	52%	52%	105	238	184	121	1,363	1,371	0.28	0.25	2.21	663
			Public transport	3%	5%	3%	4%	4%	4%	4	5	18	13	114	116				
			Active travel	41%	40%	52%	44%	45%	45%	93	259	193	98	1,255	1,260				

All residential vision-led internal trips	2,600	dwellings + empl	Vehicles													0.28	0.25	2.21	663	26%	26%	26%	26%	24%	24%	0.042	0.119	0.093	0.045	0.623	0.626	20	56	41	20	263	264	0.06	0.05	0.43	128	Vehicles	-239	-193	-1,658	-0.2	-0.2	-1.3	-402
			Public transport																	3%	3%	3%	3%	3%	3%	0.005	0.016	0.012	0.006	0.082	0.083	11	31	23	11	144	145					Public transport	35	28	242				
			Active travel																	70%	70%	70%	70%	70%	70%	0.112	0.322	0.252	0.121	1.681	1.692	143	409	301	144	1,912	1,922					Active travel	204	164	1,416				
Whole site vision-led internal trips	2,600	dwellings + empl	Vehicles							105	238	184	121	1363	1371	0.28	0.25	2.21	663	39%	38%	25%	34%	33%	33%							41	61	48	53	491	495	0.08	0.08	0.80	239	Vehicles	-241	-204	-1,748	0	0	-1	-424
			Public transport																	6%	8%	6%	7%	6%	6%							15	32	26	21	209	208					Public transport	37	16	187				
			Active travel																	56%	54%	69%	59%	60%	60%							146	409	320	159	2,032	2,045					Active travel	203	188	1,562				

Baldock trips and mode shares Trips made from each allocation site into / around Baldock and Letchworth and the stations

Site	Scale	Unit	Theme rating 1	2	3	4	Mode	BAU Two-Way Trip Rates AM Peak Arr	AM Peak Dep	PM Peak Arr	PM Peak Dep	Daily Arr	Daily Dep	BAU Mode Share AM Peak Arr	AM Peak Dep	PM Peak Arr	PM Peak Dep	Daily Arr	Daily Dep	BAU Baldock Trip Generation AM Peak Arr	AM Peak Dep	PM Peak Arr	PM Peak Dep	Daily Arr	Daily Dep	BAU CO2e emissions - Tonnes (2040 fleet mix assumptions) AM Peak	PM Peak	Daily	Annually
BA1	2,400	dwellings	4	4	3	4	Vehicles	0.127	0.334	0.299	0.137	1.901	1.906	80%	73%	84%	80%	80%	79%	45	118	126	58	891	893	0.13	0.15	1.44	433
			Public transport	0.003	0.030	0.003	0.003	0.105	0.105	2%	7%	5%	2%	4%	4%	1	11	1	1	49	49								
			Active travel	0.030	0.092	0.041	0.031	0.381	0.390	18%	20%	12%	18%	16%	16%	10	33	17	13	179	183								
BA2	200	dwellings	3	3	3	3	Vehicles	0.127	0.334	0.299	0.137	1.901	1.906	80%	73%	84%	80%	80%	79%	15	40	36	16	228	229	0.04	0.04	0.37	111
			Public transport	0.003	0.030	0.003	0.003	0.105	0.105	2%	7%	5%	2%	4%	4%	0	4	0	0	13	13								
			Active travel	0.030	0.092	0.041	0.031	0.381	0.390	18%	20%	12%	18%	16%	16%	4	11	5	4	46	47								
BA3	-	dwellings	3	3	3	3	Vehicles	0.127	0.334	0.299	0.137	1.901	1.906	80%	73%	84%	80%	80%	79%	0	0	0	0	0	0	0.00	0.00	0.00	0
			Public transport	0.003	0.030	0.003	0.003	0.105	0.105	2%	7%	5%	2%	4%	4%	0	0	0	0	0	0								
			Active travel	0.030	0.092	0.041	0.031	0.381	0.390	18%	20%	12%	18%	16%	16%	0	0	0	0	0	0								
BA10	86,500	sqm	4	4	3	4	Vehicles	0.508	0.111	0.109	0.357	2.924	2.952	82%	80%	41%	67%	66%	66%	241	53	45	146	1245	1257	0.24	0.15	2.02	607
			Public transport	0.052	0.006	0.134	0.103	0.975	0.993	10%	15%	9%	13%	12%	12%	24	3	55	42	415	423								
			Active travel	0.062	0.021	0.025	0.070	0.523	0.516	8%	4%	50%	19%	22%	22%	29	10	10	29	223	220								

Mode Shift by Theme - AM Peak Arr 1	2	3	4	Dep 1	2	3	4	Mode Shift by Theme - PM Peak Arr 1	2	3	4	Dep 1	2	3	4	Mode Shift by Theme - Daily Arr 1	2	3	4	Dep 1	2	3	4	median AM Peak Arr	AM Peak Dep	PM Peak Arr	PM Peak Dep	Daily Arr	Daily Dep
45%	15%	17%	4%	45%	15%	17%	4%	45%	15%	17%	4%	45%	15%	17%	4%	45%	15%	17%	4%	45%	15%	17%	4%	53%	45%	58%	54%	53%	53%
3%	1%	1%	0%	3%	1%	1%	0%	3%	1%	1%	0%	3%	1%	1%	0%	3%	1%	1%	0%	3%	1%	1%	0%	6%	13%	10%	6%	10%	10%
18%	7%	7%	2%	18%	7%	7%	2%	18%	7%	7%	2%	18%	7%	7%	2%	18%	7%	7%	2%	18%	7%	7%	2%	41%	43%	32%	40%	37%	38%
45%	15%	17%	4%	45%	15%	17%	4%	45%	15%	17%	4%	45%	15%	17%	4%	45%	15%	17%	4%	45%	15%	17%	4%	66%	57%	70%	67%	65%	65%
2%	1%	1%	0%	2%	1%	1%	0%	2%	1%	1%	0%	2%	1%	1%	0%	2%	1%	1%	0%	2%	1%	1%	0%	11%	17%	15%	11%	15%	15%
23%	9%	9%	2%	23%	9%	9%	2%	23%	9%	9%	2%	23%	9%	9%	2%	23%	9%	9%	2%	23%	9%	9%	2%	24%	27%	15%	24%	21%	21%
55%	18%	23%	4%	55%	18%	23%	4%	55%	18%	23%	4%	55%	18%	23%	4%	55%	18%	23%	4%	55%	18%	23%	4%	55%	54%	3%	37%	36%	36%
4%	2%	2%	0%	4%	2%	2%	0%	4%	2%	2%	0%	4%	2%	2%	0%	4%	2%	2%	0%	4%	2%	2%	0%	17%	24%	16%	21%	19%	19%
31%	10%	12%	3%	31%	10%	12%	3%	31%	10%	12%	3%	31%	10%	12%	3%	31%	10%	12%	3%	31%	10%	12%	3%	28%	23%	81%	42%	45%	46%

Vision-led Mode Share AM Peak	PM Peak	Daily	Vision-led Trip Rates AM Peak	PM Peak	Daily	Vision-led Baldock Trip Generation AM Peak	PM Peak	Daily	Vision-led CO2e emissions - Tonnes AM Peak	PM Peak	Daily	Annually
53%	45%	58%	54%	53%	53%	0.085	0.203	0.208	0.092	1.262	1.262	30	72	87	39	592	591	0.08	0.10	0.96	287
6%	13%	10%	6%	10%	10%	0.010	0.058	0.037	0.010	0.231	0.232	4	20	15	4	108	109				
41%	43%	32%	40%	37%	38%	0.065	0.196	0.114	0.069	0.894	0.907	23	69	48	29	419	425				
66%	57%	70%	67%	65%	65%	0.105	0.262	0.252	0.114	1.562	1.564	13	31	30	14	187	188	0.04	0.04	0.30	91
11%	17%	15%	11%	15%	15%	0.018	0.080	0.054	0.019	0.348	0.349	2	10	7	2	42	42				
23%	25%	14%	22%	20%	20%	0.037	0.115	0.052	0.038	0.477	0.488	4	14	6	5	57	59				
69%	60%	74%	70%	69%	69%	0.110	0.275	0.265	0.119	1.644	1.646	0	0	0	0	0	0	0.00	0.00	0.00	0
6%	13%	11%	6%	10%	10%	0.010	0.059	0.038	0.011	0.239	0.239	0	0	0	0	0	0				
24%	27%	15%	24%	21%	21%	0.039	0.122	0.054	0.041	0.504	0.515	0	0	0	0	0	0				
55%	54%	3%	37%	36%	36%	0.345	0.074	0.008	0.197	1.571	1.588	163	35	3	81	669	676	0.16	0.07	1.09	326
17%	24%	16%	21%	19%	19%	0.105	0.033	0.042	0.111	0.851	0.843	50	16	17	45	362	359				
28%	23%	81%	42%	45%	46%	0.172	0.031	0.217	0.221	2.000	2.030	81	15	89	91	851	864				

Mode	Difference in trips between BAU and vision-led scenarios AM Peak	PM Peak	Daily	Annually	CO2e savings between BAU and ambitious scenarios - Tonnes AM Peak	PM Peak	Daily	Annually
Vehicles	-61	-58	-602		0.0	0.0	-0.5	-146
Public transport	12	18	119					
Active travel	49	46	483					
Vehicles	-11	-8	-82		0.0	0.0	-0.1	-20
Public transport	8	8	58					
Active travel	4	2	23					
Vehicles	0	0	0		0.0	0.0	0.0	0
Public transport	0	0	0					
Active travel	0	0	0					
Vehicles	-95	-107	-1,157		-0.1	-0.1	-0.9	-281
Public transport	38	-34	-116					
Active travel	56	141	1,273					

All residential BAU Baldock trips	2,600	dwellings + empl	Vehicles	80%	73%	84%	80%	80%	79%	60	158	162	74	1,119	1,122	0.18	0.19	1.81	544
			Public transport	2%	7%	5%	2%	4%	4%	1	14	1	1	62	62				
			Active travel	18%	20%	12%	18%	16%	16%	14	44	22	17	225	229				
Whole site BAU Baldock trips	2,600	dwellings + empl	Vehicles	80%	75%	73%	77%	76%	76%	301	211	206	220	2,364	2,379	0.41	0.34	3.84	1,151
			Public transport	4%	9%	6%	4%	6%	6%	26	17	56	43	476	484				
			Active travel	16%	16%	21%	18%	17%	18%	43	54	32	45	447	449				

All residential vision-led Baldock trips	2,600	dwellings + empl	Vehicles													0.41	0.34	3.84	1,151	63%	54%	68%	63%	62%	62%	0.100	0.247	0.242	0.108	1.490	1.490	43	103	117	52	779	779	0.12	0.14	1.26	378	Vehicles	-73	-66	-683	-0.1	-0.1	-0.6	-166
			Public transport																	8%	14%	12%	8%	11%	11%	0.013	0.066	0.043	0.013	0.273	0.273	6	30	22	7	150	151					Public transport	20	26	178				
			Active travel																	29%	32%	20%	29%	26%	27%	0.047	0.144	0.073	0.049	0.625	0.637	77	83	54	34	476	484					Active travel	53	48	306				
Whole site vision-led Baldock trips	2,600	dwellings + empl	Vehicles							301	211	206	220	2364	2379	0.41	0.34	3.84	1,151	61%	54%	51%	57%	56%	55%							206	139	121	133	1,448	1,455	0.28	0.21	2.35	704	Vehicles	-167	-173	-1,540	0	0	-1	-447
			Public transport																	10%	17%	13%	11%	13%	13%							56	46	39	52	512	510					Public transport	58	-8	61				
			Active travel																	29%	29%	36%	32%	31%	31%							109	98	143	124	1,327	1,348					Active travel	109	189	1,779				

Residual trips and mode shares Trips made outside of Baldock / Letchworth

Business as Usual

Internal trips

Site	Scale	Mode	AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2400	Vehicles	81	233	172	82	1090	1096
		Public transport	2	5	4	2	23	23
		Active travel	90	258	190	91	1206	1212
BA2	200	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA3	0	Vehicles	42	2	0	21	50	52
		Public transport	120	0	0	1	120	120
		Active travel	632	0	0	551	632	632
BA10	86500	Vehicles	23	5	12	39	273	275
		Public transport	2	0	15	11	91	93
		Active travel	3	1	3	8	49	48
Whole site		Vehicles	105	238	184	121	1363	1371
		Public transport	4	5	18	13	114	116
		Active travel	93	259	193	98	1255	1260
BA10	86500	HGVs	1	1	0	0	15	15

Trips to Baldock and Letchworth

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2400	Vehicles	45	118	126	58	891	893
		Public transport	1	11	1	1	49	49
		Active travel	10	33	17	13	179	183
BA2	200	Vehicles	15	40	36	16	228	229
		Public transport	0	4	0	0	13	13
		Active travel	4	11	5	4	46	47
BA3	0	Vehicles	288	15	2	89	287	298
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	86500	Vehicles	241	53	45	146	1245	1257
		Public transport	24	3	55	42	415	423
		Active travel	29	10	10	29	223	220
Whole site		Vehicles	301	211	206	220	2364	2379
		Public transport	26	17	56	43	476	484
		Active travel	43	54	32	45	447	449
BA10	86500	HGVs	7	7	0	0	70	70

Residual trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2400	Vehicles	122	321	287	132	1825	1830
		Public transport	3	29	3	3	100	100
		Active travel	28	89	40	30	366	374
BA2	200	Vehicles	10	27	24	11	152	152
		Public transport	0	2	0	0	8	8
		Active travel	2	7	3	2	31	31
BA3	0	Vehicles	220	11	1	73	225	233
		Public transport	53	0	0	1	53	53
		Active travel	279	0	0	9	279	279
BA10	86500	Vehicles	176	38	38	124	1012	1021
		Public transport	18	2	46	36	337	344
		Active travel	22	7	8	24	181	178
Whole site		Vehicles	308	386	349	266	2989	3004
		Public transport	21	34	49	38	446	452
		Active travel	52	103	51	57	578	584
BA10	86500	HGVs	5	5	0	0	57	57

Total external trips

			AM Peak		PM Peak		Daily		
			Arr	Dep	Arr	Dep	Arr	Dep	
BA1	2400	Vehicles	167	439	413	189	2716	2723	80%
		Public transport	4	40	4	4	149	149	4%
		Active travel	39	121	57	43	545	557	16%
BA2	200	Vehicles	25	67	60	27	380	381	80%
		Public transport	1	6	1	1	21	21	4%
		Active travel	6	18	8	6	76	78	16%
BA3	0	Vehicles	508	26	3	162	511	531	61%
		Public transport	53	0	0	1	53	53	6%
		Active travel	279	0	0	9	279	279	33%
BA10	86500	Vehicles	416	91	82	270	2256	2278	66%
		Public transport	42	5	101	77	752	767	22%
		Active travel	51	18	19	53	404	398	12%
Whole site		Vehicles	609	597	555	487	5353	5382	73%
		Public transport	47	51	105	82	922	937	13%
		Active travel	96	157	84	102	1025	1033	14%
BA10	86500	HGVs	12	12	0	0	126	126	

Total trips

			AM Peak		PM Peak		Daily		
			Arr	Dep	Arr	Dep	Arr	Dep	
BA1	2400	Vehicles	249	672	585	272	3806	3819	66%
		Public transport	5	45	7	6	173	173	3%
		Active travel	129	379	247	134	1751	1769	31%
BA2	200	Vehicles	25	67	60	27	380	381	80%
		Public transport	1	6	1	1	21	21	4%
		Active travel	6	18	8	6	76	78	16%
BA3	0	Vehicles	550	28	4	184	561	583	35%
		Public transport	173	0	0	2	173	173	10%
		Active travel	911	0	0	559	911	911	55%
BA10	86500	Vehicles	440	96	94	309	2529	2554	66%
		Public transport	45	5	116	89	843	859	22%
		Active travel	54	19	21	60	452	446	12%
Whole site		Vehicles	714	835	739	608	6716	6754	67%
		Public transport	51	56	124	95	1037	1053	10%
		Active travel	189	416	276	200	2279	2293	23%
			0	0	0	0	0	0	
BA10	86500	HGVs	13	12	0	0	141	142	

Vision-led

Internal trips

Site	Mode	AM Peak		PM Peak		Daily		
		Arr	Dep	Arr	Dep	Arr	Dep	
BA1	Vehicles	20	56	41	20	263	264	
	Public transport	11	31	23	11	144	145	
	Active travel	143	409	301	144	1912	1922	
BA2	Vehicles	0	0	0	0	0	0	
	Public transport	0	0	0	0	0	0	
	Active travel	0	0	0	0	0	0	
BA3	Vehicles	42	2	0	21	50	52	
	Public transport	120	0	0	1	120	120	
	Active travel	632	0	0	20	632	632	
BA10	Vehicles	22	5	6	33	228	230	
	Public transport	4	1	4	10	64	64	
	Active travel	3	0	19	15	120	122	
Whole site	Vehicles	41	61	48	53	491	495	
	Public transport	15	32	26	21	209	208	
	Active travel	146	409	320	159	2032	2045	
BA10	HGVs	1	1	0	0	15	15	

Trips to Baldock and Letchworth

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	30	72	87	39	592	591
	Public transport	4	20	15	4	108	109
	Active travel	23	69	48	29	419	425
BA2	Vehicles	13	31	30	14	187	188
	Public transport	2	10	7	2	42	42
	Active travel	4	14	6	5	57	59
BA3	Vehicles	288	15	2	89	287	298
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	163	35	3	81	669	676
	Public transport	50	16	17	45	362	359
	Active travel	81	15	89	91	851	864
Whole site	Vehicles	206	139	121	133	1448	1455
	Public transport	56	46	39	52	512	510
	Active travel	109	98	143	124	1327	1348
BA10	HGVs	7	7	0	0	70	70

Residual trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	122	321	287	132	1825	1830
	Public transport	3	29	17	3	100	100
	Active travel	28	89	40	30	366	374
BA2	Vehicles	10	25	23	11	145	145
	Public transport	0	3	2	0	10	10
	Active travel	3	8	4	3	36	36
BA3	Vehicles	220	11	1	73	225	233
	Public transport	53	0	0	1	53	53
	Active travel	279	0	0	9	279	279
BA10	Vehicles	176	38	38	124	1012	1021
	Public transport	22	7	8	24	181	178
	Active travel	18	2	46	36	337	344
Whole site	Vehicles	308	384	348	266	2982	2996
	Public transport	25	39	27	27	292	289
	Active travel	49	99	90	68	739	754
BA10	HGVs	5	5	0	0	57	57

Total external trips

		AM Peak		PM Peak		Daily		
		Arr	Dep	Arr	Dep	Arr	Dep	
BA1	Vehicles	152	393	375	170	2417	2421	71%
	Public transport	6	50	32	7	209	209	6%
	Active travel	51	158	87	59	785	799	23%
BA2	Vehicles	22	57	53	24	332	333	69%
	Public transport	3	12	8	3	52	52	11%
	Active travel	7	22	10	7	93	95	20%
BA3	Vehicles	508	26	3	162	511	531	61%
	Public transport	53	0	0	1	53	53	6%
	Active travel	279	0	0	9	279	279	33%
BA10	Vehicles	339	74	41	204	1680	1697	49%
	Public transport	71	23	26	70	543	537	16%
	Active travel	99	17	135	126	1188	1208	35%
Whole site	Vehicles	514	523	469	399	4430	4451	61%
	Public transport	80	85	66	79	804	799	11%
	Active travel	158	197	232	192	2066	2102	28%
BA10	HGVs	12	12	0	0	126	126	

Total trips

		AM Peak		PM Peak		Daily		
		Arr	Dep	Arr	Dep	Arr	Dep	
BA1	Vehicles	172	449	416	190	2680	2685	47%
	Public transport	17	80	55	18	353	354	6%
	Active travel	194	567	388	203	2697	2721	47%
BA2	Vehicles	22	57	53	24	332	333	69%
	Public transport	3	12	8	3	52	52	11%
	Active travel	7	22	10	7	93	95	20%
BA3	Vehicles	550	28	4	184	561	583	35%
	Public transport	173	0	0	2	173	173	10%
	Active travel	911	0	0	29	911	911	55%
BA10	Vehicles	361	78	47	237	1908	1928	50%
	Public transport	75	24	29	80	608	601	16%
	Active travel	102	17	154	141	1309	1330	34%
Whole site	Vehicles	555	584	517	452	4920	4946	49%
	Public transport	95	117	92	100	1013	1007	10%
	Active travel	304	606	553	351	4098	4146	41%
BA10	HGVs	13	12	0	0	141	142	

Difference

Internal trips

Site	Mode	AM	PM	Daily
BA1	Vehicles	-239	-193	-1658
	Public transport	35	28	242
	Active travel	204	164	1416
BA2	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	-2	-12	-90
	Public transport	2	-12	-56
	Active travel	0	24	146
Whole site	Vehicles	-241	-204	-1,748
	Public transport	37	16	187
	Active travel	203	188	1,562
BA10	HGVs	0	0	0

Trips to Baldock and Letchworth

		AM	PM	Daily
BA1	Vehicles	-61	-58	-602
	Public transport	12	18	119
	Active travel	49	46	483
BA2	Vehicles	-11	-8	-82
	Public transport	8	8	58
	Active travel	4	2	23
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	-95	-107	-1157
	Public transport	38	-34	-116
	Active travel	56	141	1273
Whole site	Vehicles	-167	-173	-1,840
	Public transport	58	-8	61
	Active travel	109	189	1,779
BA10	HGVs	0	0	0

Residual trips

		AM	PM	Daily
BA1	Vehicles	0	0	0
	Public transport	0	14	0
	Active travel	0	0	0
BA2	Vehicles	-2	-2	-14
	Public transport	1	2	4
	Active travel	1	1	10
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	0	0	0
	Public transport	9	-49	-322
	Active travel	-9	49	322
Whole site	Vehicles	-2	-2	-14
	Public transport	10	-33	-317
	Active travel	-8	50	332
BA10	HGVs	0	0	0

Total external trips

		AM	PM	Daily
BA1	Vehicles	-61	-58	-602
	Public transport	12	32	119
	Active travel	49	46	483
BA2	Vehicles	-13	-10	-96
	Public transport	8	10	63
	Active travel	5	3	33
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	-95	-107	-1157
	Public transport	47	-83	-438
	Active travel	47	190	1595
Whole site	Vehicles	-169	-174	-1855
	Public transport	68	-42	-256
	Active travel	102	239	2111
BA10	HGVs	0	0	0

Total trips

		AM	PM	Daily
BA1	Vehicles	-300	-250	-2260
	Public transport	47	60	362
	Active travel	253	211	1898
BA2	Vehicles	-13	-10	-96
	Public transport	8	10	63
	Active travel	5	3	33
BA3	Vehicles	0	0	0
	Public transport	0	0	0
	Active travel	0	0	0
BA10	Vehicles	-97	-118	-1247
	Public transport	50	-95	-494
	Active travel	47	214	1741
Whole site	Vehicles	-410	-379	-3603
	Public transport	105	-26	-69
	Active travel	305	427	3672
		0	0	0
BA10	HGVs	0	0	0

Appendix D – TRICS Outputs

TRICS 7.11.1
Trip Rate Parameter: Gross floor area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 07 - LEISURE
Category Q - COMMUNITY CENTRE
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

6 WEST MIDLANDS
TE TELFORD & 1 days
7 YORKSHIRE & NORTH LINCOLNSHIRE
NY NORTH YO 1 days
8 NORTH WEST
EC CHESHIRE 1 days

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

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.
Parameter: Gross floor area
Actual Range: 100 to 1486 (units: sqm)
Range Selected by User: 100 to 2329 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 07/06/24

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.
Selected survey days:
Tuesday 1 days
Wednesday 1 days
Thursday 1 days
This data displays the number of selected surveys by day of the week.

Selected survey types:
Manual count 3 days
Directional ATC Count 0 days
This data displays the number of manual classified survey the total a whilst ATC surveys are undertaking using machines.

Selected Locations:
Town Centre 0
Edge of Town Centre 0
Suburban Area (PPS6 Out of Centre) 0
Edge of Town 1
Neighbourhood Centre (PPS6 Local Centre) 2
Free Standing (PPS6 Out of Town) 0
Not Known 0
This data displays the number of surveys per main locatio Edge of To Suburban / Neighbourhoo Edge of To Town Centre and Not Known.

Selected Location Sub Categories:
Industrial Zone 0
Commercial Zone 0
Development Zone 0
Residential Zone 1
Retail Zone 0
Built-Up Zone 0
Village 1
Out of Town 0
High Street 0
No Sub Category 1
This data displays the number of surveys per location sub- Industrial Z Developm Residential Zor Retail Zone Built-Up Zc Village Out of Tow High Street and No Sub Category.

Secondary Filtering selection:

Use Class:
F2(b) 3 days
This data displays the number of surveys per Use Class cl which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Population within 1 mile:
1,000 or Less 1 days
5,001 to 10,000 1 days
15,001 to 20,000 1 days
This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:
5,001 to 25,000 1 days
50,001 to 75,000 2 days
This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:
0.6 to 1.0 2 days
1.1 to 1.5 1 days
This data displays the number of selected surveys within s within a radius of 5-miles of selected survey sites.

Travel Plan:
No 3 days
This data displays the number of surveys within the select and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:
No PTAL Present 3 days
This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 EC-07-Q-0 COMMUNI CHESHIRE EAST
WARRINGTON ROAD

MERE
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 100 sqm
Survey dat TUESDAY 07/11/2017 Survey Typ MANUAL
2 NY-07-Q-0 COMMUNI NORTH YORKSHIRE
SHUTE ROAD

CATTERRICK GARRISON
Neighbourhood Centre (PPS6 Local Centre)
No Sub Category
Total Gross floor area: 316 sqm
Survey dat WEDNESD, 10/05/2017 Survey Typ MANUAL
3 TE-07-Q-01 COMMUNI TELFORD & WREKIN
SOUTHGATE
SUTTON HILL
TELFORD
Edge of Town
Residential Zone
Total Gross floor area: 1486 sqm

Survey date THURSDAY 24/10/2013 Survey Type MANUAL

This section provides a list of all survey sites and days in th it displays the selecte the day of the w and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
Calculation Factor: 100 sqm
Count Type: TOTAL VEHICLES

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00	2	208	0.481	2	208	0	2	208	0.481
08:00-09:00	3	634	0.315	3	634	0.105	3	634	0.42
09:00-10:00	3	634	0.368	3	634	0.158	3	634	0.526
10:00-11:00	3	634	0.105	3	634	0.526	3	634	0.631
11:00-12:00	3	634	0.21	3	634	0.158	3	634	0.368
12:00-13:00	3	634	0.263	3	634	0.631	3	634	0.894
13:00-14:00	3	634	0.263	3	634	0.473	3	634	0.736
14:00-15:00	3	634	0.368	3	634	0.105	3	634	0.473
15:00-16:00	3	634	0.263	3	634	0.263	3	634	0.526
16:00-17:00	2	793	0.189	2	793	0.063	2	793	0.252
17:00-18:00	2	793	0.189	2	793	0.315	2	793	0.504
18:00-19:00	2	793	0.82	2	793	0.126	2	793	0.946
19:00-20:00	2	793	1.513	2	793	0	2	793	1.513
20:00-21:00	2	793	0	2	793	0	2	793	0
21:00-22:00	2	793	0	2	793	1.324	2	793	1.324
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			5.347			4.247			9.594

Floor Area **0** 0

Time Range	ARRIVALS Trip Rate	Trips	DEPARTURES Trip Rate	Trips	TOTALS Trip Rate	Trips
06:00-07:00		0		0		0
07:00-08:00	0.481	0	0	0	0.481	0
08:00-09:00	0.315	0	0.105	0	0.42	0
09:00-10:00	0.368	0	0.158	0	0.526	0
10:00-11:00	0.105	0	0.526	0	0.631	0
11:00-12:00	0.21	0	0.158	0	0.368	0
12:00-13:00	0.263	0	0.631	0	0.894	0
13:00-14:00	0.263	0	0.473	0	0.736	0
14:00-15:00	0.368	0	0.105	0	0.473	0
15:00-16:00	0.263	0	0.263	0	0.526	0
16:00-17:00	0.189	0	0.063	0	0.252	0
17:00-18:00	0.189	0	0.315	0	0.504	0
18:00-19:00	0.82	0	0.126	0	0.946	0
19:00-20:00	1.513	0	0	0	1.513	0
20:00-21:00	0	0	0	0	0	0
21:00-22:00	0	0	1.324	0	1.324	0
Daily Trip Rates:	5.347	0	4.247	0	9.594	0

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
Calculation Factor: 100 sqm
Count Type: TAXIS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00	2	208	0	2	208	0	2	208	0
08:00-09:00	3	634	0	3	634	0	3	634	0
09:00-10:00	3	634	0	3	634	0	3	634	0
10:00-11:00	3	634	0	3	634	0	3	634	0
11:00-12:00	3	634	0	3	634	0	3	634	0
12:00-13:00	3	634	0	3	634	0	3	634	0
13:00-14:00	3	634	0.053	3	634	0	3	634	0.053
14:00-15:00	3	634	0	3	634	0.053	3	634	0.053
15:00-16:00	3	634	0	3	634	0	3	634	0
16:00-17:00	2	793	0	2	793	0	2	793	0
17:00-18:00	2	793	0	2	793	0	2	793	0
18:00-19:00	2	793	0	2	793	0	2	793	0
19:00-20:00	2	793	0	2	793	0	2	793	0
20:00-21:00	2	793	0	2	793	0	2	793	0
21:00-22:00	2	793	0	2	793	0	2	793	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.053			0.053			0.106

Time Range	ARRIVALS Trip Rate	Trips	DEPARTURES Trip Rate	Trips	TOTALS Trip Rate	Trips
06:00-07:00		0		0		0
07:00-08:00	0	0	0	0	0	0
08:00-09:00	0	0	0	0	0	0
09:00-10:00	0	0	0	0	0	0
10:00-11:00	0	0	0	0	0	0
11:00-12:00	0	0	0	0	0	0
12:00-13:00	0	0	0	0	0	0
13:00-14:00	0.053	0	0	0	0.053	0
14:00-15:00	0	0	0.053	0	0.053	0
15:00-16:00	0	0	0	0	0	0
16:00-17:00	0	0	0	0	0	0
17:00-18:00	0	0	0	0	0	0
18:00-19:00	0	0	0	0	0	0
19:00-20:00	0	0	0	0	0	0
20:00-21:00	0	0	0	0	0	0
21:00-22:00	0	0	0	0	0	0
Daily Trip Rates:	0.053	0	0.053	0	0.106	0

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
Calculation Factor: 100 sqm
Count Type: OGVS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00	2	208	0	2	208	0	2	208	0
08:00-09:00	3	634	0	3	634	0	3	634	0
09:00-10:00	3	634	0	3	634	0	3	634	0
10:00-11:00	3	634	0.053	3	634	0.053	3	634	0.106
11:00-12:00	3	634	0	3	634	0	3	634	0
12:00-13:00	3	634	0	3	634	0	3	634	0
13:00-14:00	3	634	0	3	634	0	3	634	0
14:00-15:00	3	634	0	3	634	0	3	634	0
15:00-16:00	3	634	0	3	634	0	3	634	0
16:00-17:00	2	793	0	2	793	0	2	793	0
17:00-18:00	2	793	0	2	793	0	2	793	0
18:00-19:00	2	793	0	2	793	0	2	793	0
19:00-20:00	2	793	0	2	793	0	2	793	0
20:00-21:00	2	793	0	2	793	0	2	793	0
21:00-22:00	2	793	0	2	793	0	2	793	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.053			0.053			0.106

Time Range	ARRIVALS Trip Rate	Trips	DEPARTURES Trip Rate	Trips	TOTALS Trip Rate	Trips
06:00-07:00		0		0		0
07:00-08:00	0	0	0	0	0	0
08:00-09:00	0	0	0	0	0	0
09:00-10:00	0	0	0	0	0	0
10:00-11:00	0.053	0	0.053	0	0.106	0
11:00-12:00	0	0	0	0	0	0
12:00-13:00	0	0	0	0	0	0
13:00-14:00	0	0	0	0	0	0
14:00-15:00	0	0	0	0	0	0
15:00-16:00	0	0	0	0	0	0
16:00-17:00	0	0	0	0	0	0
17:00-18:00	0	0	0	0	0	0
18:00-19:00	0	0	0	0	0	0
19:00-20:00	0	0	0	0	0	0
20:00-21:00	0	0	0	0	0	0
21:00-22:00	0	0	0	0	0	0
Daily Trip Rates:	0.053	0	0.053	0	0.106	0

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
Calculation Factor: 100 sqm
Count Type: VEHICLE OCCUPANTS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00	2	208	0.481	2	208	0	2	208	0.481
08:00-09:00	3	634	0.368	3	634	0.158	3	634	0.526
09:00-10:00	3	634	0.473	3	634	0.21	3	634	0.683
10:00-11:00	3	634	0.053	3	634	0.578	3	634	0.631
11:00-12:00	3	634	0.263	3	634	0.158	3	634	0.421

Time Range	ARRIVALS Trip Rate	Trips	DEPARTURES Trip Rate	Trips	TOTALS Trip Rate	Trips
06:00-07:00		0		0		0
07:00-08:00	0.481	0	0	0	0.481	0
08:00-09:00	0.368	0	0.158	0	0.526	0
09:00-10:00	0.473	0	0.21	0	0.683	0
10:00-11:00	0.053	0	0.578	0	0.631	0
11:00-12:00	0.263	0	0.158	0	0.421	0
12:00-13:00	0.315	0	0.736	0	1.051	0
13:00-14:00	0.21	0	0.578	0	0.788	0
14:00-15:00	0.421	0	0.105	0	0.526	0
15:00-16:00	0.315	0	0.21	0	0.525	0
16:00-17:00	0.252	0	0.063	0	0.315	0
17:00-18:00	0.189	0	0.441	0	0.63	0

12:00-13:00	3	634	0.315	3	634	0.736	3	634	1.051
13:00-14:00	3	634	0.21	3	634	0.578	3	634	0.788
14:00-15:00	3	634	0.421	3	634	0.105	3	634	0.526
15:00-16:00	3	634	0.315	3	634	0.21	3	634	0.525
16:00-17:00	2	793	0.252	2	793	0.063	2	793	0.315
17:00-18:00	2	793	0.189	2	793	0.441	2	793	0.63
18:00-19:00	2	793	0.883	2	793	0.189	2	793	1.072
19:00-20:00	2	793	1.955	2	793	0	2	793	1.955
20:00-21:00	2	793	0	2	793	0	2	793	0
21:00-22:00	2	793	0	2	793	1.765	2	793	1.765
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			6.178			5.191			11.369

18:00-19:00	0.883	0	0.189	0	1.072	0
19:00-20:00	1.955	0	0	0	1.955	0
20:00-21:00	0	0	0	0	0	0
21:00-22:00	0	0	1.765	0	1.765	0
Daily Trip Rates:	6.178	0	5.191	0	11.369	0

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
Calculation Factor: 100 sqm
Count Type: PEDESTRIANS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00	2	208	0	2	208	0	2	208	0
08:00-09:00	3	634	0.21	3	634	0	3	634	0.21
09:00-10:00	3	634	0.21	3	634	0.473	3	634	0.683
10:00-11:00	3	634	0.105	3	634	0.263	3	634	0.368
11:00-12:00	3	634	0.21	3	634	0.053	3	634	0.263
12:00-13:00	3	634	0.263	3	634	0.368	3	634	0.631
13:00-14:00	3	634	0.158	3	634	0.368	3	634	0.526
14:00-15:00	3	634	0.21	3	634	0.105	3	634	0.315
15:00-16:00	3	634	0.315	3	634	0.21	3	634	0.525
16:00-17:00	2	793	0.567	2	793	0.883	2	793	1.45
17:00-18:00	2	793	1.135	2	793	0.441	2	793	1.576
18:00-19:00	2	793	2.081	2	793	0.757	2	793	2.838
19:00-20:00	2	793	0	2	793	1.576	2	793	1.576
20:00-21:00	2	793	0	2	793	0.126	2	793	0.126
21:00-22:00	2	793	0	2	793	0	2	793	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			5.464			5.623			11.087

	ARRIVALS		DEPARTURES		TOTALS	
Time Range	Trip Rate	Trips	Trip Rate	Trips	Trip Rate	Trips
06:00-07:00		0		0		0
07:00-08:00	0	0	0	0	0	0
08:00-09:00	0.21	0	0	0	0.21	0
09:00-10:00	0.21	0	0.473	0	0.683	0
10:00-11:00	0.105	0	0.263	0	0.368	0
11:00-12:00	0.21	0	0.053	0	0.263	0
12:00-13:00	0.263	0	0.368	0	0.631	0
13:00-14:00	0.158	0	0.368	0	0.526	0
14:00-15:00	0.21	0	0.105	0	0.315	0
15:00-16:00	0.315	0	0.21	0	0.525	0
16:00-17:00	0.567	0	0.883	0	1.45	0
17:00-18:00	1.135	0	0.441	0	1.576	0
18:00-19:00	2.081	0	0.757	0	2.838	0
19:00-20:00	0	0	1.576	0	1.576	0
20:00-21:00	0	0	0.126	0	0.126	0
21:00-22:00	0	0	0	0	0	0
Daily Trip Rates:	5.464	0	5.623	0	11.087	0

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
Calculation Factor: 100 sqm
Count Type: PUBLIC TRANSPORT USERS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00	2	208	0	2	208	0	2	208	0
08:00-09:00	3	634	0	3	634	0	3	634	0
09:00-10:00	3	634	0.105	3	634	0	3	634	0.105
10:00-11:00	3	634	1.209	3	634	0.105	3	634	1.314
11:00-12:00	3	634	0.368	3	634	0.21	3	634	0.578
12:00-13:00	3	634	0.053	3	634	0.21	3	634	0.263
13:00-14:00	3	634	0.105	3	634	0.421	3	634	0.526
14:00-15:00	3	634	0	3	634	0.053	3	634	0.053
15:00-16:00	3	634	0	3	634	0.841	3	634	0.841
16:00-17:00	2	793	0	2	793	0	2	793	0
17:00-18:00	2	793	0	2	793	0	2	793	0
18:00-19:00	2	793	0	2	793	0	2	793	0
19:00-20:00	2	793	0	2	793	0	2	793	0
20:00-21:00	2	793	0	2	793	0	2	793	0
21:00-22:00	2	793	0	2	793	0	2	793	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.84			1.84			3.68

	ARRIVALS		DEPARTURES		TOTALS	
Time Range	Trip Rate	Trips	Trip Rate	Trips	Trip Rate	Trips
06:00-07:00		0		0		0
07:00-08:00	0	0	0	0	0	0
08:00-09:00	0	0	0	0	0	0
09:00-10:00	0.105	0	0	0	0.105	0
10:00-11:00	1.209	0	0.105	0	1.314	0
11:00-12:00	0.368	0	0.21	0	0.578	0
12:00-13:00	0.053	0	0.21	0	0.263	0
13:00-14:00	0.105	0	0.421	0	0.526	0
14:00-15:00	0	0	0.053	0	0.053	0
15:00-16:00	0	0	0.841	0	0.841	0
16:00-17:00	0	0	0	0	0	0
17:00-18:00	0	0	0	0	0	0
18:00-19:00	0	0	0	0	0	0
19:00-20:00	0	0	0	0	0	0
20:00-21:00	0	0	0	0	0	0
21:00-22:00	0	0	0	0	0	0
Daily Trip Rates:	1.84	0	1.84	0	3.68	0

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
Calculation Factor: 100 sqm
Count Type: TOTAL PEOPLE

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00	2	208	0.481	2	208	0	2	208	0.481
08:00-09:00	3	634	0.578	3	634	0.158	3	634	0.736
09:00-10:00	3	634	0.789	3	634	0.683	3	634	1.472
10:00-11:00	3	634	1.367	3	634	0.946	3	634	2.313
11:00-12:00	3	634	0.841	3	634	0.421	3	634	1.262
12:00-13:00	3	634	0.631	3	634	1.314	3	634	1.945
13:00-14:00	3	634	0.473	3	634	1.367	3	634	1.84
14:00-15:00	3	634	0.631	3	634	0.263	3	634	0.894
15:00-16:00	3	634	0.631	3	634	1.262	3	634	1.893
16:00-17:00	2	793	0.82	2	793	0.946	2	793	1.766
17:00-18:00	2	793	1.324	2	793	0.883	2	793	2.207
18:00-19:00	2	793	2.963	2	793	0.946	2	793	3.909
19:00-20:00	2	793	1.955	2	793	1.576	2	793	3.531
20:00-21:00	2	793	0	2	793	0.126	2	793	0.126
21:00-22:00	2	793	0	2	793	1.765	2	793	1.765
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			13.484			12.656			26.14

	ARRIVALS		DEPARTURES		TOTALS	
Time Range	Trip Rate	Trips	Trip Rate	Trips	Trip Rate	Trips
06:00-07:00		0		0		0
07:00-08:00	0.481	0	0	0	0.481	0
08:00-09:00	0.578	0	0.158	0	0.736	0
09:00-10:00	0.789	0	0.683	0	1.472	0
10:00-11:00	1.367	0	0.946	0	2.313	0
11:00-12:00	0.841	0	0.421	0	1.262	0
12:00-13:00	0.631	0	1.314	0	1.945	0
13:00-14:00	0.473	0	1.367	0	1.84	0
14:00-15:00	0.631	0	0.263	0	0.894	0
15:00-16:00	0.631	0	1.262	0	1.893	0
16:00-17:00	0.82	0	0.946	0	1.766	0
17:00-18:00	1.324	0	0.883	0	2.207	0
18:00-19:00	2.963	0	0.946	0	3.909	0
19:00-20:00	1.955	0	1.576	0	3.531	0
20:00-21:00	0	0	0.126	0	0.126	0
21:00-22:00	0	0	1.765	0	1.765	0
Daily Trip Rates:	13.484	0	12.656	0	26.14	0

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
Calculation Factor: 100 sqm
Count Type: LGVS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									

	ARRIVALS		DEPARTURES		TOTALS	
Time Range	Trip Rate	Trips	Trip Rate	Trips	Trip Rate	Trips
06:00-07:00		0		0		0
07:00-08:00	0	0	0	0	0	0
08:00-09:00	0	0	0	0	0	0

03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00	2	208	0	2	208	0	2	208	0
08:00-09:00	3	634	0	3	634	0	3	634	0
09:00-10:00	3	634	0.053	3	634	0	3	634	0.053
10:00-11:00	3	634	0	3	634	0.053	3	634	0.053
11:00-12:00	3	634	0	3	634	0	3	634	0
12:00-13:00	3	634	0	3	634	0	3	634	0
13:00-14:00	3	634	0	3	634	0	3	634	0
14:00-15:00	3	634	0.053	3	634	0	3	634	0.053
15:00-16:00	3	634	0	3	634	0	3	634	0
16:00-17:00	2	793	0	2	793	0	2	793	0
17:00-18:00	2	793	0	2	793	0	2	793	0
18:00-19:00	2	793	0	2	793	0	2	793	0
19:00-20:00	2	793	0	2	793	0	2	793	0
20:00-21:00	2	793	0	2	793	0	2	793	0
21:00-22:00	2	793	0	2	793	0	2	793	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.106			0.053			0.159

09:00-10:00	0.053	0	0	0	0.053	0
10:00-11:00	0	0	0.053	0	0.053	0
11:00-12:00	0	0	0	0	0	0
12:00-13:00	0	0	0	0	0	0
13:00-14:00	0	0	0	0	0	0
14:00-15:00	0.053	0	0	0	0.053	0
15:00-16:00	0	0	0	0	0	0
16:00-17:00	0	0	0	0	0	0
17:00-18:00	0	0	0	0	0	0
18:00-19:00	0	0	0	0	0	0
19:00-20:00	0	0	0	0	0	0
20:00-21:00	0	0	0	0	0	0
21:00-22:00	0	0	0	0	0	0
Daily Trip Rates:	0.106	0	0.053	0	0.159	0

Parameter summary

Trip rate parameter range selected:	100 - 1486 (units: sqm)
Survey date date range:	01/01/13 - 07/06/24
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data followed by the total number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRICS 7.11.4
Trip Rate Pa Gross floor area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 15 - VEHICLE SERVICES
Category B - MOTORIST CENTRE (FAST FIT)
TOTAL VEHICLES

Selected regions and areas:

3	SOUTH WEST		
	DV	DEVON	1 days
5	EAST MIDLANDS		
	DY	DERBY	2 days
	NN	NORTH NO	1 days
7	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YOF	1 days
8	NORTH WEST		
	GM	GREATER M	1 days
	MS	MERSEYSID	1 days

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

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.
Parameter: Gross floor area
Actual Ran 200 to 1878 (units: sqm)
Range Sele 150 to 1878 (units: sqm)

Public Transport Provision:
Selection b Include all surveys

Date Range 01/01/10 to 22/05/24

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

Monday	1 days
Tuesday	1 days
Wednesday	3 days
Thursday	1 days
Friday	1 days

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

Selected survey types:
Manual cou 7 days
Directional 0 days
This data di the total ac whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centr	0
Edge of Tow	0
Suburban A	5
Edge of Tow	0
Neighbourh	2
Free Standi	0
Not Known	0

This data di Edge of Tov Suburban A Neighbourhoo Edge of Tov Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Z	2
Commercia	0
Developme	0
Residential	3
Retail Zone	0
Built-Up Zo	1
Village	0
Out of Towr	0
High Street	0
No Sub Cat	1

This data di Industrial Z Developme Residential Zon Retail Zone Built-Up Zo Village Out of Tow High Street and No Sub Category.

Secondary Filtering selection:

Use Class:
Not Known 7 days
This data di which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Population within 1 mile:
5,001 to 10 2 days
20,001 to 2 2 days
25,001 to 5 3 days
This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:
5,001 to 2! 1 days
25,001 to 5 1 days
75,001 to 1 1 days
125,001 to 2 days
250,001 to 2 days
This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:
0.6 to 1.0 3 days
1.1 to 1.5 4 days
This data di within a radius of 5-miles of selected survey sites.

Travel Plan:
No 7 days
This data di and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:
No PTAL Pr‹ 7 days
This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 DV-15-B-02 KWIK FIT DEVON
MARSH BARTON ROAD
MARSH BARTON
EXETER
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 1878 sqm
Survey date THURSDAY 28/11/2013 Survey Type MANUAL

2 DY-15-B-01 KWIK FIT DERBY
OSMASTON ROAD

DERBY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 525 sqm
Survey date TUESDAY 21/10/2014 Survey Type MANUAL

3 DY-15-B-02 NATIONAL T DERBY
NOTTINGHAM ROAD

DERBY
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 320 sqm
Survey date FRIDAY 26/06/2015 Survey Type MANUAL

4 GM-15-B-0: ATS EUROM GREATER MANCHESTER
YORKSHIRE STREET

ROCHDALE
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 600 sqm
Survey date WEDNESDA 21/10/2015 Survey Type MANUAL

5 MS-15-B-0: FAST FIT CE MERSEYSIDE
HOYLAKE ROAD
NORTH BIRKENHEAD
BIRKENHEAD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 200 sqm
Survey date WEDNESDA 22/05/2024 Survey Type MANUAL

6 NN-15-B-0: NATIONAL T NORTH NORTHAMPTONSHIRE
OXFORD STREET

WELLINGBOROUGH
Neighbourhood Centre (PPS6 Local Centre)
Built-Up Zone
Total Gross floor area: 336 sqm
Survey date WEDNESDA 26/09/2012 Survey Type MANUAL

7 NY-15-B-04 KWIK FIT NORTH YORKSHIRE
LONG STREET

THIRSK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 363 sqm
Survey date MONDAY 17/10/2011 Survey Type MANUAL

This sectior it displays ‹ the selecte the day of the w and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 15 - VEHICLE SERVICES/B - MOTORIST CENTRE (FAST FIT)
Calculation Factor: 100 sqm
Count Type: TOTAL VEHICLES

Floor Area **0** 0

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	6	643	0.363	6	643	0.078	6	643	0.441
08:00-09:0	7	603	0.971	7	603	0.261	7	603	1.232
09:00-10:0	7	603	0.9	7	603	0.853	7	603	1.753
10:00-11:0	7	603	0.805	7	603	0.734	7	603	1.539
11:00-12:0	7	603	0.829	7	603	0.829	7	603	1.658
12:00-13:0	7	603	0.782	7	603	0.876	7	603	1.658
13:00-14:0	7	603	0.64	7	603	0.829	7	603	1.469
14:00-15:0	7	603	0.545	7	603	0.64	7	603	1.185
15:00-16:0	7	603	0.474	7	603	0.521	7	603	0.995
16:00-17:0	7	603	0.663	7	603	0.663	7	603	1.326
17:00-18:0	7	603	0.213	7	603	0.663	7	603	0.876
18:00-19:0	6	643	0.104	6	643	0.389	6	643	0.493
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			7.289			7.336			14.625

	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate		Rate		Rate	
07:00-08:00	0.363	0	0.078	0	0.441	0
08:00-09:00	0.971	0	0.261	0	1.232	0
09:00-10:00	0.9	0	0.853	0	1.753	0
10:00-11:00	0.805	0	0.734	0	1.539	0
11:00-12:00	0.829	0	0.829	0	1.658	0
12:00-13:00	0.782	0	0.876	0	1.658	0
13:00-14:00	0.64	0	0.829	0	1.469	0
14:00-15:00	0.545	0	0.64	0	1.185	0
15:00-16:00	0.474	0	0.521	0	0.995	0
16:00-17:00	0.663	0	0.663	0	1.326	0
17:00-18:00	0.213	0	0.663	0	0.876	0
18:00-19:00	0.104	0	0.389	0	0.493	0
Daily Trip Rates:	7.289	0	7.336	0	14.625	0

TRIP RATE for Land Use 15 - VEHICLE SERVICES/B - MOTORIST CENTRE (FAST FIT)
Calculation Factor: 100 sqm
Count Type: TAXIS

Time Range	ARRIVALS No. Days	Ave. GFA	Trip Rate	DEPARTURES No. Days	Ave. GFA	Trip Rate	TOTALS No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	6	643	0	6	643	0	6	643	0
08:00-09:0	7	603	0	7	603	0	7	603	0
09:00-10:0	7	603	0	7	603	0	7	603	0
10:00-11:0	7	603	0.024	7	603	0.024	7	603	0.048
11:00-12:0	7	603	0	7	603	0	7	603	0
12:00-13:0	7	603	0	7	603	0	7	603	0
13:00-14:0	7	603	0	7	603	0	7	603	0
14:00-15:0	7	603	0	7	603	0	7	603	0
15:00-16:0	7	603	0	7	603	0	7	603	0
16:00-17:0	7	603	0.024	7	603	0.024	7	603	0.048
17:00-18:0	7	603	0	7	603	0	7	603	0
18:00-19:0	6	643	0	6	643	0	6	643	0
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.048			0.048			0.096

Time Range	ARRIVALS Trip Rate		DEPARTURES Trip Rate		TOTALS Trip Rate	
07:00-08:00	0	0	0	0	0	0
08:00-09:00	0	0	0	0	0	0
09:00-10:00	0	0	0	0	0	0
10:00-11:00	0.024	0	0.024	0	0.048	0
11:00-12:00	0	0	0	0	0	0
12:00-13:00	0	0	0	0	0	0
13:00-14:00	0	0	0	0	0	0
14:00-15:00	0	0	0	0	0	0
15:00-16:00	0	0	0	0	0	0
16:00-17:00	0.024	0	0.024	0	0.048	0
17:00-18:00	0	0	0	0	0	0
18:00-19:00	0	0	0	0	0	0
Daily Trip Rates:	0.048	0	0.048	0	0.096	0

TRIP RATE for Land Use 15 - VEHICLE SERVICES/B - MOTORIST CENTRE (FAST FIT)
Calculation Factor: 100 sqm
Count Type: OGVS

Time Range	ARRIVALS No. Days	Ave. GFA	Trip Rate	DEPARTURES No. Days	Ave. GFA	Trip Rate	TOTALS No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	6	643	0	6	643	0	6	643	0
08:00-09:0	7	603	0	7	603	0	7	603	0
09:00-10:0	7	603	0.024	7	603	0.024	7	603	0.048
10:00-11:0	7	603	0.095	7	603	0.071	7	603	0.166
11:00-12:0	7	603	0.047	7	603	0.047	7	603	0.094
12:00-13:0	7	603	0.047	7	603	0.071	7	603	0.118
13:00-14:0	7	603	0	7	603	0	7	603	0
14:00-15:0	7	603	0.024	7	603	0	7	603	0.024
15:00-16:0	7	603	0.024	7	603	0.047	7	603	0.071
16:00-17:0	7	603	0.024	7	603	0.024	7	603	0.048
17:00-18:0	7	603	0	7	603	0.024	7	603	0.024
18:00-19:0	6	643	0	6	643	0	6	643	0
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.285			0.308			0.593

Time Range	ARRIVALS Trip Rate		DEPARTURES Trip Rate		TOTALS Trip Rate	
07:00-08:00	0	0	0	0	0	0
08:00-09:00	0	0	0	0	0	0
09:00-10:00	0.024	0	0.024	0	0.048	0
10:00-11:00	0.095	0	0.071	0	0.166	0
11:00-12:00	0.047	0	0.047	0	0.094	0
12:00-13:00	0.047	0	0.071	0	0.118	0
13:00-14:00	0	0	0	0	0	0
14:00-15:00	0.024	0	0	0	0.024	0
15:00-16:00	0.024	0	0.047	0	0.071	0
16:00-17:00	0.024	0	0.024	0	0.048	0
17:00-18:00	0	0	0.024	0	0.024	0
18:00-19:00	0	0	0	0	0	0
Daily Trip Rates:	0.285	0	0.308	0	0.593	0

TRIP RATE for Land Use 15 - VEHICLE SERVICES/B - MOTORIST CENTRE (FAST FIT)
Calculation Factor: 100 sqm
Count Type: CYCLISTS

Time Range	ARRIVALS No. Days	Ave. GFA	Trip Rate	DEPARTURES No. Days	Ave. GFA	Trip Rate	TOTALS No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	6	643	0	6	643	0	6	643	0
08:00-09:0	7	603	0	7	603	0	7	603	0
09:00-10:0	7	603	0	7	603	0	7	603	0
10:00-11:0	7	603	0	7	603	0	7	603	0
11:00-12:0	7	603	0	7	603	0	7	603	0
12:00-13:0	7	603	0	7	603	0	7	603	0
13:00-14:0	7	603	0	7	603	0	7	603	0
14:00-15:0	7	603	0	7	603	0	7	603	0
15:00-16:0	7	603	0	7	603	0	7	603	0
16:00-17:0	7	603	0	7	603	0	7	603	0
17:00-18:0	7	603	0.024	7	603	0.024	7	603	0.048
18:00-19:0	6	643	0	6	643	0	6	643	0
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.024			0.024			0.048

Time Range	ARRIVALS Trip Rate		DEPARTURES Trip Rate		TOTALS Trip Rate	
07:00-08:00	0	0	0	0	0	0
08:00-09:00	0	0	0	0	0	0
09:00-10:00	0	0	0	0	0	0
10:00-11:00	0	0	0	0	0	0
11:00-12:00	0	0	0	0	0	0
12:00-13:00	0	0	0	0	0	0
13:00-14:00	0	0	0	0	0	0
14:00-15:00	0	0	0	0	0	0
15:00-16:00	0	0	0	0	0	0
16:00-17:00	0	0	0	0	0	0
17:00-18:00	0.024	0	0.024	0	0.048	0
18:00-19:00	0	0	0	0	0	0
Daily Trip Rates:	0.024	0	0.024	0	0.048	0

Parameter summary

Trip rate pa	200 - 1878 (units: sqm)
Survey date	01/01/10 - 22/05/24
Number of	7
Number of	0
Number of	0
Surveys aut	0

Surveys ma 0

This sectior followed by the total nu the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRICS 7.11.4
Trip Rate Parameter: Site area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 12 - CIVIC AMENITY SITES
Category A - CIVIC AMENITY SITE
TOTAL VEHICLES

Selected regions and areas:

3	SOUTH WEST		
	SG	SOUTH GL(	1 days
6	WEST MIDLANDS		
	WO	WORCESTE	1 days
7	YORKSHIRE & NORTH	LINCOLNSHIRE	
	LS	LEEDS	1 days
8	NORTH WEST		
	AC	CHESHIRE	1 days

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

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.
Parameter: Site area
Actual Range: 0.21 to 0.90 (units: hect)
Range Selected by Us(0.10 to 1 (units: hect)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 24/03/24

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.
Selected survey days:
Tuesday 1 days
Wednesday 2 days
Friday 1 days
This data displays the number of selected surveys by day of the week.

Selected survey types:
Manual count 4 days
Directional ATC Count 0 days
This data displays the the total ac whilst ATC surveys are undertaking using machines.

Selected Locations:
Town Centre 0
Edge of Town Centre 0
Suburban Area (PPS6 1
Edge of Town 3
Neighbourhood Centr(0
Free Standing (PPS6 C 0
Not Known 0
This data displays the Edge of To\ Suburban / Neighbourhood Centre Edge of To\ Town Centre and Not Known.

Selected Location Sub Categories:
Industrial Zone 3
Commercial Zone 0
Development Zone 0
Residential Zone 1
Retail Zone 0
Built-Up Zone 0
Village 0
Out of Town 0
High Street 0
No Sub Category 0
This data displays the Industrial Z Developm(Residential Zone Retail Zone Built-Up Z(Village Out of Tow High Street and No Sub Category.

Secondary Filtering selection:

Use Class:
B2 4 days
This data displays the which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Population within 1 mile:
10,001 to 15,000 1 days
15,001 to 20,000 2 days
20,001 to 25,000 1 days
This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:
100,001 to 125,000 1 days
125,001 to 250,000 1 days
250,001 to 500,000 2 days
This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:
0.6 to 1.0 3 days
1.1 to 1.5 1 days
This data displays the within a radius of 5-miles of selected survey sites.

Travel Plan:
No 4 days
This data displays the and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:
No PTAL Present 4 days
This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	AC-12-A-0:	RECYCLIN(	CHESHIRE WEST & CHESTER		
	BUMPERS LANE				
	SEALAND IND. ESTATE				
	CHESTER				
	Edge of Town				
	Industrial Zone				
	Total Site area:		0.3	hect	
	Survey date	WEDNESD/	12/11/2014	Survey Type	MANUAL

2	LS-12-A-01	CIVIC AMEI	LEEDS				
	LIMEWOOD ROAD						
	LEEDS						
	Edge of Town						
	Industrial Zone						
	Total Site area:			0.73	hect		
	Survey date	TUESDAY		08/06/2010	Survey Type	MANUAL	
3	SG-12-A-0:	RECYCLIN(	SOUTH GLOUCESTERSHIRE				
	CARSONS ROAD						
	MANGOTSFIELD						
	NEAR BRISTOL						
	Edge of Town						
	Industrial Zone						
	Total Site area:			0.9	hect		
	Survey date	FRIDAY		19/05/2023	Survey Type	MANUAL	
4	WO-12-A-0	CIVIC AMEI	WORCESTERSHIRE				
	HORSFORD ROAD						
	WORCESTER						
	Suburban Area (PPS6 Out of Centre)						
	Residential Zone						
	Total Site area:			0.21	hect		
	Survey date	WEDNESD/		13/10/2010	Survey Type	MANUAL	

This section provides a it displays the selecte the day of the week and date of e and whether the survey was a manual classified count or an ATC count.

Floor Area **5000**

TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE **50** 0.5
Calculation Factor: 1 hect
Count Type: TOTAL VEHICLES

			ARRIVALS			DEPARTURES			TOTALS			ARRIVALS		DEPARTURES		TOTALS	
	No.	Ave.	Trip			No.	Ave.	Trip	No.	Ave.	Trip	Trip	Trips	Trip	Trips	Trip	Trips
Time Range	Days	AREA	Rate			Days	AREA	Rate	Days	AREA	Rate	Time Range	Rate		Rate		Rate	
00:00-01:00												07:00-08:0	7.772	4	6.218	3	13.99	7
01:00-02:00												08:00-09:0	35.981	18	32.243	16	68.224	34
02:00-03:00												09:00-10:0	71.963	36	62.15	31	134.113	67
03:00-04:00												10:00-11:0	81.776	41	80.374	40	162.15	81
04:00-05:00												11:00-12:0	88.785	44	85.514	43	174.299	87
05:00-06:00												12:00-13:0	66.822	33	69.159	35	135.981	68
06:00-07:00												13:00-14:0	54.206	27	59.346	30	113.552	57
07:00-08:00		3	0.64		7.772	3	0.64	6.218	3	0.64	13.99	14:00-15:0	51.402	26	52.336	26	103.738	52
08:00-09:00		4	0.54		35.981	4	0.54	32.243	4	0.54	68.224	15:00-16:0	45.327	23	51.402	26	96.729	48
09:00-10:00		4	0.54		71.963	4	0.54	62.15	4	0.54	134.113	16:00-17:0	8.411	4	15.888	8	24.299	12
10:00-11:00		4	0.54		81.776	4	0.54	80.374	4	0.54	162.15	17:00-18:0	0	0	3.261	2	3.261	2
11:00-12:00		4	0.54		88.785	4	0.54	85.514	4	0.54	174.299	Daily Trip R	512.445	256	517.891	259	1030.336	515
12:00-13:00		4	0.54		66.822	4	0.54	69.159	4	0.54	135.981							
13:00-14:00		4	0.54		54.206	4	0.54	59.346	4	0.54	113.552							
14:00-15:00		4	0.54		51.402	4	0.54	52.336	4	0.54	103.738							
15:00-16:00		4	0.54		45.327	4	0.54	51.402	4	0.54	96.729							
16:00-17:00		4	0.54		8.411	4	0.54	15.888	4	0.54	24.299							
17:00-18:00		3	0.61		0	3	0.61	3.261	3	0.61	3.261							
18:00-19:00																		
19:00-20:00																		
20:00-21:00																		
21:00-22:00																		
22:00-23:00																		
23:00-24:00																		
Daily Trip Rates:					512.445			517.891			1030.336							

	ARRIVALS		DEPARTURES		TOTALS	
	Trip	Trips	Trip	Trips	Trip	Trips
Time Range	Rate		Rate		Rate	
07:00-08:0	0.07772	4	0.06218	3	0.1399	7
08:00-09:0	0.35981	18	0.32243	16	0.68224	34
09:00-10:0	0.71963	36	0.6215	31	1.34113	67
10:00-11:0	0.81776	41	0.80374	40	1.6215	81
11:00-12:0	0.88785	44	0.85514	43	1.74299	87
12:00-13:0	0.66822	33	0.69159	35	1.35981	68
13:00-14:0	0.54206	27	0.59346	30	1.13552	57
14:00-15:0	0.51402	26	0.52336	26	1.03738	52
15:00-16:0	0.45327	23	0.51402	26	0.96729	48
16:00-17:0	0.08411	4	0.15888	8	0.24299	12
17:00-18:0	0	0	0.03261	2	0.03261	2
Daily Trip R	5.12445	256	5.17891	259	10.30336	515

TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE
Calculation Factor: 1 hect
Count Type: OGVS

			ARRIVALS			DEPARTURES			TOTALS			ARRIVALS		DEPARTURES		TOTALS	
	No.	Ave.	Trip			No.	Ave.	Trip	No.	Ave.	Trip	Trip	Trips	Trip	Trips	Trip	Trips
Time Range	Days	AREA	Rate			Days	AREA	Rate	Days	AREA	Rate	Time Range	Rate		Rate		Rate	
00:00-01:00												07:00-08:0	1.554	1	1.554	1	3.108	2
01:00-02:00												08:00-09:0	0.467	0	0.935	0	1.402	1
02:00-03:00												09:00-10:0	2.804	1	1.402	1	4.206	2
03:00-04:00												10:00-11:0	2.804	1	2.804	1	5.608	3
04:00-05:00												11:00-12:0	3.271	2	4.206	2	7.477	4
05:00-06:00												12:00-13:0	2.336	1	1.402	1	3.738	2
06:00-07:00												13:00-14:0	2.336	1	2.804	1	5.14	3
07:00-08:00		3	0.64		1.554	3	0.64	1.554	3	0.64	3.108	14:00-15:0	1.402	1	1.869	1	3.271	2
08:00-09:00		4	0.54		0.467	4	0.54	0.935	4	0.54	1.402	15:00-16:0	1.402	1	2.336	1	3.738	2
09:00-10:00		4	0.54		2.804	4	0.54	1.402	4	0.54	4.206	16:00-17:0	0.935	0	0.935	0	1.87	1
10:00-11:00		4	0.54		2.804	4	0.54	2.804	4	0.54	5.608	17:00-18:0	0	0	0	0	0	0
11:00-12:00		4	0.54		3.271	4	0.54	4.206	4	0.54	7.477	Daily Trip R	19.311	10	20.247	10	39.558	20
12:00-13:00		4	0.54		2.336	4	0.54	1.402	4	0.54	3.738							
13:00-14:00		4	0.54		2.336	4	0.54	2.804	4	0.54	5.14							
14:00-15:00		4	0.54		1.402	4	0.54	1.869	4	0.54	3.271							
15:00-16:00		4	0.54		1.402	4	0.54	2.336	4	0.54	3.738							
16:00-17:00		4	0.54		0.935	4	0.54	0.935	4	0.54	1.87							
17:00-18:00		3	0.61		0	3	0.61	0	3	0.61	0							
18:00-19:00																		
19:00-20:00																		
20:00-21:00																		
21:00-22:00																		
22:00-23:00																		
23:00-24:00																		
Daily Trip Rates:					19.311			20.247			39.558							

TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE
Calculation Factor: 1 hect
Count Type: PSVS

			ARRIVALS			DEPARTURES			TOTALS			ARRIVALS		DEPARTURES		TOTALS	
	No.	Ave.	Trip			No.	Ave.	Trip	No.	Ave.	Trip	Trip	Trips	Trip	Trips	Trip	Trips
Time Range	Days	AREA	Rate			Days	AREA	Rate	Days	AREA	Rate	Time Range	Rate		Rate		Rate	
00:00-01:00												07:00-08:0	0	0	0	0	0	0
01:00-02:00												08:00-09:0	0	0	0	0	0	0
02:00-03:00												09:00-10:0	0	0	0	0	0	0
03:00-04:00												10:00-11:0	0.467	0	0.467	0	0.934	0
04:00-05:00												11:00-12:0	0	0	0	0	0	0
05:00-06:00												12:00-13:0	0	0	0	0	0	0
06:00-07:00												13:00-14:0	0	0	0	0	0	0
07:00-08:00		3	0.64		0	3	0.64	0	3	0.64	0	14:00-15:0	0	0	0	0	0	0
08:00-09:00		4	0.54		0	4	0.54	0	4	0.54	0	15:00-16:0	0	0	0	0	0	0
09:00-10:00		4	0.54		0	4	0.54	0	4	0.54	0	16:00-17:0	0	0	0	0	0	0

10:00-11:00	4	0.54	0.467	4	0.54	0.467	4	0.54	0.934
11:00-12:00	4	0.54	0	4	0.54	0	4	0.54	0
12:00-13:00	4	0.54	0	4	0.54	0	4	0.54	0
13:00-14:00	4	0.54	0	4	0.54	0	4	0.54	0
14:00-15:00	4	0.54	0	4	0.54	0	4	0.54	0
15:00-16:00	4	0.54	0	4	0.54	0	4	0.54	0
16:00-17:00	4	0.54	0	4	0.54	0	4	0.54	0
17:00-18:00	3	0.61	0	3	0.61	0	3	0.61	0
18:00-19:00									
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.467			0.467			0.934

	ARRIVALS			DEPARTURES			TOTALS		
	Trip	Trips		Trip	Trips		Trip	Trips	
17:00-18:0	0	0		0	0		0	0	
Daily Trip R	0.467	0		0.467	0		0.934	0	

TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE
Calculation Factor: 1 hect
Count Type: CYCLISTS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	AREA	Rate	Days	AREA	Rate	Days	AREA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00	3	0.64	0	3	0.64	0	3	0.64	0
08:00-09:00	4	0.54	0	4	0.54	0	4	0.54	0
09:00-10:00	4	0.54	0	4	0.54	0	4	0.54	0
10:00-11:00	4	0.54	0	4	0.54	0	4	0.54	0
11:00-12:00	4	0.54	0.467	4	0.54	0.467	4	0.54	0.934
12:00-13:00	4	0.54	0	4	0.54	0	4	0.54	0
13:00-14:00	4	0.54	0	4	0.54	0	4	0.54	0
14:00-15:00	4	0.54	0	4	0.54	0	4	0.54	0
15:00-16:00	4	0.54	0	4	0.54	0	4	0.54	0
16:00-17:00	4	0.54	0	4	0.54	0	4	0.54	0
17:00-18:00	3	0.61	0	3	0.61	0	3	0.61	0
18:00-19:00									
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.467			0.467			0.934

	ARRIVALS		DEPARTURES		TOTALS	
	Trip	Trips	Trip	Trips	Trip	Trips
Time Range	Rate		Rate		Rate	
07:00-08:0	0	0	0	0	0	0
08:00-09:0	0	0	0	0	0	0
09:00-10:0	0	0	0	0	0	0
10:00-11:0	0	0	0	0	0	0
11:00-12:0	0.467	0	0.467	0	0.934	0
12:00-13:0	0	0	0	0	0	0
13:00-14:0	0	0	0	0	0	0
14:00-15:0	0	0	0	0	0	0
15:00-16:0	0	0	0	0	0	0
16:00-17:0	0	0	0	0	0	0
17:00-18:0	0	0	0	0	0	0
Daily Trip R	0.467	0	0.467	0	0.934	0

Parameter summary

Trip rate parameter ra	0.21 to 0.90 (units: hect)
Survey date date rang	01/01/10 - 24/03/24
Number of weekdays (	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically	0
Surveys manually rem	0

This section displays a followed by the total nu the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRICS 7.11.4
Trip Rate Pa Gross floor area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 05 - HEALTH
Category G - GP SURGERIES
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

2	SOUTH EAST		
	ES	EAST SUSSI	1 days
	IW	ISLE OF WI	1 days
3	SOUTH WEST		
	WL	WILTSHIRE	1 days
4	EAST ANGLIA		
	CA	CAMBRIDG	1 days
5	EAST MIDLANDS		
	DY	DERBY	1 days
7	YORKSHIRE & NORTH LINCOLNSHIRE		
	DR	DONCASTE	1 days
9	NORTH		
	CU	CUMBERLA	1 days
	TW	TYNE & WE	1 days

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

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.
Parameter: Gross floor area
Actual Ran 1046 to 2150 (units: sqm)
Range Sele 750 to 2250 (units: sqm)

Public Transport Provision:
Selection b Include all surveys

Date Range 01/01/16 to 18/06/24

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.
Selected survey days:
Tuesday 1 days
Wednesda 2 days
Thursday 4 days
Friday 1 days
This data displays the number of selected surveys by day of the week.

Selected survey types:
Manual co 8 days
Directional 0 days
This data di the total ac whilst ATC surveys are undertaking using machines.

Selected Locations:
Town Centr 0
Edge of Tow 0
Suburban A 3
Edge of Tow 3
Neighbourh 2
Free Standi 0
Not Known 0
This data di Edge of To Suburban A Neighbourl Edge of To Town Centre and Not Known.

Selected Location Sub Categories:
Industrial Z 0
Commercia 0
Developme 0
Residential 8
Retail Zone 0
Built-Up Zo 0
Village 0
Out of Towr 0
High Street 0
No Sub Cat 0
This data di Industrial Z Developma Residentia Retail Zone Built-Up Zc Village Out of Tow High Street and No Sub Category.

Secondary Filtering selection:

Use Class:
E(e) 8 days
This data di which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Population within 1 mile:
15,001 to 2 2 days
20,001 to 2 3 days
25,001 to 5 2 days
50,001 to 1 1 days
This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:
50,001 to 7 2 days
100,001 to 1 days

125,001 to 3 days
250,001 to 1 days
500,001 or 1 days
This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:
0.6 to 1.0 3 days
1.1 to 1.5 5 days
This data di within a radius of 5-miles of selected survey sites.

Travel Plan:
No 8 days
This data di and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:
No PTAL Pr 8 days
This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CA-05-G-0: MEDICAL C CAMBRIDGESHIRE
NUFFIELD ROAD
CHESTERTON
CAMBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1046 sqm
Survey date FRIDAY ######## Survey Type MANUAL

2 CU-05-G-0: GP SURGEF CUMBERLAND
FUSEHILL STREET

CARLISLE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1370 sqm
Survey date TUESDAY ######## Survey Type MANUAL

3 DR-05-G-0: GP SURGEF DONCASTER
GOODISON BOULEVARD
CANTLEY
DONCASTER
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 1050 sqm
Survey date THURSDAY ######## Survey Type MANUAL

4 DY-05-G-0: GP SURGEF DERBY
ST THOMAS ROAD

DERBY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 2000 sqm
Survey date WEDNESDA ######## Survey Type MANUAL

5 ES-05-G-0: MEDICAL C EAST SUSSEX
VICTORIA DRIVE

EASTBOURNE
Edge of Town
Residential Zone
Total Gross floor area: 1976 sqm
Survey date THURSDAY ######## Survey Type MANUAL

6 IW-05-G-01 GP SURGEF ISLE OF WIGHT
NEWPORT ROAD

COWES
Edge of Town
Residential Zone
Total Gross floor area: 1400 sqm
Survey date WEDNESDA ######## Survey Type MANUAL

7 TW-05-G-0: GP SURGEF TYNE & WEAR
MANOR WALK
BENTON
NEWCASTLE UPON TYNE
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 1400 sqm
Survey date THURSDAY ######## Survey Type MANUAL

8 WL-05-G-0 MEDICAL C WILTSHIRE
MIDDLEFIELD ROAD

CHIPPENHAM
Edge of Town
Residential Zone
Total Gross floor area: 2150 sqm
Survey date THURSDAY ######## Survey Type MANUAL

This sectior it displays : the selecte the day of t and whether the survey was a manual classified count or an ATC count. **Floor Area** **1500** 15

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: TOTAL VEHICLES

	ARRIVALS	DEPARTURES	TOTALS		ARRIVALS	DEPARTURES	TOTALS

Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0.071	1	1400	0	1	1400	0.071
07:00-08:0	7	1607	1.156	7	1607	0.196	7	1607	1.352
08:00-09:0	8	1537	2.563	8	1537	1.359	8	1537	3.922
09:00-10:0	8	1537	2.831	8	1537	2.628	8	1537	5.459
10:00-11:0	8	1537	2.709	8	1537	2.376	8	1537	5.085
11:00-12:0	8	1537	2.432	8	1537	2.522	8	1537	4.954
12:00-13:0	8	1537	2.392	8	1537	2.546	8	1537	4.938
13:00-14:0	8	1537	2.156	8	1537	2.229	8	1537	4.385
14:00-15:0	8	1537	2.522	8	1537	2.465	8	1537	4.987
15:00-16:0	8	1537	2.164	8	1537	2.319	8	1537	4.483
16:00-17:0	8	1537	1.896	8	1537	2.546	8	1537	4.442
17:00-18:0	8	1537	1.058	8	1537	1.952	8	1537	3.01
18:00-19:0	8	1537	0.456	8	1537	0.944	8	1537	1.4
19:00-20:0	1	1400	0.143	1	1400	0.143	1	1400	0.286
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			24.549			24.225			48.774

Time Range	Trip Rate		Trip Rate		Trip Rate	
06:00-07:0	0.071	1	0	0	0.071	1
07:00-08:0	1.156	17	0.196	3	1.352	20
08:00-09:0	2.563	38	1.359	20	3.922	59
09:00-10:0	2.831	42	2.628	39	5.459	82
10:00-11:0	2.709	41	2.376	36	5.085	76
11:00-12:0	2.432	36	2.522	38	4.954	74
12:00-13:0	2.392	36	2.546	38	4.938	74
13:00-14:0	2.156	32	2.229	33	4.385	66
14:00-15:0	2.522	38	2.465	37	4.987	75
15:00-16:0	2.164	32	2.319	35	4.483	67
16:00-17:0	1.896	28	2.546	38	4.442	67
17:00-18:0	1.058	16	1.952	29	3.01	45
18:00-19:0	0.456	7	0.944	14	1.4	21
19:00-20:0	0.143	2	0.143	2	0.286	4
20:00-21:0	0	0	0	0	0	0
21:00-22:00		0		0		0
Daily Trip R	24.549	368	24.225	363	48.774	732

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: TAXIS

Time Range	No. Days	Ave. GFA	ARRIVALS Trip Rate	No. Days	Ave. GFA	DEPARTURES Trip Rate	No. Days	Ave. GFA	TOTALS Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0.009	7	1607	0	7	1607	0.009
08:00-09:0	8	1537	0.049	8	1537	0.057	8	1537	0.106
09:00-10:0	8	1537	0.187	8	1537	0.187	8	1537	0.374
10:00-11:0	8	1537	0.089	8	1537	0.089	8	1537	0.178
11:00-12:0	8	1537	0.106	8	1537	0.106	8	1537	0.212
12:00-13:0	8	1537	0.089	8	1537	0.089	8	1537	0.178
13:00-14:0	8	1537	0.155	8	1537	0.138	8	1537	0.293
14:00-15:0	8	1537	0.114	8	1537	0.13	8	1537	0.244
15:00-16:0	8	1537	0.057	8	1537	0.057	8	1537	0.114
16:00-17:0	8	1537	0.041	8	1537	0.033	8	1537	0.074
17:00-18:0	8	1537	0.008	8	1537	0.016	8	1537	0.024
18:00-19:0	8	1537	0.016	8	1537	0.016	8	1537	0.032
19:00-20:0	1	1400	0	1	1400	0	1	1400	0
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.92			0.918			1.838

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: OGVS

Time Range	No. Days	Ave. GFA	ARRIVALS Trip Rate	No. Days	Ave. GFA	DEPARTURES Trip Rate	No. Days	Ave. GFA	TOTALS Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0.009	7	1607	0.009	7	1607	0.018
08:00-09:0	8	1537	0.008	8	1537	0.008	8	1537	0.016
09:00-10:0	8	1537	0.008	8	1537	0.008	8	1537	0.016
10:00-11:0	8	1537	0	8	1537	0	8	1537	0
11:00-12:0	8	1537	0	8	1537	0	8	1537	0
12:00-13:0	8	1537	0	8	1537	0	8	1537	0
13:00-14:0	8	1537	0	8	1537	0	8	1537	0
14:00-15:0	8	1537	0	8	1537	0	8	1537	0
15:00-16:0	8	1537	0	8	1537	0	8	1537	0
16:00-17:0	8	1537	0	8	1537	0	8	1537	0
17:00-18:0	8	1537	0	8	1537	0	8	1537	0
18:00-19:0	8	1537	0	8	1537	0	8	1537	0
19:00-20:0	1	1400	0	1	1400	0	1	1400	0
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.025			0.025			0.05

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: PSVS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0	7	1607	0	7	1607	0
08:00-09:0	8	1537	0	8	1537	0	8	1537	0
09:00-10:0	8	1537	0	8	1537	0	8	1537	0
10:00-11:0	8	1537	0.008	8	1537	0	8	1537	0.008
11:00-12:0	8	1537	0	8	1537	0.008	8	1537	0.008
12:00-13:0	8	1537	0	8	1537	0	8	1537	0
13:00-14:0	8	1537	0	8	1537	0	8	1537	0
14:00-15:0	8	1537	0	8	1537	0	8	1537	0
15:00-16:0	8	1537	0	8	1537	0	8	1537	0
16:00-17:0	8	1537	0	8	1537	0	8	1537	0
17:00-18:0	8	1537	0	8	1537	0	8	1537	0
18:00-19:0	8	1537	0	8	1537	0	8	1537	0
19:00-20:0	1	1400	0	1	1400	0	1	1400	0
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.008			0.008			0.016

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: CYCLISTS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0.009	7	1607	0	7	1607	0.009
08:00-09:0	8	1537	0.049	8	1537	0	8	1537	0.049
09:00-10:0	8	1537	0.016	8	1537	0.024	8	1537	0.04
10:00-11:0	8	1537	0.016	8	1537	0.033	8	1537	0.049
11:00-12:0	8	1537	0.065	8	1537	0.041	8	1537	0.106
12:00-13:0	8	1537	0.008	8	1537	0.033	8	1537	0.041
13:00-14:0	8	1537	0.033	8	1537	0.041	8	1537	0.074
14:00-15:0	8	1537	0.041	8	1537	0.041	8	1537	0.082
15:00-16:0	8	1537	0.033	8	1537	0.041	8	1537	0.074
16:00-17:0	8	1537	0.049	8	1537	0.033	8	1537	0.082
17:00-18:0	8	1537	0.016	8	1537	0.041	8	1537	0.057
18:00-19:0	8	1537	0.024	8	1537	0.016	8	1537	0.04
19:00-20:0	1	1400	0	1	1400	0	1	1400	0
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.359			0.344			0.703

	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate		Rate		Rate	
06:00-07:0	0	0	0	0	0	0
07:00-08:0	0.009	0	0	0	0.009	0
08:00-09:0	0.049	1	0	0	0.049	1
09:00-10:0	0.016	0	0.024	0	0.04	1
10:00-11:0	0.016	0	0.033	0	0.049	1
11:00-12:0	0.065	1	0.041	1	0.106	2
12:00-13:0	0.008	0	0.033	0	0.041	1
13:00-14:0	0.033	0	0.041	1	0.074	1
14:00-15:0	0.041	1	0.041	1	0.082	1
15:00-16:0	0.033	0	0.041	1	0.074	1
16:00-17:0	0.049	1	0.033	0	0.082	1
17:00-18:0	0.016	0	0.041	1	0.057	1
18:00-19:0	0.024	0	0.016	0	0.04	1
19:00-20:0	0	0	0	0	0	0
20:00-21:0	0	0	0	0	0	0
21:00-22:00		0		0		0
Daily Trip R	0.359	5	0.344	5	0.703	11

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: VEHICLE OCCUPANTS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0.071	1	1400	0	1	1400	0.071
07:00-08:0	7	1607	1.298	7	1607	0.213	7	1607	1.511
08:00-09:0	8	1537	3.189	8	1537	1.595	8	1537	4.784
09:00-10:0	8	1537	3.881	8	1537	3.449	8	1537	7.33
10:00-11:0	8	1537	3.441	8	1537	3.157	8	1537	6.598
11:00-12:0	8	1537	3.287	8	1537	3.222	8	1537	6.509
12:00-13:0	8	1537	3.124	8	1537	3.384	8	1537	6.508
13:00-14:0	8	1537	2.872	8	1537	2.872	8	1537	5.744
14:00-15:0	8	1537	3.49	8	1537	3.319	8	1537	6.809
15:00-16:0	8	1537	2.904	8	1537	3.181	8	1537	6.085
16:00-17:0	8	1537	2.644	8	1537	3.506	8	1537	6.15
17:00-18:0	8	1537	1.318	8	1537	2.498	8	1537	3.816
18:00-19:0	8	1537	0.586	8	1537	1.196	8	1537	1.782

19:00-20:0	1	1400	0.143	1	1400	0.143	1	1400	0.286
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			32.248			31.735			63.983

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: PEDESTRIANS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0.507	7	1607	0.027	7	1607	0.534
08:00-09:0	8	1537	0.789	8	1537	0.61	8	1537	1.399
09:00-10:0	8	1537	1.106	8	1537	1.058	8	1537	2.164
10:00-11:0	8	1537	0.976	8	1537	1.131	8	1537	2.107
11:00-12:0	8	1537	0.96	8	1537	1.033	8	1537	1.993
12:00-13:0	8	1537	0.716	8	1537	0.781	8	1537	1.497
13:00-14:0	8	1537	0.83	8	1537	0.667	8	1537	1.497
14:00-15:0	8	1537	0.822	8	1537	0.879	8	1537	1.701
15:00-16:0	8	1537	0.748	8	1537	0.773	8	1537	1.521
16:00-17:0	8	1537	0.643	8	1537	0.757	8	1537	1.4
17:00-18:0	8	1537	0.504	8	1537	0.781	8	1537	1.285
18:00-19:0	8	1537	0.081	8	1537	0.187	8	1537	0.268
19:00-20:0	1	1400	0.143	1	1400	0.357	1	1400	0.5
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			8.825			9.041			17.866

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: BUS/TRAM PASSENGERS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0.062	7	1607	0	7	1607	0.062
08:00-09:0	8	1537	0.244	8	1537	0.081	8	1537	0.325
09:00-10:0	8	1537	0.268	8	1537	0.285	8	1537	0.553
10:00-11:0	8	1537	0.277	8	1537	0.26	8	1537	0.537
11:00-12:0	8	1537	0.301	8	1537	0.325	8	1537	0.626
12:00-13:0	8	1537	0.171	8	1537	0.203	8	1537	0.374
13:00-14:0	8	1537	0.179	8	1537	0.195	8	1537	0.374
14:00-15:0	8	1537	0.203	8	1537	0.179	8	1537	0.382
15:00-16:0	8	1537	0.171	8	1537	0.203	8	1537	0.374
16:00-17:0	8	1537	0.203	8	1537	0.187	8	1537	0.39
17:00-18:0	8	1537	0.089	8	1537	0.138	8	1537	0.227
18:00-19:0	8	1537	0.008	8	1537	0.106	8	1537	0.114
19:00-20:0	1	1400	0	1	1400	0	1	1400	0
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			2.176			2.162			4.338

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: TOTAL RAIL PASSENGERS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0.018	7	1607	0	7	1607	0.018
08:00-09:0	8	1537	0.057	8	1537	0	8	1537	0.057
09:00-10:0	8	1537	0.057	8	1537	0.081	8	1537	0.138
10:00-11:0	8	1537	0.008	8	1537	0.008	8	1537	0.016
11:00-12:0	8	1537	0.049	8	1537	0.033	8	1537	0.082
12:00-13:0	8	1537	0.033	8	1537	0.016	8	1537	0.049

	ARRIVALS			DEPARTURES			TOTALS		
			Trip			Trip			Trip
Time Range			Rate			Rate			Rate
06:00-07:0	0	0	0	0	0	0	0	0	0
07:00-08:0	0.507	8	0.027	0	0.534	8			
08:00-09:0	0.789	12	0.61	9	1.399	21			
09:00-10:0	1.106	17	1.058	16	2.164	32			
10:00-11:0	0.976	15	1.131	17	2.107	32			
11:00-12:0	0.96	14	1.033	15	1.993	30			
12:00-13:0	0.716	11	0.781	12	1.497	22			
13:00-14:0	0.83	12	0.667	10	1.497	22			
14:00-15:0	0.822	12	0.879	13	1.701	26			
15:00-16:0	0.748	11	0.773	12	1.521	23			
16:00-17:0	0.643	10	0.757	11	1.4	21			
17:00-18:0	0.504	8	0.781	12	1.285	19			
18:00-19:0	0.081	1	0.187	3	0.268	4			
19:00-20:0	0.143	2	0.357	5	0.5	8			
20:00-21:0	0	0	0	0	0	0			
21:00-22:00		0		0		0			
Daily Trip R	8.825	132	9.041	136	17.866	268			

13:00-14:0	8	1537	0.041	8	1537	0.033	8	1537	0.074
14:00-15:0	8	1537	0.033	8	1537	0.033	8	1537	0.066
15:00-16:0	8	1537	0.041	8	1537	0.033	8	1537	0.074
16:00-17:0	8	1537	0.033	8	1537	0.073	8	1537	0.106
17:00-18:0	8	1537	0.024	8	1537	0.057	8	1537	0.081
18:00-19:0	8	1537	0	8	1537	0.024	8	1537	0.024
19:00-20:0	1	1400	0	1	1400	0	1	1400	0
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.394			0.391			0.785

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: COACH PASSENGERS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0	7	1607	0	7	1607	0
08:00-09:0	8	1537	0	8	1537	0	8	1537	0
09:00-10:0	8	1537	0	8	1537	0	8	1537	0
10:00-11:0	8	1537	0.024	8	1537	0	8	1537	0.024
11:00-12:0	8	1537	0	8	1537	0.024	8	1537	0.024
12:00-13:0	8	1537	0	8	1537	0	8	1537	0
13:00-14:0	8	1537	0	8	1537	0	8	1537	0
14:00-15:0	8	1537	0	8	1537	0	8	1537	0
15:00-16:0	8	1537	0	8	1537	0	8	1537	0
16:00-17:0	8	1537	0	8	1537	0	8	1537	0
17:00-18:0	8	1537	0	8	1537	0	8	1537	0
18:00-19:0	8	1537	0	8	1537	0	8	1537	0
19:00-20:0	1	1400	0	1	1400	0	1	1400	0
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.024			0.024			0.048

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: PUBLIC TRANSPORT USERS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0.08	7	1607	0	7	1607	0.08
08:00-09:0	8	1537	0.301	8	1537	0.081	8	1537	0.382
09:00-10:0	8	1537	0.325	8	1537	0.366	8	1537	0.691
10:00-11:0	8	1537	0.309	8	1537	0.268	8	1537	0.577
11:00-12:0	8	1537	0.35	8	1537	0.382	8	1537	0.732
12:00-13:0	8	1537	0.203	8	1537	0.22	8	1537	0.423
13:00-14:0	8	1537	0.22	8	1537	0.228	8	1537	0.448
14:00-15:0	8	1537	0.236	8	1537	0.212	8	1537	0.448
15:00-16:0	8	1537	0.212	8	1537	0.236	8	1537	0.448
16:00-17:0	8	1537	0.236	8	1537	0.26	8	1537	0.496
17:00-18:0	8	1537	0.114	8	1537	0.195	8	1537	0.309
18:00-19:0	8	1537	0.008	8	1537	0.13	8	1537	0.138
19:00-20:0	1	1400	0	1	1400	0	1	1400	0
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			2.594			2.578			5.172

	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate		Rate		Rate	
06:00-07:0	0	0	0	0	0	0
07:00-08:0	0.08	1	0	0	0.08	1
08:00-09:0	0.301	5	0.081	1	0.382	6
09:00-10:0	0.325	5	0.366	5	0.691	10
10:00-11:0	0.309	5	0.268	4	0.577	9
11:00-12:0	0.35	5	0.382	6	0.732	11
12:00-13:0	0.203	3	0.22	3	0.423	6
13:00-14:0	0.22	3	0.228	3	0.448	7
14:00-15:0	0.236	4	0.212	3	0.448	7
15:00-16:0	0.212	3	0.236	4	0.448	7
16:00-17:0	0.236	4	0.26	4	0.496	7
17:00-18:0	0.114	2	0.195	3	0.309	5
18:00-19:0	0.008	0	0.13	2	0.138	2
19:00-20:0	0	0	0	0	0	0
20:00-21:0	0	0	0	0	0	0
21:00-22:00		0		0		0
Daily Trip R	2.594	39	2.578	39	5.172	78

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: TOTAL PEOPLE

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0.071	1	1400	0	1	1400	0.071

	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate		Rate		Rate	
06:00-07:0	0.071	1	0	0	0.071	1
07:00-08:0	1.894	28	0.24	4	2.134	32
08:00-09:0	4.328	65	2.286	34	6.614	99
09:00-10:0	5.329	80	4.897	73	10.226	153
10:00-11:0	4.743	71	4.588	69	9.331	140
11:00-12:0	4.662	70	4.678	70	9.34	140
12:00-13:0	4.051	61	4.418	66	8.469	127

07:00-08:0	7	1607	1.894	7	1607	0.24	7	1607	2.134
08:00-09:0	8	1537	4.328	8	1537	2.286	8	1537	6.614
09:00-10:0	8	1537	5.329	8	1537	4.897	8	1537	10.226
10:00-11:0	8	1537	4.743	8	1537	4.588	8	1537	9.331
11:00-12:0	8	1537	4.662	8	1537	4.678	8	1537	9.34
12:00-13:0	8	1537	4.051	8	1537	4.418	8	1537	8.469
13:00-14:0	8	1537	3.954	8	1537	3.807	8	1537	7.761
14:00-15:0	8	1537	4.588	8	1537	4.45	8	1537	9.038
15:00-16:0	8	1537	3.897	8	1537	4.23	8	1537	8.127
16:00-17:0	8	1537	3.571	8	1537	4.556	8	1537	8.127
17:00-18:0	8	1537	1.952	8	1537	3.514	8	1537	5.466
18:00-19:0	8	1537	0.7	8	1537	1.529	8	1537	2.229
19:00-20:0	1	1400	0.286	1	1400	0.5	1	1400	0.786
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			44.026			43.693			87.719

13:00-14:0	3.954	59	3.807	57	7.761	116
14:00-15:0	4.588	69	4.45	67	9.038	136
15:00-16:0	3.897	58	4.23	63	8.127	122
16:00-17:0	3.571	54	4.556	68	8.127	122
17:00-18:0	1.952	29	3.514	53	5.466	82
18:00-19:0	0.7	11	1.529	23	2.229	33
19:00-20:0	0.286	4	0.5	8	0.786	12
20:00-21:0	0	0	0	0	0	0
21:00-22:00		0		0		0
Daily Trip R	44.026	660	43.693	655	87.719	1316

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: CARS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0.071	1	1400	0	1	1400	0.071
07:00-08:0	7	1607	1.094	7	1607	0.16	7	1607	1.254
08:00-09:0	8	1537	2.408	8	1537	1.245	8	1537	3.653
09:00-10:0	8	1537	2.489	8	1537	2.221	8	1537	4.71
10:00-11:0	8	1537	2.465	8	1537	2.14	8	1537	4.605
11:00-12:0	8	1537	2.197	8	1537	2.27	8	1537	4.467
12:00-13:0	8	1537	2.164	8	1537	2.327	8	1537	4.491
13:00-14:0	8	1537	1.952	8	1537	2.026	8	1537	3.978
14:00-15:0	8	1537	2.278	8	1537	2.237	8	1537	4.515
15:00-16:0	8	1537	1.985	8	1537	2.172	8	1537	4.157
16:00-17:0	8	1537	1.774	8	1537	2.367	8	1537	4.141
17:00-18:0	8	1537	0.952	8	1537	1.863	8	1537	2.815
18:00-19:0	8	1537	0.415	8	1537	0.895	8	1537	1.31
19:00-20:0	1	1400	0.143	1	1400	0.143	1	1400	0.286
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			22.387			22.066			44.453

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: LGVS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0.044	7	1607	0.027	7	1607	0.071
08:00-09:0	8	1537	0.089	8	1537	0.041	8	1537	0.13
09:00-10:0	8	1537	0.114	8	1537	0.179	8	1537	0.293
10:00-11:0	8	1537	0.13	8	1537	0.122	8	1537	0.252
11:00-12:0	8	1537	0.122	8	1537	0.13	8	1537	0.252
12:00-13:0	8	1537	0.114	8	1537	0.122	8	1537	0.236
13:00-14:0	8	1537	0.041	8	1537	0.041	8	1537	0.082
14:00-15:0	8	1537	0.089	8	1537	0.065	8	1537	0.154
15:00-16:0	8	1537	0.114	8	1537	0.089	8	1537	0.203
16:00-17:0	8	1537	0.081	8	1537	0.13	8	1537	0.211
17:00-18:0	8	1537	0.065	8	1537	0.049	8	1537	0.114
18:00-19:0	8	1537	0.008	8	1537	0.016	8	1537	0.024
19:00-20:0	1	1400	0	1	1400	0	1	1400	0
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.011			1.011			2.022

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: MOTOR CYCLES

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									

01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0	7	1607	0	7	1607	0
08:00-09:0	8	1537	0.008	8	1537	0.008	8	1537	0.016
09:00-10:0	8	1537	0.024	8	1537	0.016	8	1537	0.04
10:00-11:0	8	1537	0	8	1537	0.008	8	1537	0.008
11:00-12:0	8	1537	0	8	1537	0	8	1537	0
12:00-13:0	8	1537	0.016	8	1537	0	8	1537	0.016
13:00-14:0	8	1537	0.008	8	1537	0.024	8	1537	0.032
14:00-15:0	8	1537	0.008	8	1537	0	8	1537	0.008
15:00-16:0	8	1537	0	8	1537	0	8	1537	0
16:00-17:0	8	1537	0	8	1537	0.008	8	1537	0.008
17:00-18:0	8	1537	0.008	8	1537	0.008	8	1537	0.016
18:00-19:0	8	1537	0	8	1537	0	8	1537	0
19:00-20:0	1	1400	0	1	1400	0	1	1400	0
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.072			0.072			0.144

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Calculation Factor: 100 sqm
Count Type: SERVICING VEHICLES

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:0	1	1400	0	1	1400	0	1	1400	0
07:00-08:0	7	1607	0.027	7	1607	0.018	7	1607	0.045
08:00-09:0	8	1537	0.057	8	1537	0.033	8	1537	0.09
09:00-10:0	8	1537	0.106	8	1537	0.138	8	1537	0.244
10:00-11:0	8	1537	0.122	8	1537	0.106	8	1537	0.228
11:00-12:0	8	1537	0.065	8	1537	0.073	8	1537	0.138
12:00-13:0	8	1537	0.065	8	1537	0.073	8	1537	0.138
13:00-14:0	8	1537	0.033	8	1537	0.016	8	1537	0.049
14:00-15:0	8	1537	0.089	8	1537	0.089	8	1537	0.178
15:00-16:0	8	1537	0.065	8	1537	0.065	8	1537	0.13
16:00-17:0	8	1537	0.033	8	1537	0.049	8	1537	0.082
17:00-18:0	8	1537	0.041	8	1537	0.033	8	1537	0.074
18:00-19:0	8	1537	0.016	8	1537	0.016	8	1537	0.032
19:00-20:0	1	1400	0	1	1400	0	1	1400	0
20:00-21:0	1	1400	0	1	1400	0	1	1400	0
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.719			0.709			1.428

Parameter summary

Trip rate pa	1046 - 2150 (units: sqm)
Survey date	01/01/16 - 18/06/24
Number of	8
Number of	0
Number of	0
Surveys aut	0
Surveys ma	0

This sectior followed b the total nu the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRICS 7.11.4
Trip Rate Pa Gross floor area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 02 - EMPLOYMENT
Category B - BUSINESS PARK
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

2	SOUTH EAST		
	SC	SURREY	1 days
4	EAST ANGLIA		
	CA	CAMBRIDG	1 days
6	WEST MIDLANDS		
	ST	STAFFORDS	1 days
	WK	WARWICKS	1 days

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

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.
Parameter: Gross floor area
Actual Ran 15100 to 56520 (units: sqm)
Range Sele 10000 to 60000 (units: sqm)

Public Transport Provision:
Selection b Include all surveys

Date Range 01/01/16 to 20/06/24

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.
Selected survey days:
Monday 1 days
Wednesda 2 days
Thursday 1 days
This data displays the number of selected surveys by day of the week.

Selected survey types:
Manual cou 4 days
Directional 0 days
This data di the total ac whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centr	0
Edge of Tow	0
Suburban A	1
Edge of Tow	3
Neighbourh	0
Free Standi	0
Not Known	0

This data di Edge of Tow Suburban A Neighbourl Edge of Tow Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Z	1
Commercia	2
Developme	0
Residential	0
Retail Zone	0
Built-Up Zo	0
Village	0
Out of Towr	1
High Street	0
No Sub Cat	0

This data di Industrial Z Developme Residentia Retail Zone Built-Up Zc Village Out of Tow High Street and No Sub Category.

Secondary Filtering selection:

Use Class:
Not Known 4 days
This data di which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Population within 1 mile:
1,001 to 5, 1 days
5,001 to 1(1 days
20,001 to 2 1 days
25,001 to 5 1 days
This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:
50,001 to 7 1 days
100,001 to 1 days
125,001 to 2 days
This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:
0.6 to 1.0 2 days

1.1 to 1.5 2 days
This data di within a radius of 5-miles of selected survey sites.

Travel Plan:
Yes 2 days
No 2 days
This data di and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:
No PTAL Pr 4 days
This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CA-02-B-01 BUSINESS I CAMBRIDGESHIRE
MILTON ROAD

CAMBRIDGE
Edge of Town
Commercial Zone
Total Gross floor area: 23354 sqm
Survey date MONDAY ######## Survey Type MANUAL

2 SC-02-B-04 BUSINESS I SURREY
SURREY WAY

GUILDFORD
Suburban Area (PPS6 Out of Centre)
Commercial Zone
Total Gross floor area: 15800 sqm
Survey date THURSDAY ######## Survey Type MANUAL

3 ST-02-B-04 BUSINESS I STAFFORDSHIRE
STONE ROAD

STAFFORD
Edge of Town
Industrial Zone
Total Gross floor area: 20760 sqm
Survey date WEDNESDA ######## Survey Type MANUAL

4 WK-02-B-0 BUSINESS/ WARWICKSHIRE
GALLOWS HILL

WARWICK
Edge of Town
Out of Town
Total Gross floor area: 56520 sqm
Survey date WEDNESDA ######## Survey Type MANUAL

This sectior it displays a the selecte the day of t and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: TOTAL VEHICLES

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	1.259	4	27284	0.093	4	27284	1.352
08:00-09:0	4	27284	1.531	4	27284	0.153	4	27284	1.684
09:00-10:0	4	27284	0.877	4	27284	0.181	4	27284	1.058
10:00-11:0	4	27284	0.244	4	27284	0.119	4	27284	0.363
11:00-12:0	4	27284	0.153	4	27284	0.164	4	27284	0.317
12:00-13:0	4	27284	0.317	4	27284	0.36	4	27284	0.677
13:00-14:0	4	27284	0.326	4	27284	0.263	4	27284	0.589
14:00-15:0	4	27284	0.15	4	27284	0.274	4	27284	0.424
15:00-16:0	4	27284	0.107	4	27284	0.764	4	27284	0.871
16:00-17:0	4	27284	0.104	4	27284	1.271	4	27284	1.375
17:00-18:0	4	27284	0.096	4	27284	1.133	4	27284	1.229
18:00-19:0	4	27284	0.059	4	27284	0.569	4	27284	0.628
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			5.223			5.344			10.567

Floor Area **20000** 200

	ARRIVALS		DEPARTURES		TOTALS	
Time Range	Trip Rate		Trip Rate		Trip Rate	
07:00-08:0	1.259	252	0.093	19	1.352	270
08:00-09:0	1.531	306	0.153	31	1.684	337
09:00-10:0	0.877	175	0.181	36	1.058	212
10:00-11:0	0.244	49	0.119	24	0.363	73
11:00-12:0	0.153	31	0.164	33	0.317	63
12:00-13:0	0.317	63	0.36	72	0.677	135
13:00-14:0	0.326	65	0.263	53	0.589	118
14:00-15:0	0.15	30	0.274	55	0.424	85
15:00-16:0	0.107	21	0.764	153	0.871	174
16:00-17:0	0.104	21	1.271	254	1.375	275
17:00-18:0	0.096	19	1.133	227	1.229	246
18:00-19:0	0.059	12	0.569	114	0.628	126
Daily Trip R	5.223	1045	5.344	1069	10.567	2113

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: TAXIS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									

	ARRIVALS		DEPARTURES		TOTALS	
Time Range	Trip Rate		Trip Rate		Trip Rate	
07:00-08:0	0.006	1	0.005	1	0.011	2
08:00-09:0	0.019	4	0.016	3	0.035	7
09:00-10:0	0.027	5	0.027	5	0.054	11

Time Range	ARRIVALS Days	GFA	Trip Rate	DEPARTURES Days	GFA	Trip Rate	TOTALS Days	GFA	Trip Rate
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	0.006	4	27284	0.005	4	27284	0.011
08:00-09:0	4	27284	0.019	4	27284	0.016	4	27284	0.035
09:00-10:0	4	27284	0.027	4	27284	0.027	4	27284	0.054
10:00-11:0	4	27284	0.008	4	27284	0.013	4	27284	0.021
11:00-12:0	4	27284	0.006	4	27284	0.006	4	27284	0.012
12:00-13:0	4	27284	0.008	4	27284	0.007	4	27284	0.015
13:00-14:0	4	27284	0.003	4	27284	0.005	4	27284	0.008
14:00-15:0	4	27284	0.005	4	27284	0.004	4	27284	0.009
15:00-16:0	4	27284	0.005	4	27284	0.006	4	27284	0.011
16:00-17:0	4	27284	0.005	4	27284	0.005	4	27284	0.01
17:00-18:0	4	27284	0.008	4	27284	0.008	4	27284	0.016
18:00-19:0	4	27284	0.009	4	27284	0.007	4	27284	0.016
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.109			0.109			0.218

Time Range	ARRIVALS Trip Rate	DEPARTURES Trip Rate	TOTALS Trip Rate
10:00-11:0	0.008 2	0.013 3	0.021 4
11:00-12:0	0.006 1	0.006 1	0.012 2
12:00-13:0	0.008 2	0.007 1	0.015 3
13:00-14:0	0.003 1	0.005 1	0.008 2
14:00-15:0	0.005 1	0.004 1	0.009 2
15:00-16:0	0.005 1	0.006 1	0.011 2
16:00-17:0	0.005 1	0.005 1	0.01 2
17:00-18:0	0.008 2	0.008 2	0.016 3
18:00-19:0	0.009 2	0.007 1	0.016 3
Daily Trip R	0.109 22	0.109 22	0.218 44

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: OGVS

Time Range	ARRIVALS No. Days	Ave. GFA	Trip Rate	DEPARTURES No. Days	Ave. GFA	Trip Rate	TOTALS No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	0.004	4	27284	0.003	4	27284	0.007
08:00-09:0	4	27284	0.002	4	27284	0.003	4	27284	0.005
09:00-10:0	4	27284	0.005	4	27284	0.002	4	27284	0.007
10:00-11:0	4	27284	0.005	4	27284	0.005	4	27284	0.01
11:00-12:0	4	27284	0.006	4	27284	0.005	4	27284	0.011
12:00-13:0	4	27284	0.006	4	27284	0.004	4	27284	0.01
13:00-14:0	4	27284	0.005	4	27284	0.008	4	27284	0.013
14:00-15:0	4	27284	0.005	4	27284	0.005	4	27284	0.01
15:00-16:0	4	27284	0.002	4	27284	0.003	4	27284	0.005
16:00-17:0	4	27284	0	4	27284	0.002	4	27284	0.002
17:00-18:0	4	27284	0.002	4	27284	0.002	4	27284	0.004
18:00-19:0	4	27284	0	4	27284	0.001	4	27284	0.001
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.042			0.043			0.085

Time Range	ARRIVALS Trip Rate	DEPARTURES Trip Rate	TOTALS Trip Rate
07:00-08:0	0.004 1	0.003 1	0.007 1
08:00-09:0	0.002 0	0.003 1	0.005 1
09:00-10:0	0.005 1	0.002 0	0.007 1
10:00-11:0	0.005 1	0.005 1	0.01 2
11:00-12:0	0.006 1	0.005 1	0.011 2
12:00-13:0	0.006 1	0.004 1	0.01 2
13:00-14:0	0.005 1	0.008 2	0.013 3
14:00-15:0	0.005 1	0.005 1	0.01 2
15:00-16:0	0.002 0	0.003 1	0.005 1
16:00-17:0	0 0	0.002 0	0.002 0
17:00-18:0	0.002 0	0.002 0	0.004 1
18:00-19:0	0 0	0.001 0	0.001 0
Daily Trip R	0.042 8	0.043 9	0.085 17

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: PSVS

Time Range	ARRIVALS No. Days	Ave. GFA	Trip Rate	DEPARTURES No. Days	Ave. GFA	Trip Rate	TOTALS No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	0.008	4	27284	0.007	4	27284	0.015
08:00-09:0	4	27284	0.012	4	27284	0.012	4	27284	0.024
09:00-10:0	4	27284	0.008	4	27284	0.008	4	27284	0.016
10:00-11:0	4	27284	0.005	4	27284	0.004	4	27284	0.009
11:00-12:0	4	27284	0.004	4	27284	0.004	4	27284	0.008
12:00-13:0	4	27284	0.003	4	27284	0.003	4	27284	0.006
13:00-14:0	4	27284	0.005	4	27284	0.005	4	27284	0.01
14:00-15:0	4	27284	0.004	4	27284	0.003	4	27284	0.007
15:00-16:0	4	27284	0.005	4	27284	0.005	4	27284	0.01
16:00-17:0	4	27284	0.01	4	27284	0.01	4	27284	0.02
17:00-18:0	4	27284	0.008	4	27284	0.01	4	27284	0.018
18:00-19:0	4	27284	0.005	4	27284	0.006	4	27284	0.011
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.077			0.077			0.154

Time Range	ARRIVALS Trip Rate	DEPARTURES Trip Rate	TOTALS Trip Rate
07:00-08:0	0.008 2	0.007 1	0.015 3
08:00-09:0	0.012 2	0.012 2	0.024 5
09:00-10:0	0.008 2	0.008 2	0.016 3
10:00-11:0	0.005 1	0.004 1	0.009 2
11:00-12:0	0.004 1	0.004 1	0.008 2
12:00-13:0	0.003 1	0.003 1	0.006 1
13:00-14:0	0.005 1	0.005 1	0.01 2
14:00-15:0	0.004 1	0.003 1	0.007 1
15:00-16:0	0.005 1	0.005 1	0.01 2
16:00-17:0	0.01 2	0.01 2	0.02 4
17:00-18:0	0.008 2	0.01 2	0.018 4
18:00-19:0	0.005 1	0.006 1	0.011 2
Daily Trip R	0.077 15	0.077 15	0.154 31

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: CYCLISTS

Time Range	ARRIVALS No. Days	Ave. GFA	Trip Rate	DEPARTURES No. Days	Ave. GFA	Trip Rate	TOTALS No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	0.058	4	27284	0.002	4	27284	0.06
08:00-09:0	4	27284	0.09	4	27284	0.001	4	27284	0.091
09:00-10:0	4	27284	0.061	4	27284	0.005	4	27284	0.066
10:00-11:0	4	27284	0.017	4	27284	0.009	4	27284	0.026
11:00-12:0	4	27284	0.006	4	27284	0.005	4	27284	0.011
12:00-13:0	4	27284	0.005	4	27284	0.012	4	27284	0.017
13:00-14:0	4	27284	0.01	4	27284	0.012	4	27284	0.022
14:00-15:0	4	27284	0.005	4	27284	0.01	4	27284	0.015
15:00-16:0	4	27284	0.007	4	27284	0.02	4	27284	0.027
16:00-17:0	4	27284	0.001	4	27284	0.057	4	27284	0.058
17:00-18:0	4	27284	0.004	4	27284	0.084	4	27284	0.088
18:00-19:0	4	27284	0.004	4	27284	0.03	4	27284	0.034
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.268			0.247			0.515

Time Range	ARRIVALS Trip Rate		DEPARTURES Trip Rate		TOTALS Trip Rate	
07:00-08:0	0.058	12	0.002	0	0.06	12
08:00-09:0	0.09	18	0.001	0	0.091	18
09:00-10:0	0.061	12	0.005	1	0.066	13
10:00-11:0	0.017	3	0.009	2	0.026	5
11:00-12:0	0.006	1	0.005	1	0.011	2
12:00-13:0	0.005	1	0.012	2	0.017	3
13:00-14:0	0.01	2	0.012	2	0.022	4
14:00-15:0	0.005	1	0.01	2	0.015	3
15:00-16:0	0.007	1	0.02	4	0.027	5
16:00-17:0	0.001	0	0.057	11	0.058	12
17:00-18:0	0.004	1	0.084	17	0.088	18
18:00-19:0	0.004	1	0.03	6	0.034	7
Daily Trip R	0.268	54	0.247	49	0.515	103

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: VEHICLE OCCUPANTS

Time Range	ARRIVALS No. Days	Ave. GFA	Trip Rate	DEPARTURES No. Days	Ave. GFA	Trip Rate	TOTALS No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	1.432	4	27284	0.111	4	27284	1.543
08:00-09:0	4	27284	1.758	4	27284	0.193	4	27284	1.951
09:00-10:0	4	27284	0.98	4	27284	0.214	4	27284	1.194
10:00-11:0	4	27284	0.293	4	27284	0.134	4	27284	0.427
11:00-12:0	4	27284	0.193	4	27284	0.199	4	27284	0.392
12:00-13:0	4	27284	0.38	4	27284	0.421	4	27284	0.801
13:00-14:0	4	27284	0.377	4	27284	0.301	4	27284	0.678
14:00-15:0	4	27284	0.196	4	27284	0.324	4	27284	0.52
15:00-16:0	4	27284	0.155	4	27284	0.861	4	27284	1.016
16:00-17:0	4	27284	0.156	4	27284	1.451	4	27284	1.607
17:00-18:0	4	27284	0.128	4	27284	1.275	4	27284	1.403
18:00-19:0	4	27284	0.073	4	27284	0.675	4	27284	0.748
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			6.121			6.159			12.28

Time Range	ARRIVALS Trip Rate		DEPARTURES Trip Rate		TOTALS Trip Rate	
07:00-08:0	1.432	286	0.111	22	1.543	309
08:00-09:0	1.758	352	0.193	39	1.951	390
09:00-10:0	0.98	196	0.214	43	1.194	239
10:00-11:0	0.293	59	0.134	27	0.427	85
11:00-12:0	0.193	39	0.199	40	0.392	78
12:00-13:0	0.38	76	0.421	84	0.801	160
13:00-14:0	0.377	75	0.301	60	0.678	136
14:00-15:0	0.196	39	0.324	65	0.52	104
15:00-16:0	0.155	31	0.861	172	1.016	203
16:00-17:0	0.156	31	1.451	290	1.607	321
17:00-18:0	0.128	26	1.275	255	1.403	281
18:00-19:0	0.073	15	0.675	135	0.748	150
Daily Trip R	6.121	1224	6.159	1232	12.28	2456

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: PEDESTRIANS

Time Range	ARRIVALS No. Days	Ave. GFA	Trip Rate	DEPARTURES No. Days	Ave. GFA	Trip Rate	TOTALS No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	0.071	4	27284	0.013	4	27284	0.084
08:00-09:0	4	27284	0.096	4	27284	0.008	4	27284	0.104
09:00-10:0	4	27284	0.068	4	27284	0.006	4	27284	0.074
10:00-11:0	4	27284	0.032	4	27284	0.022	4	27284	0.054
11:00-12:0	4	27284	0.025	4	27284	0.019	4	27284	0.044
12:00-13:0	4	27284	0.183	4	27284	0.208	4	27284	0.391
13:00-14:0	4	27284	0.137	4	27284	0.137	4	27284	0.274
14:00-15:0	4	27284	0.043	4	27284	0.038	4	27284	0.081
15:00-16:0	4	27284	0.019	4	27284	0.046	4	27284	0.065
16:00-17:0	4	27284	0.013	4	27284	0.086	4	27284	0.099
17:00-18:0	4	27284	0.004	4	27284	0.093	4	27284	0.097
18:00-19:0	4	27284	0.006	4	27284	0.031	4	27284	0.037
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									

Time Range	ARRIVALS Trip Rate		DEPARTURES Trip Rate		TOTALS Trip Rate	
07:00-08:0	0.071	14	0.013	3	0.084	17
08:00-09:0	0.096	19	0.008	2	0.104	21
09:00-10:0	0.068	14	0.006	1	0.074	15
10:00-11:0	0.032	6	0.022	4	0.054	11
11:00-12:0	0.025	5	0.019	4	0.044	9
12:00-13:0	0.183	37	0.208	42	0.391	78
13:00-14:0	0.137	27	0.137	27	0.274	55
14:00-15:0	0.043	9	0.038	8	0.081	16
15:00-16:0	0.019	4	0.046	9	0.065	13
16:00-17:0	0.013	3	0.086	17	0.099	20
17:00-18:0	0.004	1	0.093	19	0.097	19
18:00-19:0	0.006	1	0.031	6	0.037	7
Daily Trip R	0.697	139	0.707	141	1.404	281

Daily Trip Rates:			0.697			0.707			1.404

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: BUS/TRAM PASSENGERS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	0.015	4	27284	0	4	27284	0.015
08:00-09:0	4	27284	0.033	4	27284	0.003	4	27284	0.036
09:00-10:0	4	27284	0.016	4	27284	0.002	4	27284	0.018
10:00-11:0	4	27284	0.004	4	27284	0.004	4	27284	0.008
11:00-12:0	4	27284	0.008	4	27284	0.006	4	27284	0.014
12:00-13:0	4	27284	0.019	4	27284	0.007	4	27284	0.026
13:00-14:0	4	27284	0.007	4	27284	0.004	4	27284	0.011
14:00-15:0	4	27284	0.006	4	27284	0.005	4	27284	0.011
15:00-16:0	4	27284	0.008	4	27284	0.012	4	27284	0.02
16:00-17:0	4	27284	0.001	4	27284	0.023	4	27284	0.024
17:00-18:0	4	27284	0.005	4	27284	0.033	4	27284	0.038
18:00-19:0	4	27284	0.003	4	27284	0.014	4	27284	0.017
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.125			0.113			0.238

	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate		Rate		Rate	
07:00-08:0	0.015	3	0	0	0.015	3
08:00-09:0	0.033	7	0.003	1	0.036	7
09:00-10:0	0.016	3	0.002	0	0.018	4
10:00-11:0	0.004	1	0.004	1	0.008	2
11:00-12:0	0.008	2	0.006	1	0.014	3
12:00-13:0	0.019	4	0.007	1	0.026	5
13:00-14:0	0.007	1	0.004	1	0.011	2
14:00-15:0	0.006	1	0.005	1	0.011	2
15:00-16:0	0.008	2	0.012	2	0.02	4
16:00-17:0	0.001	0	0.023	5	0.024	5
17:00-18:0	0.005	1	0.033	7	0.038	8
18:00-19:0	0.003	1	0.014	3	0.017	3
Daily Trip R	0.125	25	0.113	23	0.238	48

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: TOTAL RAIL PASSENGERS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	0.014	4	27284	0.001	4	27284	0.015
08:00-09:0	4	27284	0.056	4	27284	0.001	4	27284	0.057
09:00-10:0	4	27284	0.016	4	27284	0.002	4	27284	0.018
10:00-11:0	4	27284	0.005	4	27284	0.005	4	27284	0.01
11:00-12:0	4	27284	0.004	4	27284	0.001	4	27284	0.005
12:00-13:0	4	27284	0.005	4	27284	0.008	4	27284	0.013
13:00-14:0	4	27284	0.012	4	27284	0.006	4	27284	0.018
14:00-15:0	4	27284	0.002	4	27284	0.005	4	27284	0.007
15:00-16:0	4	27284	0	4	27284	0.005	4	27284	0.005
16:00-17:0	4	27284	0.001	4	27284	0.03	4	27284	0.031
17:00-18:0	4	27284	0.001	4	27284	0.031	4	27284	0.032
18:00-19:0	4	27284	0	4	27284	0.015	4	27284	0.015
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.116			0.11			0.226

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: PUBLIC TRANSPORT USERS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	0.029	4	27284	0.001	4	27284	0.03
08:00-09:0	4	27284	0.089	4	27284	0.004	4	27284	0.093
09:00-10:0	4	27284	0.033	4	27284	0.004	4	27284	0.037
10:00-11:0	4	27284	0.008	4	27284	0.009	4	27284	0.017
11:00-12:0	4	27284	0.012	4	27284	0.007	4	27284	0.019
12:00-13:0	4	27284	0.025	4	27284	0.016	4	27284	0.041
13:00-14:0	4	27284	0.019	4	27284	0.01	4	27284	0.029
14:00-15:0	4	27284	0.008	4	27284	0.01	4	27284	0.018
15:00-16:0	4	27284	0.008	4	27284	0.016	4	27284	0.024
16:00-17:0	4	27284	0.002	4	27284	0.053	4	27284	0.055
17:00-18:0	4	27284	0.005	4	27284	0.064	4	27284	0.069

	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate		Rate		Rate	
07:00-08:0	0.029	6	0.001	0	0.03	6
08:00-09:0	0.089	18	0.004	1	0.093	19
09:00-10:0	0.033	7	0.004	1	0.037	7
10:00-11:0	0.008	2	0.009	2	0.017	3
11:00-12:0	0.012	2	0.007	1	0.019	4
12:00-13:0	0.025	5	0.016	3	0.041	8
13:00-14:0	0.019	4	0.01	2	0.029	6
14:00-15:0	0.008	2	0.01	2	0.018	4
15:00-16:0	0.008	2	0.016	3	0.024	5
16:00-17:0	0.002	0	0.053	11	0.055	11
17:00-18:0	0.005	1	0.064	13	0.069	14
18:00-19:0	0.003	1	0.028	6	0.031	6
Daily Trip R	0.241	48	0.222	44	0.463	93

18:00-19:0	4	27284	0.003	4	27284	0.028	4	27284	0.031
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.241			0.222			0.463

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: TOTAL PEOPLE

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	1.59	4	27284	0.126	4	27284	1.716
08:00-09:0	4	27284	2.033	4	27284	0.206	4	27284	2.239
09:00-10:0	4	27284	1.142	4	27284	0.229	4	27284	1.371
10:00-11:0	4	27284	0.351	4	27284	0.174	4	27284	0.525
11:00-12:0	4	27284	0.236	4	27284	0.23	4	27284	0.466
12:00-13:0	4	27284	0.594	4	27284	0.656	4	27284	1.25
13:00-14:0	4	27284	0.543	4	27284	0.46	4	27284	1.003
14:00-15:0	4	27284	0.252	4	27284	0.383	4	27284	0.635
15:00-16:0	4	27284	0.19	4	27284	0.944	4	27284	1.134
16:00-17:0	4	27284	0.171	4	27284	1.647	4	27284	1.818
17:00-18:0	4	27284	0.141	4	27284	1.516	4	27284	1.657
18:00-19:0	4	27284	0.086	4	27284	0.765	4	27284	0.851
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			7.329			7.336			14.665

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: CARS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	1.219	4	27284	0.067	4	27284	1.286
08:00-09:0	4	27284	1.46	4	27284	0.11	4	27284	1.57
09:00-10:0	4	27284	0.815	4	27284	0.128	4	27284	0.943
10:00-11:0	4	27284	0.192	4	27284	0.073	4	27284	0.265
11:00-12:0	4	27284	0.113	4	27284	0.119	4	27284	0.232
12:00-13:0	4	27284	0.275	4	27284	0.323	4	27284	0.598
13:00-14:0	4	27284	0.296	4	27284	0.226	4	27284	0.522
14:00-15:0	4	27284	0.121	4	27284	0.24	4	27284	0.361
15:00-16:0	4	27284	0.083	4	27284	0.724	4	27284	0.807
16:00-17:0	4	27284	0.08	4	27284	1.233	4	27284	1.313
17:00-18:0	4	27284	0.074	4	27284	1.099	4	27284	1.173
18:00-19:0	4	27284	0.043	4	27284	0.542	4	27284	0.585
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			4.771			4.884			9.655

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: LGVS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	0.016	4	27284	0.01	4	27284	0.026
08:00-09:0	4	27284	0.028	4	27284	0.01	4	27284	0.038
09:00-10:0	4	27284	0.019	4	27284	0.016	4	27284	0.035
10:00-11:0	4	27284	0.029	4	27284	0.022	4	27284	0.051
11:00-12:0	4	27284	0.021	4	27284	0.028	4	27284	0.049

	ARRIVALS	DEPARTURES	TOTALS
Time Range	Trip Rate	Trip Rate	Trip Rate
07:00-08:0	1.59	318	0.126	25	1.716	343
08:00-09:0	2.033	407	0.206	41	2.239	448
09:00-10:0	1.142	228	0.229	46	1.371	274
10:00-11:0	0.351	70	0.174	35	0.525	105
11:00-12:0	0.236	47	0.23	46	0.466	93
12:00-13:0	0.594	119	0.656	131	1.25	250
13:00-14:0	0.543	109	0.46	92	1.003	201
14:00-15:0	0.252	50	0.383	77	0.635	127
15:00-16:0	0.19	38	0.944	189	1.134	227
16:00-17:0	0.171	34	1.647	329	1.818	364
17:00-18:0	0.141	28	1.516	303	1.657	331
18:00-19:0	0.086	17	0.765	153	0.851	170
Daily Trip R	7.329	1466	7.336	1467	14.665	2933

12:00-13:0	4	27284	0.023	4	27284	0.022	4	27284	0.045
13:00-14:0	4	27284	0.017	4	27284	0.016	4	27284	0.033
14:00-15:0	4	27284	0.016	4	27284	0.022	4	27284	0.038
15:00-16:0	4	27284	0.009	4	27284	0.022	4	27284	0.031
16:00-17:0	4	27284	0.009	4	27284	0.013	4	27284	0.022
17:00-18:0	4	27284	0.003	4	27284	0.009	4	27284	0.012
18:00-19:0	4	27284	0.002	4	27284	0.008	4	27284	0.01
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.192			0.198			0.39

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: MOTOR CYCLES

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	4	27284	0.005	4	27284	0	4	27284	0.005
08:00-09:0	4	27284	0.01	4	27284	0.002	4	27284	0.012
09:00-10:0	4	27284	0.004	4	27284	0	4	27284	0.004
10:00-11:0	4	27284	0.005	4	27284	0.002	4	27284	0.007
11:00-12:0	4	27284	0.003	4	27284	0.001	4	27284	0.004
12:00-13:0	4	27284	0.002	4	27284	0.002	4	27284	0.004
13:00-14:0	4	27284	0	4	27284	0.003	4	27284	0.003
14:00-15:0	4	27284	0	4	27284	0.001	4	27284	0.001
15:00-16:0	4	27284	0.002	4	27284	0.005	4	27284	0.007
16:00-17:0	4	27284	0	4	27284	0.007	4	27284	0.007
17:00-18:0	4	27284	0.001	4	27284	0.005	4	27284	0.006
18:00-19:0	4	27284	0	4	27284	0.005	4	27284	0.005
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.032			0.033			0.065

Parameter summary

Trip rate pa	15100 - 56520 (units: sqm)
Survey date	01/01/16 - 20/06/24
Number of	4
Number of	0
Number of	0
Surveys aut	0
Surveys ma	0

This sectior followed b the total nu the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRICS 7.11.4
Trip Rate P: Gross floor area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 02 - EMPLOYMENT
Category C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

2	SOUTH EAST		
	HC	HAMPSHIR	1 days
3	SOUTH WEST		
	DV	DEVON	1 days
6	WEST MIDLANDS		
	WK	WARWICKS	1 days
7	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YO	1 days

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

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.
Parameter: Gross floor area
Actual Ran 1500 to 9216 (units: sqm)
Range Sele 1000 to 60000 (units: sqm)

Public Transport Provision:
Selection b Include all surveys

Date Range 01/01/16 to 08/11/23

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:
Wednesda 2 days
Thursday 2 days
This data displays the number of selected surveys by day of the week.

Selected survey types:
Manual co 4 days
Directional 0 days
This data di the total ac whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centı	0
Edge of Tov	0
Suburban A	1
Edge of Tov	2
Neighbourh	1
Free Standi	0
Not Known	0

This data di Edge of To Suburban / Neighbour Edge of To Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Z	3
Commercia	0
Developme	0
Residential	0
Retail Zone	0
Built-Up Zo	0
Village	1
Out of Towı	0
High Street	0
No Sub Cat	0

This data di Industrial Z Developm Residentia Retail Zone Built-Up Zc Village Out of Tow High Street and No Sub Category.

Secondary Filtering selection:

Use Class:
Not Known 4 days
This data di which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Population within 1 mile:
1,000 or Le 1 days
5,001 to 1(2 days
15,001 to 2 1 days
This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:
25,001 to 5 1 days
75,001 to 1 2 days
125,001 to 1 days
This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:
1.1 to 1.5 3 days
1.6 to 2.0 1 days
This data di within a radius of 5-miles of selected survey sites.

Travel Plan:
No 4 days
This data di and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:
No PTAL Pr 4 days
This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 DV-02-C-0 ENERGY RE DEVON
GRACE ROAD SOUTH
MARSH BARTON TRAD. EST.
EXETER
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 3513 sqm
Survey date THURSDAY ######## Survey Type MANUAL

2 HC-02-C-0 GIN DISTILL HAMPSHIRE
LONDON ROAD

LAVERSTOKE
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 8000 sqm
Survey date WEDNESDA ######## Survey Type MANUAL

3 NY-02-C-0 WORKWEA NORTH YORKSHIRE
WETHERBY ROAD

KNARESBOROUGH
Edge of Town
Industrial Zone
Total Gross floor area: 1500 sqm
Survey date THURSDAY ######## Survey Type MANUAL

4 WK-02-C-0 MACHINE E WARWICKSHIRE
CASTLE MOUND WAY

RUGBY
Edge of Town
Industrial Zone
Total Gross floor area: 9216 sqm
Survey date WEDNESDA ######## Survey Type MANUAL

This sectio it displays the selecte the day of t and whether the survey was a manual classified count or an ATC count.

Manually Deselected Sites

Site Ref	Reason for Deselection
HF-02-C-0	Too large

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: TOTAL VEHICLES

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0.098	1	9216	0	1	9216	0.098
06:00-07:0	1	9216	0.011	1	9216	0	1	9216	0.011
07:00-08:0	4	5557	0.319	4	5557	0.031	4	5557	0.35
08:00-09:0	4	5557	0.229	4	5557	0.049	4	5557	0.278
09:00-10:0	4	5557	0.202	4	5557	0.108	4	5557	0.31
10:00-11:0	4	5557	0.166	4	5557	0.067	4	5557	0.233
11:00-12:0	4	5557	0.09	4	5557	0.094	4	5557	0.184
12:00-13:0	4	5557	0.175	4	5557	0.247	4	5557	0.422
13:00-14:0	4	5557	0.117	4	5557	0.27	4	5557	0.387
14:00-15:0	4	5557	0.112	4	5557	0.094	4	5557	0.206
15:00-16:0	4	5557	0.054	4	5557	0.166	4	5557	0.22
16:00-17:0	4	5557	0.036	4	5557	0.324	4	5557	0.36
17:00-18:0	4	5557	0.045	4	5557	0.067	4	5557	0.112
18:00-19:0	4	5557	0.036	4	5557	0.027	4	5557	0.063
19:00-20:0	2	8608	0.012	2	8608	0.006	2	8608	0.018
20:00-21:0	2	8608	0.006	2	8608	0.081	2	8608	0.087
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.708			1.631			3.339

Floor Area **26500** 265

Time Range	ARRIVALS Trip Rate		DEPARTURES Trip Rate		TOTALS Trip Rate	
06:00-07:00	0.011	3	0	0	0.011	3
07:00-08:00	0.319	85	0.031	8	0.35	93
08:00-09:00	0.229	61	0.049	13	0.278	74
09:00-10:00	0.202	54	0.108	29	0.31	82
10:00-11:00	0.166	44	0.067	18	0.233	62
11:00-12:00	0.09	24	0.094	25	0.184	49
12:00-13:00	0.175	46	0.247	65	0.422	112
13:00-14:00	0.117	31	0.27	72	0.387	103
14:00-15:00	0.112	30	0.094	25	0.206	55
15:00-16:00	0.054	14	0.166	44	0.22	58
16:00-17:00	0.036	10	0.324	86	0.36	95
17:00-18:00	0.045	12	0.067	18	0.112	30
18:00-19:00	0.036	10	0.027	7	0.063	17
19:00-20:00	0.012	3	0.006	2	0.018	5
20:00-21:00	0.006	2	0.081	21	0.087	23
21:00-22:00	0	0	0	0	0	0
Daily Trip Rates:	1.61	427	1.631	432	3.241	859

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: TAXIS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0	1	9216	0	1	9216	0
06:00-07:0	1	9216	0	1	9216	0	1	9216	0
07:00-08:0	4	5557	0	4	5557	0	4	5557	0
08:00-09:0	4	5557	0	4	5557	0	4	5557	0
09:00-10:0	4	5557	0.004	4	5557	0.004	4	5557	0.008
10:00-11:0	4	5557	0	4	5557	0	4	5557	0
11:00-12:0	4	5557	0	4	5557	0	4	5557	0
12:00-13:0	4	5557	0	4	5557	0	4	5557	0
13:00-14:0	4	5557	0	4	5557	0	4	5557	0

14:00-15:0	4	5557	0	4	5557	0	4	5557	0
15:00-16:0	4	5557	0.018	4	5557	0.018	4	5557	0.036
16:00-17:0	4	5557	0	4	5557	0	4	5557	0
17:00-18:0	4	5557	0	4	5557	0	4	5557	0
18:00-19:0	4	5557	0	4	5557	0	4	5557	0
19:00-20:0	2	8608	0	2	8608	0	2	8608	0
20:00-21:0	2	8608	0	2	8608	0	2	8608	0
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.022			0.022			0.044

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: OGVS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0	1	9216	0	1	9216	0
06:00-07:0	1	9216	0	1	9216	0	1	9216	0
07:00-08:0	4	5557	0.04	4	5557	0.022	4	5557	0.062
08:00-09:0	4	5557	0.036	4	5557	0.031	4	5557	0.067
09:00-10:0	4	5557	0.04	4	5557	0.045	4	5557	0.085
10:00-11:0	4	5557	0.009	4	5557	0.009	4	5557	0.018
11:00-12:0	4	5557	0.031	4	5557	0.027	4	5557	0.058
12:00-13:0	4	5557	0.081	4	5557	0.09	4	5557	0.171
13:00-14:0	4	5557	0.049	4	5557	0.04	4	5557	0.089
14:00-15:0	4	5557	0.013	4	5557	0.013	4	5557	0.026
15:00-16:0	4	5557	0.018	4	5557	0.027	4	5557	0.045
16:00-17:0	4	5557	0.009	4	5557	0.018	4	5557	0.027
17:00-18:0	4	5557	0	4	5557	0	4	5557	0
18:00-19:0	4	5557	0	4	5557	0	4	5557	0
19:00-20:0	2	8608	0.006	2	8608	0	2	8608	0.006
20:00-21:0	2	8608	0	2	8608	0.006	2	8608	0.006
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.332			0.328			0.66

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: CYCLISTS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0	1	9216	0	1	9216	0
06:00-07:0	1	9216	0.011	1	9216	0	1	9216	0.011
07:00-08:0	4	5557	0.004	4	5557	0	4	5557	0.004
08:00-09:0	4	5557	0	4	5557	0	4	5557	0
09:00-10:0	4	5557	0	4	5557	0	4	5557	0
10:00-11:0	4	5557	0	4	5557	0	4	5557	0
11:00-12:0	4	5557	0	4	5557	0	4	5557	0
12:00-13:0	4	5557	0	4	5557	0	4	5557	0
13:00-14:0	4	5557	0	4	5557	0	4	5557	0
14:00-15:0	4	5557	0	4	5557	0	4	5557	0
15:00-16:0	4	5557	0	4	5557	0.004	4	5557	0.004
16:00-17:0	4	5557	0	4	5557	0.004	4	5557	0.004
17:00-18:0	4	5557	0	4	5557	0	4	5557	0
18:00-19:0	4	5557	0	4	5557	0	4	5557	0
19:00-20:0	2	8608	0	2	8608	0	2	8608	0
20:00-21:0	2	8608	0	2	8608	0	2	8608	0
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.015			0.008			0.023

Floor Area **26500** 265

	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate		Rate		Rate	
06:00-07:00	0.011	3	0	0	0.011	3
07:00-08:00	0.004	1	0	0	0.004	1
08:00-09:00	0	0	0	0	0	0
09:00-10:00	0	0	0	0	0	0
10:00-11:00	0	0	0	0	0	0
11:00-12:00	0	0	0	0	0	0
12:00-13:00	0	0	0	0	0	0
13:00-14:00	0	0	0	0	0	0
14:00-15:00	0	0	0	0	0	0
15:00-16:00	0	0	0.004	1	0.004	1
16:00-17:00	0	0	0.004	1	0.004	1
17:00-18:00	0	0	0	0	0	0
18:00-19:00	0	0	0	0	0	0
19:00-20:00	0	0	0	0	0	0
20:00-21:00	0	0	0	0	0	0
21:00-22:00	0	0	0	0	0	0
Daily Trip Rates:	0.015	4	0.008	2	0.023	6

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: VEHICLE OCCUPANTS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0.087	1	9216	0	1	9216	0.087
06:00-07:0	1	9216	0.011	1	9216	0	1	9216	0.011
07:00-08:0	4	5557	0.328	4	5557	0.027	4	5557	0.355
08:00-09:0	4	5557	0.283	4	5557	0.049	4	5557	0.332
09:00-10:0	4	5557	0.31	4	5557	0.139	4	5557	0.449
10:00-11:0	4	5557	0.315	4	5557	0.072	4	5557	0.387
11:00-12:0	4	5557	0.157	4	5557	0.126	4	5557	0.283
12:00-13:0	4	5557	0.301	4	5557	0.396	4	5557	0.697
13:00-14:0	4	5557	0.189	4	5557	0.454	4	5557	0.643
14:00-15:0	4	5557	0.193	4	5557	0.148	4	5557	0.341

15:00-16:0	4	5557	0.09	4	5557	0.265	4	5557	0.355
16:00-17:0	4	5557	0.054	4	5557	0.432	4	5557	0.486
17:00-18:0	4	5557	0.09	4	5557	0.085	4	5557	0.175
18:00-19:0	4	5557	0.058	4	5557	0.04	4	5557	0.098
19:00-20:0	2	8608	0.017	2	8608	0.023	2	8608	0.04
20:00-21:0	2	8608	0.006	2	8608	0.151	2	8608	0.157
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			2.489			2.407			4.896

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: PEDESTRIANS

Floor Area **26500** 265

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0	1	9216	0	1	9216	0
06:00-07:0	1	9216	0	1	9216	0	1	9216	0
07:00-08:0	4	5557	0.031	4	5557	0	4	5557	0.031
08:00-09:0	4	5557	0.009	4	5557	0	4	5557	0.009
09:00-10:0	4	5557	0	4	5557	0	4	5557	0
10:00-11:0	4	5557	0.004	4	5557	0.004	4	5557	0.008
11:00-12:0	4	5557	0	4	5557	0	4	5557	0
12:00-13:0	4	5557	0.009	4	5557	0.013	4	5557	0.022
13:00-14:0	4	5557	0	4	5557	0.004	4	5557	0.004
14:00-15:0	4	5557	0	4	5557	0	4	5557	0
15:00-16:0	4	5557	0	4	5557	0	4	5557	0
16:00-17:0	4	5557	0	4	5557	0.022	4	5557	0.022
17:00-18:0	4	5557	0	4	5557	0.009	4	5557	0.009
18:00-19:0	4	5557	0	4	5557	0	4	5557	0
19:00-20:0	2	8608	0	2	8608	0	2	8608	0
20:00-21:0	2	8608	0	2	8608	0	2	8608	0
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.053			0.052			0.105

	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate		Rate		Rate	
06:00-07:00	0	0	0	0	0	0
07:00-08:00	0.031	8	0	0	0.031	8
08:00-09:00	0.009	2	0	0	0.009	2
09:00-10:00	0	0	0	0	0	0
10:00-11:00	0.004	1	0.004	1	0.008	2
11:00-12:00	0	0	0	0	0	0
12:00-13:00	0.009	2	0.013	3	0.022	6
13:00-14:00	0	0	0.004	1	0.004	1
14:00-15:00	0	0	0	0	0	0
15:00-16:00	0	0	0	0	0	0
16:00-17:00	0	0	0.022	6	0.022	6
17:00-18:00	0	0	0.009	2	0.009	2
18:00-19:00	0	0	0	0	0	0
19:00-20:00	0	0	0	0	0	0
20:00-21:00	0	0	0	0	0	0
21:00-22:00	0	0	0	0	0	0
Daily Trip Rates:	0.053	14	0.052	14	0.105	28

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: BUS/TRAM PASSENGERS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0	1	9216	0	1	9216	0
06:00-07:0	1	9216	0	1	9216	0	1	9216	0
07:00-08:0	4	5557	0.027	4	5557	0.009	4	5557	0.036
08:00-09:0	4	5557	0.063	4	5557	0	4	5557	0.063
09:00-10:0	4	5557	0.022	4	5557	0.004	4	5557	0.026
10:00-11:0	4	5557	0.054	4	5557	0.036	4	5557	0.09
11:00-12:0	4	5557	0.027	4	5557	0.022	4	5557	0.049
12:00-13:0	4	5557	0.054	4	5557	0.058	4	5557	0.112
13:00-14:0	4	5557	0.031	4	5557	0.027	4	5557	0.058
14:00-15:0	4	5557	0.022	4	5557	0.027	4	5557	0.049
15:00-16:0	4	5557	0.009	4	5557	0.009	4	5557	0.018
16:00-17:0	4	5557	0.031	4	5557	0.049	4	5557	0.08
17:00-18:0	4	5557	0.049	4	5557	0.027	4	5557	0.076
18:00-19:0	4	5557	0.022	4	5557	0.036	4	5557	0.058
19:00-20:0	2	8608	0	2	8608	0.006	2	8608	0.006
20:00-21:0	2	8608	0.012	2	8608	0.145	2	8608	0.157
21:00-22:0	1	8000	0.013	1	8000	0	1	8000	0.013
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.436			0.455			0.891

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: COACH PASSENGERS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0	1	9216	0	1	9216	0
06:00-07:0	1	9216	0	1	9216	0	1	9216	0
07:00-08:0	4	5557	0	4	5557	0	4	5557	0
08:00-09:0	4	5557	0	4	5557	0	4	5557	0
09:00-10:0	4	5557	0.117	4	5557	0	4	5557	0.117
10:00-11:0	4	5557	0.126	4	5557	0.117	4	5557	0.243
11:00-12:0	4	5557	0.225	4	5557	0.004	4	5557	0.229
12:00-13:0	4	5557	0.148	4	5557	0.126	4	5557	0.274
13:00-14:0	4	5557	0.103	4	5557	0.099	4	5557	0.202
14:00-15:0	4	5557	0	4	5557	0.27	4	5557	0.27
15:00-16:0	4	5557	0.297	4	5557	0.103	4	5557	0.4

16:00-17:0	4	5557	0	4	5557	0.144	4	5557	0.144
17:00-18:0	4	5557	0.252	4	5557	0.153	4	5557	0.405
18:00-19:0	4	5557	0.108	4	5557	0.117	4	5557	0.225
19:00-20:0	2	8608	0.122	2	8608	0.174	2	8608	0.296
20:00-21:0	2	8608	0.006	2	8608	0.267	2	8608	0.273
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.504			1.574			3.078

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: PUBLIC TRANSPORT USERS

Floor Area **26500** 265

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0	1	9216	0	1	9216	0
06:00-07:0	1	9216	0	1	9216	0	1	9216	0
07:00-08:0	4	5557	0.027	4	5557	0.009	4	5557	0.036
08:00-09:0	4	5557	0.063	4	5557	0	4	5557	0.063
09:00-10:0	4	5557	0.139	4	5557	0.004	4	5557	0.143
10:00-11:0	4	5557	0.18	4	5557	0.153	4	5557	0.333
11:00-12:0	4	5557	0.252	4	5557	0.027	4	5557	0.279
12:00-13:0	4	5557	0.202	4	5557	0.184	4	5557	0.386
13:00-14:0	4	5557	0.135	4	5557	0.126	4	5557	0.261
14:00-15:0	4	5557	0.022	4	5557	0.297	4	5557	0.319
15:00-16:0	4	5557	0.306	4	5557	0.112	4	5557	0.418
16:00-17:0	4	5557	0.031	4	5557	0.193	4	5557	0.224
17:00-18:0	4	5557	0.301	4	5557	0.18	4	5557	0.481
18:00-19:0	4	5557	0.13	4	5557	0.153	4	5557	0.283
19:00-20:0	2	8608	0.122	2	8608	0.18	2	8608	0.302
20:00-21:0	2	8608	0.017	2	8608	0.412	2	8608	0.429
21:00-22:0	1	8000	0.013	1	8000	0	1	8000	0.013
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.94			2.03			3.97

	ARRIVALS	DEPARTURES	TOTALS
Time Range	Trip Rate	Trip Rate	Trip Rate
06:00-07:00	0	0	0
07:00-08:00	0.027	0.009	0.036
08:00-09:00	0.063	0	0.063
09:00-10:00	0.139	0.004	0.143
10:00-11:00	0.18	0.153	0.333
11:00-12:00	0.252	0.027	0.279
12:00-13:00	0.202	0.184	0.386
13:00-14:00	0.135	0.126	0.261
14:00-15:00	0.022	0.297	0.319
15:00-16:00	0.306	0.112	0.418
16:00-17:00	0.031	0.193	0.224
17:00-18:00	0.301	0.18	0.481
18:00-19:00	0.13	0.153	0.283
19:00-20:00	0.122	0.18	0.302
20:00-21:00	0.017	0.412	0.429
21:00-22:00	0.013	0	0.013
Daily Trip Rates:	1.94	2.03	3.97

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: TOTAL PEOPLE

Floor Area **26500** 265

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0.087	1	9216	0	1	9216	0.087
06:00-07:0	1	9216	0.022	1	9216	0	1	9216	0.022
07:00-08:0	4	5557	0.391	4	5557	0.036	4	5557	0.427
08:00-09:0	4	5557	0.355	4	5557	0.049	4	5557	0.404
09:00-10:0	4	5557	0.45	4	5557	0.144	4	5557	0.594
10:00-11:0	4	5557	0.499	4	5557	0.229	4	5557	0.728
11:00-12:0	4	5557	0.409	4	5557	0.153	4	5557	0.562
12:00-13:0	4	5557	0.513	4	5557	0.594	4	5557	1.107
13:00-14:0	4	5557	0.324	4	5557	0.585	4	5557	0.909
14:00-15:0	4	5557	0.216	4	5557	0.445	4	5557	0.661
15:00-16:0	4	5557	0.396	4	5557	0.382	4	5557	0.778
16:00-17:0	4	5557	0.085	4	5557	0.652	4	5557	0.737
17:00-18:0	4	5557	0.391	4	5557	0.274	4	5557	0.665
18:00-19:0	4	5557	0.189	4	5557	0.193	4	5557	0.382
19:00-20:0	2	8608	0.139	2	8608	0.203	2	8608	0.342
20:00-21:0	2	8608	0.023	2	8608	0.563	2	8608	0.586
21:00-22:0	1	8000	0.013	1	8000	0	1	8000	0.013
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			4.502			4.502			9.004

	ARRIVALS	DEPARTURES	TOTALS
Time Range	Trip Rate	Trip Rate	Trip Rate
06:00-07:00	0.022	0	0.022
07:00-08:00	0.391	0.036	0.427
08:00-09:00	0.355	0.049	0.404
09:00-10:00	0.45	0.144	0.594
10:00-11:00	0.499	0.229	0.728
11:00-12:00	0.409	0.153	0.562
12:00-13:00	0.513	0.594	1.107
13:00-14:00	0.324	0.585	0.909
14:00-15:00	0.216	0.445	0.661
15:00-16:00	0.396	0.382	0.778
16:00-17:00	0.085	0.652	0.737
17:00-18:00	0.391	0.274	0.665
18:00-19:00	0.189	0.193	0.382
19:00-20:00	0.139	0.203	0.342
20:00-21:00	0.023	0.563	0.586
21:00-22:00	0.013	0	0.013
Daily Trip Rates:	4.415	4.502	8.917

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: CARS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0.087	1	9216	0	1	9216	0.087
06:00-07:0	1	9216	0.011	1	9216	0	1	9216	0.011
07:00-08:0	4	5557	0.261	4	5557	0.004	4	5557	0.265
08:00-09:0	4	5557	0.148	4	5557	0.004	4	5557	0.152
09:00-10:0	4	5557	0.117	4	5557	0.031	4	5557	0.148
10:00-11:0	4	5557	0.121	4	5557	0.031	4	5557	0.152
11:00-12:0	4	5557	0.045	4	5557	0.049	4	5557	0.094
12:00-13:0	4	5557	0.067	4	5557	0.13	4	5557	0.197
13:00-14:0	4	5557	0.054	4	5557	0.198	4	5557	0.252
14:00-15:0	4	5557	0.067	4	5557	0.045	4	5557	0.112
15:00-16:0	4	5557	0.009	4	5557	0.108	4	5557	0.117
16:00-17:0	4	5557	0.018	4	5557	0.27	4	5557	0.288

17:00-18:0	4	5557	0.045	4	5557	0.067	4	5557	0.112
18:00-19:0	4	5557	0.031	4	5557	0.022	4	5557	0.053
19:00-20:0	2	8608	0.006	2	8608	0.006	2	8608	0.012
20:00-21:0	2	8608	0	2	8608	0.07	2	8608	0.07
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.087			1.035			2.122

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: LGVS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0	1	9216	0	1	9216	0
06:00-07:0	1	9216	0	1	9216	0	1	9216	0
07:00-08:0	4	5557	0.018	4	5557	0.004	4	5557	0.022
08:00-09:0	4	5557	0.045	4	5557	0.013	4	5557	0.058
09:00-10:0	4	5557	0.04	4	5557	0.027	4	5557	0.067
10:00-11:0	4	5557	0.036	4	5557	0.027	4	5557	0.063
11:00-12:0	4	5557	0.013	4	5557	0.018	4	5557	0.031
12:00-13:0	4	5557	0.027	4	5557	0.027	4	5557	0.054
13:00-14:0	4	5557	0.013	4	5557	0.031	4	5557	0.044
14:00-15:0	4	5557	0.031	4	5557	0.036	4	5557	0.067
15:00-16:0	4	5557	0.009	4	5557	0.009	4	5557	0.018
16:00-17:0	4	5557	0.009	4	5557	0.036	4	5557	0.045
17:00-18:0	4	5557	0	4	5557	0	4	5557	0
18:00-19:0	4	5557	0.004	4	5557	0.004	4	5557	0.008
19:00-20:0	2	8608	0	2	8608	0	2	8608	0
20:00-21:0	2	8608	0.006	2	8608	0.006	2	8608	0.012
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.251			0.238			0.489

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: MOTOR CYCLES

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	9216	0.011	1	9216	0	1	9216	0.011
06:00-07:0	1	9216	0	1	9216	0	1	9216	0
07:00-08:0	4	5557	0	4	5557	0	4	5557	0
08:00-09:0	4	5557	0	4	5557	0	4	5557	0
09:00-10:0	4	5557	0	4	5557	0	4	5557	0
10:00-11:0	4	5557	0	4	5557	0	4	5557	0
11:00-12:0	4	5557	0	4	5557	0	4	5557	0
12:00-13:0	4	5557	0	4	5557	0	4	5557	0
13:00-14:0	4	5557	0	4	5557	0	4	5557	0
14:00-15:0	4	5557	0	4	5557	0	4	5557	0
15:00-16:0	4	5557	0	4	5557	0.004	4	5557	0.004
16:00-17:0	4	5557	0	4	5557	0	4	5557	0
17:00-18:0	4	5557	0	4	5557	0	4	5557	0
18:00-19:0	4	5557	0	4	5557	0	4	5557	0
19:00-20:0	2	8608	0	2	8608	0	2	8608	0
20:00-21:0	2	8608	0	2	8608	0	2	8608	0
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.011			0.004			0.015

Parameter summary

Trip rate pa	1500 - 9216 (units: sqm)
Survey date	01/01/16 - 08/11/23
Number of	4
Number of	0
Number of	0
Surveys au	0
Surveys ma	1

This sectio followed b the total nu the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRICS 7.11.4
Trip Rate P Gross floor area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 02 - EMPLOYMENT
Category C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

2	SOUTH EAST		
	HC	HAMPSHIR	1 days
	HF	HERTFORD	1 days
3	SOUTH WEST		
	DV	DEVON	1 days
6	WEST MIDLANDS		
	WK	WARWICKS	1 days
7	YORKSHIRE & NORTH	LINCOLNSHIRE	
	NY	NORTH YOI	1 days

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

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.
Parameter: Gross floor area
Actual Ran 1500 to 17834 (units: sqm)
Range Sele 1000 to 60000 (units: sqm)

Public Transport Provision:
Selection b Include all surveys

Date Range 01/01/16 to 08/11/24

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:
Wednesday 3 days
Thursday 2 days
This data displays the number of selected surveys by day of the week.

Selected survey types:
Manual cou 5 days
Directional 0 days
This data di the total ac whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centr	0
Edge of Tow	0
Suburban A	1
Edge of Tow	3
Neighbourh	1
Free Standi	0
Not Known	0

This data di Edge of To Suburban A Neighbourl Edge of To Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Z	4
Commercia	0
Developme	0
Residential	0
Retail Zone	0
Built-Up Zo	0
Village	1
Out of Towr	0
High Street	0
No Sub Cat	0

This data di Industrial Z Developme Residentia Retail Zone Built-Up Zo Village Out of Tow High Street and No Sub Category.

Secondary Filtering selection:

Use Class:
Not Known 5 days
This data di which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Population within 1 mile:
1,000 or Le 1 days
5,001 to 10 2 days
15,001 to 2 2 days
This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:
25,001 to 5 1 days
75,001 to 1 2 days
125,001 to 2 days
This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:
0.6 to 1.0 1 days
1.1 to 1.5 3 days
1.6 to 2.0 1 days
This data di within a radius of 5-miles of selected survey sites.

Travel Plan:
No 5 days
This data di and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:
No PTAL Pr 5 days
This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 DV-02-C-02 ENERGY RE DEVON
GRACE ROAD SOUTH
MARSH BARTON TRAD. EST.
EXETER
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 3513 sqm
Survey date THURSDAY ######## Survey Type MANUAL

2 HC-02-C-01 GIN DISTILL HAMPSHIRE
LONDON ROAD

LAVERSTOKE
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 8000 sqm
Survey date WEDNESDA ######## Survey Type MANUAL

3 HF-02-C-02 FRESH PRC HERTFORDSHIRE
COCKERELL CLOSE

STEVENAGE
Edge of Town
Industrial Zone
Total Gross floor area: 17834 sqm
Survey date WEDNESDA ######## Survey Type MANUAL

4 NY-02-C-03 WORKWEA NORTH YORKSHIRE
WETHERBY ROAD

KNARESBOROUGH
Edge of Town
Industrial Zone
Total Gross floor area: 1500 sqm
Survey date THURSDAY ######## Survey Type MANUAL

5 WK-02-C-0 MACHINE E WARWICKSHIRE
CASTLE MOUND WAY

RUGBY
Edge of Town
Industrial Zone
Total Gross floor area: 9216 sqm
Survey date WEDNESDA ######## Survey Type MANUAL

This sectio it displays the selecte the day of t and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: TOTAL VEHICLES

Floor Area **26500** 265

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0.078	2	13525	0.007	2	13525	0.085
06:00-07:0	2	13525	0.214	2	13525	0.148	2	13525	0.362
07:00-08:0	5	8013	0.22	5	8013	0.037	5	8013	0.257
08:00-09:0	5	8013	0.177	5	8013	0.037	5	8013	0.214
09:00-10:0	5	8013	0.13	5	8013	0.075	5	8013	0.205
10:00-11:0	5	8013	0.115	5	8013	0.05	5	8013	0.165
11:00-12:0	5	8013	0.057	5	8013	0.06	5	8013	0.117
12:00-13:0	5	8013	0.115	5	8013	0.145	5	8013	0.26
13:00-14:0	5	8013	0.082	5	8013	0.162	5	8013	0.244
14:00-15:0	5	8013	0.07	5	8013	0.072	5	8013	0.142
15:00-16:0	5	8013	0.04	5	8013	0.137	5	8013	0.177
16:00-17:0	5	8013	0.022	5	8013	0.217	5	8013	0.239
17:00-18:0	5	8013	0.047	5	8013	0.105	5	8013	0.152
18:00-19:0	5	8013	0.087	5	8013	0.105	5	8013	0.192
19:00-20:0	3	11683	0.006	3	11683	0.029	3	11683	0.035
20:00-21:0	3	11683	0.003	3	11683	0.049	3	11683	0.052
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.463			1.435			2.898

	ARRIVALS		DEPARTURES		TOTALS	
Time Range	Trip Rate		Trip Rate		Trip Rate	
06:00-07:0	0.214	57	0.148	39	0.362	96
07:00-08:0	0.22	58	0.037	10	0.257	68
08:00-09:0	0.177	47	0.037	10	0.214	57
09:00-10:0	0.13	34	0.075	20	0.205	54
10:00-11:0	0.115	30	0.05	13	0.165	44
11:00-12:0	0.057	15	0.06	16	0.117	31
12:00-13:0	0.115	30	0.145	38	0.26	69
13:00-14:0	0.082	22	0.162	43	0.244	65
14:00-15:0	0.07	19	0.072	19	0.142	38
15:00-16:0	0.04	11	0.137	36	0.177	47
16:00-17:0	0.022	6	0.217	58	0.239	63
17:00-18:0	0.047	12	0.105	28	0.152	40
18:00-19:0	0.087	23	0.105	28	0.192	51
19:00-20:0	0.006	2	0.029	8	0.035	9
20:00-21:0	0.003	1	0.049	13	0.052	14
21:00-22:0	0	0	0	0	0	0
Daily Trip R	1.385	367	1.428	378	2.813	745

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: TAXIS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									

05:00-06:0	2	13525	0	2	13525	0	2	13525	0
06:00-07:0	2	13525	0	2	13525	0	2	13525	0
07:00-08:0	5	8013	0	5	8013	0	5	8013	0
08:00-09:0	5	8013	0	5	8013	0	5	8013	0
09:00-10:0	5	8013	0.002	5	8013	0.002	5	8013	0.004
10:00-11:0	5	8013	0	5	8013	0	5	8013	0
11:00-12:0	5	8013	0	5	8013	0	5	8013	0
12:00-13:0	5	8013	0	5	8013	0	5	8013	0
13:00-14:0	5	8013	0	5	8013	0	5	8013	0
14:00-15:0	5	8013	0	5	8013	0	5	8013	0
15:00-16:0	5	8013	0.01	5	8013	0.01	5	8013	0.02
16:00-17:0	5	8013	0	5	8013	0	5	8013	0
17:00-18:0	5	8013	0.002	5	8013	0.002	5	8013	0.004
18:00-19:0	5	8013	0.002	5	8013	0.002	5	8013	0.004
19:00-20:0	3	11683	0	3	11683	0	3	11683	0
20:00-21:0	3	11683	0	3	11683	0	3	11683	0
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.016			0.016			0.032

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: OGVS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0.004	2	13525	0	2	13525	0.004
06:00-07:0	2	13525	0.004	2	13525	0.007	2	13525	0.011
07:00-08:0	5	8013	0.027	5	8013	0.015	5	8013	0.042
08:00-09:0	5	8013	0.022	5	8013	0.02	5	8013	0.042
09:00-10:0	5	8013	0.025	5	8013	0.027	5	8013	0.052
10:00-11:0	5	8013	0.007	5	8013	0.007	5	8013	0.014
11:00-12:0	5	8013	0.017	5	8013	0.017	5	8013	0.034
12:00-13:0	5	8013	0.05	5	8013	0.05	5	8013	0.1
13:00-14:0	5	8013	0.027	5	8013	0.025	5	8013	0.052
14:00-15:0	5	8013	0.007	5	8013	0.01	5	8013	0.017
15:00-16:0	5	8013	0.012	5	8013	0.017	5	8013	0.029
16:00-17:0	5	8013	0.005	5	8013	0.012	5	8013	0.017
17:00-18:0	5	8013	0	5	8013	0	5	8013	0
18:00-19:0	5	8013	0	5	8013	0	5	8013	0
19:00-20:0	3	11683	0.003	3	11683	0	3	11683	0.003
20:00-21:0	3	11683	0	3	11683	0.003	3	11683	0.003
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.21			0.21			0.42

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: PSVS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0	2	13525	0	2	13525	0
06:00-07:0	2	13525	0.004	2	13525	0.004	2	13525	0.008
07:00-08:0	5	8013	0	5	8013	0	5	8013	0
08:00-09:0	5	8013	0	5	8013	0	5	8013	0
09:00-10:0	5	8013	0	5	8013	0	5	8013	0
10:00-11:0	5	8013	0	5	8013	0	5	8013	0
11:00-12:0	5	8013	0	5	8013	0	5	8013	0
12:00-13:0	5	8013	0	5	8013	0	5	8013	0
13:00-14:0	5	8013	0	5	8013	0	5	8013	0
14:00-15:0	5	8013	0	5	8013	0	5	8013	0
15:00-16:0	5	8013	0	5	8013	0	5	8013	0
16:00-17:0	5	8013	0	5	8013	0	5	8013	0
17:00-18:0	5	8013	0	5	8013	0	5	8013	0
18:00-19:0	5	8013	0	5	8013	0	5	8013	0
19:00-20:0	3	11683	0	3	11683	0	3	11683	0
20:00-21:0	3	11683	0	3	11683	0	3	11683	0
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.004			0.004			0.008

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: CYCLISTS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									

	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate		Rate		Rate	
06:00-07:0	0.022	6	0.004	1	0.026	7
07:00-08:0	0.005	1	0.002	1	0.007	2
08:00-09:0	0	0	0	0	0	0
09:00-10:0	0	0	0	0	0	0

04:00-05:00									
05:00-06:0	2	13525	0	2	13525	0	2	13525	0
06:00-07:0	2	13525	0.022	2	13525	0.004	2	13525	0.026
07:00-08:0	5	8013	0.005	5	8013	0.002	5	8013	0.007
08:00-09:0	5	8013	0	5	8013	0	5	8013	0
09:00-10:0	5	8013	0	5	8013	0	5	8013	0
10:00-11:0	5	8013	0	5	8013	0	5	8013	0
11:00-12:0	5	8013	0	5	8013	0	5	8013	0
12:00-13:0	5	8013	0	5	8013	0	5	8013	0
13:00-14:0	5	8013	0	5	8013	0	5	8013	0
14:00-15:0	5	8013	0	5	8013	0	5	8013	0
15:00-16:0	5	8013	0	5	8013	0.005	5	8013	0.005
16:00-17:0	5	8013	0	5	8013	0.002	5	8013	0.002
17:00-18:0	5	8013	0	5	8013	0.005	5	8013	0.005
18:00-19:0	5	8013	0.017	5	8013	0.002	5	8013	0.019
19:00-20:0	3	11683	0	3	11683	0.006	3	11683	0.006
20:00-21:0	3	11683	0	3	11683	0	3	11683	0
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.044			0.026			0.07

10:00-11:0	0	0	0	0	0	0
11:00-12:0	0	0	0	0	0	0
12:00-13:0	0	0	0	0	0	0
13:00-14:0	0	0	0	0	0	0
14:00-15:0	0	0	0	0	0	0
15:00-16:0	0	0	0.005	1	0.005	1
16:00-17:0	0	0	0.002	1	0.002	1
17:00-18:0	0	0	0.005	1	0.005	1
18:00-19:0	0.017	5	0.002	1	0.019	5
19:00-20:0	0	0	0.006	2	0.006	2
20:00-21:0	0	0	0	0	0	0
21:00-22:0	0	0	0	0	0	0
Daily Trip R	0.044	12	0.026	7	0.07	19

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: VEHICLE OCCUPANTS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0.074	2	13525	0.007	2	13525	0.081
06:00-07:0	2	13525	0.288	2	13525	0.174	2	13525	0.462
07:00-08:0	5	8013	0.225	5	8013	0.05	5	8013	0.275
08:00-09:0	5	8013	0.207	5	8013	0.04	5	8013	0.247
09:00-10:0	5	8013	0.19	5	8013	0.095	5	8013	0.285
10:00-11:0	5	8013	0.197	5	8013	0.052	5	8013	0.249
11:00-12:0	5	8013	0.095	5	8013	0.077	5	8013	0.172
12:00-13:0	5	8013	0.19	5	8013	0.23	5	8013	0.42
13:00-14:0	5	8013	0.125	5	8013	0.265	5	8013	0.39
14:00-15:0	5	8013	0.117	5	8013	0.11	5	8013	0.227
15:00-16:0	5	8013	0.06	5	8013	0.2	5	8013	0.26
16:00-17:0	5	8013	0.032	5	8013	0.277	5	8013	0.309
17:00-18:0	5	8013	0.072	5	8013	0.127	5	8013	0.199
18:00-19:0	5	8013	0.13	5	8013	0.162	5	8013	0.292
19:00-20:0	3	11683	0.009	3	11683	0.046	3	11683	0.055
20:00-21:0	3	11683	0.003	3	11683	0.083	3	11683	0.086
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			2.014			1.995			4.009

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: PEDESTRIANS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0	2	13525	0	2	13525	0
06:00-07:0	2	13525	0	2	13525	0	2	13525	0
07:00-08:0	5	8013	0.017	5	8013	0	5	8013	0.017
08:00-09:0	5	8013	0.005	5	8013	0	5	8013	0.005
09:00-10:0	5	8013	0	5	8013	0	5	8013	0
10:00-11:0	5	8013	0.002	5	8013	0.002	5	8013	0.004
11:00-12:0	5	8013	0	5	8013	0	5	8013	0
12:00-13:0	5	8013	0.005	5	8013	0.007	5	8013	0.012
13:00-14:0	5	8013	0	5	8013	0.002	5	8013	0.002
14:00-15:0	5	8013	0	5	8013	0	5	8013	0
15:00-16:0	5	8013	0	5	8013	0	5	8013	0
16:00-17:0	5	8013	0	5	8013	0.012	5	8013	0.012
17:00-18:0	5	8013	0	5	8013	0.01	5	8013	0.01
18:00-19:0	5	8013	0	5	8013	0	5	8013	0
19:00-20:0	3	11683	0	3	11683	0	3	11683	0
20:00-21:0	3	11683	0	3	11683	0	3	11683	0
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.029			0.033			0.062

	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate		Rate		Rate	
06:00-07:0	0	0	0	0	0	0
07:00-08:0	0.017	5	0	0	0.017	5
08:00-09:0	0.005	1	0	0	0.005	1
09:00-10:0	0	0	0	0	0	0
10:00-11:0	0.002	1	0.002	1	0.004	1
11:00-12:0	0	0	0	0	0	0
12:00-13:0	0.005	1	0.007	2	0.012	3
13:00-14:0	0	0	0.002	1	0.002	1
14:00-15:0	0	0	0	0	0	0
15:00-16:0	0	0	0	0	0	0
16:00-17:0	0	0	0.012	3	0.012	3
17:00-18:0	0	0	0.01	3	0.01	3
18:00-19:0	0	0	0	0	0	0
19:00-20:0	0	0	0	0	0	0
20:00-21:0	0	0	0	0	0	0
21:00-22:0	0	0	0	0	0	0
Daily Trip R	0.029	8	0.033	9	0.062	16

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: BUS/TRAM PASSENGERS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									

03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0.004	2	13525	0	2	13525	0.004
06:00-07:0	2	13525	0.074	2	13525	0.078	2	13525	0.152
07:00-08:0	5	8013	0.02	5	8013	0.005	5	8013	0.025
08:00-09:0	5	8013	0.035	5	8013	0	5	8013	0.035
09:00-10:0	5	8013	0.012	5	8013	0.002	5	8013	0.014
10:00-11:0	5	8013	0.03	5	8013	0.022	5	8013	0.052
11:00-12:0	5	8013	0.015	5	8013	0.012	5	8013	0.027
12:00-13:0	5	8013	0.03	5	8013	0.032	5	8013	0.062
13:00-14:0	5	8013	0.017	5	8013	0.015	5	8013	0.032
14:00-15:0	5	8013	0.012	5	8013	0.015	5	8013	0.027
15:00-16:0	5	8013	0.005	5	8013	0.005	5	8013	0.01
16:00-17:0	5	8013	0.017	5	8013	0.027	5	8013	0.044
17:00-18:0	5	8013	0.027	5	8013	0.045	5	8013	0.072
18:00-19:0	5	8013	0.11	5	8013	0.032	5	8013	0.142
19:00-20:0	3	11683	0	3	11683	0.057	3	11683	0.057
20:00-21:0	3	11683	0.006	3	11683	0.071	3	11683	0.077
21:00-22:0	1	8000	0.013	1	8000	0	1	8000	0.013
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.427			0.418			0.845

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: TOTAL RAIL PASSENGERS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0	2	13525	0	2	13525	0
06:00-07:0	2	13525	0	2	13525	0	2	13525	0
07:00-08:0	5	8013	0	5	8013	0	5	8013	0
08:00-09:0	5	8013	0	5	8013	0	5	8013	0
09:00-10:0	5	8013	0	5	8013	0	5	8013	0
10:00-11:0	5	8013	0	5	8013	0	5	8013	0
11:00-12:0	5	8013	0	5	8013	0	5	8013	0
12:00-13:0	5	8013	0	5	8013	0	5	8013	0
13:00-14:0	5	8013	0	5	8013	0	5	8013	0
14:00-15:0	5	8013	0	5	8013	0.002	5	8013	0.002
15:00-16:0	5	8013	0	5	8013	0	5	8013	0
16:00-17:0	5	8013	0	5	8013	0	5	8013	0
17:00-18:0	5	8013	0	5	8013	0	5	8013	0
18:00-19:0	5	8013	0	5	8013	0	5	8013	0
19:00-20:0	3	11683	0	3	11683	0	3	11683	0
20:00-21:0	3	11683	0	3	11683	0	3	11683	0
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0			0.002			0.002

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: COACH PASSENGERS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0	2	13525	0	2	13525	0
06:00-07:0	2	13525	0.015	2	13525	0	2	13525	0.015
07:00-08:0	5	8013	0	5	8013	0	5	8013	0
08:00-09:0	5	8013	0	5	8013	0	5	8013	0
09:00-10:0	5	8013	0.065	5	8013	0	5	8013	0.065
10:00-11:0	5	8013	0.07	5	8013	0.065	5	8013	0.135
11:00-12:0	5	8013	0.125	5	8013	0.002	5	8013	0.127
12:00-13:0	5	8013	0.082	5	8013	0.07	5	8013	0.152
13:00-14:0	5	8013	0.057	5	8013	0.055	5	8013	0.112
14:00-15:0	5	8013	0	5	8013	0.15	5	8013	0.15
15:00-16:0	5	8013	0.165	5	8013	0.057	5	8013	0.222
16:00-17:0	5	8013	0	5	8013	0.08	5	8013	0.08
17:00-18:0	5	8013	0.14	5	8013	0.085	5	8013	0.225
18:00-19:0	5	8013	0.06	5	8013	0.065	5	8013	0.125
19:00-20:0	3	11683	0.06	3	11683	0.086	3	11683	0.146
20:00-21:0	3	11683	0.003	3	11683	0.131	3	11683	0.134
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.842			0.846			1.688

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: PUBLIC TRANSPORT USERS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									

	ARRIVALS	DEPARTURES	TOTALS
	Trip	Trip	Trip
Time Range	Rate	Rate	Rate
06:00-07:0	0.089	24 0.078	21 0.167 44
07:00-08:0	0.02	5 0.005	1 0.025 7

02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0.004	2	13525	0	2	13525	0.004
06:00-07:0	2	13525	0.089	2	13525	0.078	2	13525	0.167
07:00-08:0	5	8013	0.02	5	8013	0.005	5	8013	0.025
08:00-09:0	5	8013	0.035	5	8013	0	5	8013	0.035
09:00-10:0	5	8013	0.077	5	8013	0.002	5	8013	0.079
10:00-11:0	5	8013	0.1	5	8013	0.087	5	8013	0.187
11:00-12:0	5	8013	0.14	5	8013	0.015	5	8013	0.155
12:00-13:0	5	8013	0.112	5	8013	0.102	5	8013	0.214
13:00-14:0	5	8013	0.075	5	8013	0.07	5	8013	0.145
14:00-15:0	5	8013	0.012	5	8013	0.167	5	8013	0.179
15:00-16:0	5	8013	0.17	5	8013	0.062	5	8013	0.232
16:00-17:0	5	8013	0.017	5	8013	0.107	5	8013	0.124
17:00-18:0	5	8013	0.167	5	8013	0.13	5	8013	0.297
18:00-19:0	5	8013	0.17	5	8013	0.097	5	8013	0.267
19:00-20:0	3	11683	0.06	3	11683	0.143	3	11683	0.203
20:00-21:0	3	11683	0.009	3	11683	0.203	3	11683	0.212
21:00-22:0	1	8000	0.013	1	8000	0	1	8000	0.013
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.27			1.268			2.538

08:00-09:0	0.035	9	0	0	0.035	9
09:00-10:0	0.077	20	0.002	1	0.079	21
10:00-11:0	0.1	27	0.087	23	0.187	50
11:00-12:0	0.14	37	0.015	4	0.155	41
12:00-13:0	0.112	30	0.102	27	0.214	57
13:00-14:0	0.075	20	0.07	19	0.145	38
14:00-15:0	0.012	3	0.167	44	0.179	47
15:00-16:0	0.17	45	0.062	16	0.232	61
16:00-17:0	0.017	5	0.107	28	0.124	33
17:00-18:0	0.167	44	0.13	34	0.297	79
18:00-19:0	0.17	45	0.097	26	0.267	71
19:00-20:0	0.06	16	0.143	38	0.203	54
20:00-21:0	0.009	2	0.203	54	0.212	56
21:00-22:0	0.013	3	0	0	0.013	3
Daily Trip R	1.266	335	1.268	336	2.534	672

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: TOTAL PEOPLE

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0.078	2	13525	0.007	2	13525	0.085
06:00-07:0	2	13525	0.399	2	13525	0.255	2	13525	0.654
07:00-08:0	5	8013	0.267	5	8013	0.057	5	8013	0.324
08:00-09:0	5	8013	0.247	5	8013	0.04	5	8013	0.287
09:00-10:0	5	8013	0.267	5	8013	0.097	5	8013	0.364
10:00-11:0	5	8013	0.3	5	8013	0.142	5	8013	0.442
11:00-12:0	5	8013	0.235	5	8013	0.092	5	8013	0.327
12:00-13:0	5	8013	0.307	5	8013	0.339	5	8013	0.646
13:00-14:0	5	8013	0.2	5	8013	0.337	5	8013	0.537
14:00-15:0	5	8013	0.13	5	8013	0.277	5	8013	0.407
15:00-16:0	5	8013	0.23	5	8013	0.267	5	8013	0.497
16:00-17:0	5	8013	0.05	5	8013	0.399	5	8013	0.449
17:00-18:0	5	8013	0.24	5	8013	0.272	5	8013	0.512
18:00-19:0	5	8013	0.317	5	8013	0.262	5	8013	0.579
19:00-20:0	3	11683	0.068	3	11683	0.194	3	11683	0.262
20:00-21:0	3	11683	0.011	3	11683	0.285	3	11683	0.296
21:00-22:0	1	8000	0.013	1	8000	0	1	8000	0.013
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			3.359			3.322			6.681

	ARRIVALS	DEPARTURES	TOTALS
Time Range	Trip Rate	Trip Rate	Trip Rate
06:00-07:0	0.399	106	0.255	68	0.654	173
07:00-08:0	0.267	71	0.057	15	0.324	86
08:00-09:0	0.247	65	0.04	11	0.287	76
09:00-10:0	0.267	71	0.097	26	0.364	96
10:00-11:0	0.3	80	0.142	38	0.442	117
11:00-12:0	0.235	62	0.092	24	0.327	87
12:00-13:0	0.307	81	0.339	90	0.646	171
13:00-14:0	0.2	53	0.337	89	0.537	142
14:00-15:0	0.13	34	0.277	73	0.407	108
15:00-16:0	0.23	61	0.267	71	0.497	132
16:00-17:0	0.05	13	0.399	106	0.449	119
17:00-18:0	0.24	64	0.272	72	0.512	136
18:00-19:0	0.317	84	0.262	69	0.579	153
19:00-20:0	0.068	18	0.194	51	0.262	69
20:00-21:0	0.011	3	0.285	76	0.296	78
21:00-22:0	0.013	3	0	0	0.013	3
Daily Trip R	3.281	869	3.315	878	6.596	1748

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: CARS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0.067	2	13525	0.007	2	13525	0.074
06:00-07:0	2	13525	0.196	2	13525	0.126	2	13525	0.322
07:00-08:0	5	8013	0.182	5	8013	0.017	5	8013	0.199
08:00-09:0	5	8013	0.125	5	8013	0.007	5	8013	0.132
09:00-10:0	5	8013	0.072	5	8013	0.02	5	8013	0.092
10:00-11:0	5	8013	0.077	5	8013	0.017	5	8013	0.094
11:00-12:0	5	8013	0.03	5	8013	0.03	5	8013	0.06
12:00-13:0	5	8013	0.05	5	8013	0.08	5	8013	0.13
13:00-14:0	5	8013	0.04	5	8013	0.115	5	8013	0.155
14:00-15:0	5	8013	0.045	5	8013	0.042	5	8013	0.087
15:00-16:0	5	8013	0.01	5	8013	0.1	5	8013	0.11
16:00-17:0	5	8013	0.012	5	8013	0.182	5	8013	0.194
17:00-18:0	5	8013	0.045	5	8013	0.095	5	8013	0.14
18:00-19:0	5	8013	0.077	5	8013	0.09	5	8013	0.167
19:00-20:0	3	11683	0.003	3	11683	0.029	3	11683	0.032
20:00-21:0	3	11683	0	3	11683	0.043	3	11683	0.043
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.031			1			2.031

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: LGVS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00-01:00									

01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0.004	2	13525	0	2	13525	0.004
06:00-07:0	2	13525	0.011	2	13525	0.011	2	13525	0.022
07:00-08:0	5	8013	0.01	5	8013	0.005	5	8013	0.015
08:00-09:0	5	8013	0.03	5	8013	0.01	5	8013	0.04
09:00-10:0	5	8013	0.03	5	8013	0.025	5	8013	0.055
10:00-11:0	5	8013	0.03	5	8013	0.025	5	8013	0.055
11:00-12:0	5	8013	0.01	5	8013	0.012	5	8013	0.022
12:00-13:0	5	8013	0.015	5	8013	0.015	5	8013	0.03
13:00-14:0	5	8013	0.015	5	8013	0.022	5	8013	0.037
14:00-15:0	5	8013	0.017	5	8013	0.02	5	8013	0.037
15:00-16:0	5	8013	0.007	5	8013	0.007	5	8013	0.014
16:00-17:0	5	8013	0.005	5	8013	0.02	5	8013	0.025
17:00-18:0	5	8013	0	5	8013	0	5	8013	0
18:00-19:0	5	8013	0.007	5	8013	0.01	5	8013	0.017
19:00-20:0	3	11683	0	3	11683	0	3	11683	0
20:00-21:0	3	11683	0.003	3	11683	0.003	3	11683	0.006
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.194			0.185			0.379

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
Calculation Factor: 100 sqm
Count Type: MOTOR CYCLES

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	2	13525	0.004	2	13525	0	2	13525	0.004
06:00-07:0	2	13525	0	2	13525	0	2	13525	0
07:00-08:0	5	8013	0	5	8013	0	5	8013	0
08:00-09:0	5	8013	0	5	8013	0	5	8013	0
09:00-10:0	5	8013	0	5	8013	0	5	8013	0
10:00-11:0	5	8013	0	5	8013	0	5	8013	0
11:00-12:0	5	8013	0	5	8013	0	5	8013	0
12:00-13:0	5	8013	0	5	8013	0	5	8013	0
13:00-14:0	5	8013	0	5	8013	0	5	8013	0
14:00-15:0	5	8013	0	5	8013	0	5	8013	0
15:00-16:0	5	8013	0	5	8013	0.002	5	8013	0.002
16:00-17:0	5	8013	0	5	8013	0.002	5	8013	0.002
17:00-18:0	5	8013	0	5	8013	0.007	5	8013	0.007
18:00-19:0	5	8013	0	5	8013	0.002	5	8013	0.002
19:00-20:0	3	11683	0	3	11683	0	3	11683	0
20:00-21:0	3	11683	0	3	11683	0	3	11683	0
21:00-22:0	1	8000	0	1	8000	0	1	8000	0
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.004			0.013			0.017

Parameter summary

Trip rate pa	1500 - 17834 (units: sqm)
Survey date	01/01/16 - 08/11/24
Number of	5
Number of	0
Number of	0
Surveys aut	0
Surveys ma	0

This sectio followed by the total nu the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRICS 7.11.4
Trip Rate P: Site area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 07 - LEISURE
Category K - FITNESS CLUB (PRIVATE)
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

2	SOUTH EAST	
	BH	BRIGHTON 1 days
	HF	HERTFORD 1 days
3	SOUTH WEST	
	WL	WILTSHIRE 1 days
5	EAST MIDLANDS	
	LN	LINCOLNS 1 days
9	NORTH	
	TW	TYNE & WE 2 days

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

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.
Parameter: Site area
Actual Ran 0.02 to 0.50 (units: hect)
Range Sele 0.02 to 2.00 (units: hect)

Public Transport Provision:
Selection b Include all surveys

Date Range 01/01/16 to 17/04/24

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.
Selected survey days:
Monday 1 days
Wednesda 2 days
Thursday 1 days
Friday 1 days
Saturday 1 days
This data displays the number of selected surveys by day of the week.

Selected survey types:
Manual cou 6 days
Directional 0 days
This data di the total ac whilst ATC surveys are undertaking using machines.

Selected Locations:
Town Centr 1
Edge of Tov 0
Suburban A 3
Edge of Tov 2
Neighbourh 0
Free Standi 0
Not Known 0
This data di Edge of To Suburban / Neighbour Edge of To Town Centre and Not Known.

Selected Location Sub Categories:
Industrial Z 1
Commercia 0
Developme 1
Residential 1
Retail Zone 3
Built-Up Zo 0
Village 0
Out of Tow 0
High Street 0
No Sub Cat 0
This data di Industrial Z Developm Residentia Retail Zone Built-Up Zc Village Out of Tow High Street and No Sub Category.

Secondary Filtering selection:

Use Class:
n/a 1 days
E(d) 5 days
This data di which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Population within 1 mile:
5,001 to 10 2 days
10,001 to 1 1 days
20,001 to 2 1 days
25,001 to 5 2 days
This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:
50,001 to 7 2 days
125,001 to 2 days
250,001 to 1 days
500,001 or 1 days
This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:
0.6 to 1.0 4 days
1.1 to 1.5 2 days
This data di within a radius of 5-miles of selected survey sites.

Travel Plan:
No 6 days
This data di and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:
No PTAL Pr 6 days
This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 BH-07-K-0: CORAL FITI BRIGHTON & HOVE
ORCHARD ROAD
HOVE
BRIGHTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Site area: 0.39 hect
Survey date WEDNESD/ ######## Survey Type MANUAL

2 HF-07-K-01 LEANERLIF HERTFORDSHIRE
LONDON ROAD

STEVENAGE
Edge of Town
Retail Zone
Total Site area: 0.07 hect
Survey date MONDAY ######## Survey Type MANUAL

3 LN-07-K-02 HEALTH AN LINCOLNSHIRE
DYSART ROAD

GRANTHAM
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Site area: 0.4 hect
Survey date WEDNESD/ ######## Survey Type MANUAL

4 TW-07-K-0: DW SPORT TYNE & WEAR
TIMBER BEACH ROAD
CASTLETOWN
SUNDERLAND
Suburban Area (PPS6 Out of Centre)
Development Zone
Total Site area: 0.5 hect
Survey date THURSDAY ######## Survey Type MANUAL

5 TW-07-K-0: FITNESS CI TYNE & WEAR
HIGH BRIDGE

NEWCASTLE UPON TYNE
Town Centre
Retail Zone
Total Site area: 0.02 hect
Survey date FRIDAY ######## Survey Type MANUAL

6 WL-07-K-0: PURE GYM WILTSHIRE
SOUTHAMPTON ROAD
BOURNE RETAIL PARK
SALISBURY
Edge of Town
Retail Zone
Total Site area: 0.21 hect
Survey date SATURDAY ######## Survey Type MANUAL

This sectio it displays the selecte the day of t and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)
Calculation Factor: 1 hect
Count Type: TOTAL VEHICLES

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	0.07	28.571	1	0.07	0	1	0.07	28.571
06:00-07:0	6	0.27	38.365	6	0.27	14.465	6	0.27	52.83
07:00-08:0	6	0.27	45.912	6	0.27	34.591	6	0.27	80.503
08:00-09:0	6	0.27	40.252	6	0.27	34.591	6	0.27	74.843
09:00-10:0	6	0.27	77.358	6	0.27	32.075	6	0.27	109.433
10:00-11:0	6	0.27	51.572	6	0.27	63.522	6	0.27	115.094
11:00-12:0	6	0.27	44.025	6	0.27	44.654	6	0.27	88.679
12:00-13:0	6	0.27	40.881	6	0.27	39.623	6	0.27	80.504
13:00-14:0	6	0.27	42.138	6	0.27	43.396	6	0.27	85.534
14:00-15:0	6	0.27	45.912	6	0.27	43.396	6	0.27	89.308
15:00-16:0	6	0.27	59.748	6	0.27	53.459	6	0.27	113.207
16:00-17:0	6	0.27	74.214	6	0.27	57.862	6	0.27	132.076
17:00-18:0	6	0.27	90.566	6	0.27	79.245	6	0.27	169.811
18:00-19:0	6	0.27	71.698	6	0.27	91.824	6	0.27	163.522
19:00-20:0	6	0.27	71.698	6	0.27	89.937	6	0.27	161.635
20:00-21:0	6	0.27	47.799	6	0.27	66.667	6	0.27	114.466
21:00-22:0	5	0.31	18.471	5	0.31	49.045	5	0.31	67.516
22:00-23:0	4	0.27	5.607	4	0.27	40.187	4	0.27	45.794
23:00-24:00									
Daily Trip Rates:			894.787			878.539			1773.326

5000

Floor Area **50** 0.5

Time Range	ARRIVALS Trip Rate		DEPARTURES Trip Rate		TOTALS Trip Rate	
06:00-07:00	0.38365	19	0.14465	7	0.5283	26
07:00-08:00	0.45912	23	0.34591	17	0.80503	40
08:00-09:00	0.40252	20	0.34591	17	0.74843	37
09:00-10:00	0.77358	39	0.32075	16	1.09433	55
10:00-11:00	0.51572	26	0.63522	32	1.15094	58
11:00-12:00	0.44025	22	0.44654	22	0.88679	44
12:00-13:00	0.40881	20	0.39623	20	0.80504	40
13:00-14:00	0.42138	21	0.43396	22	0.85534	43
14:00-15:00	0.45912	23	0.43396	22	0.89308	45
15:00-16:00	0.59748	30	0.53459	27	1.13207	57
16:00-17:00	0.74214	37	0.57862	29	1.32076	66
17:00-18:00	0.90566	45	0.79245	40	1.69811	85
18:00-19:00	0.71698	36	0.91824	46	1.63522	82
19:00-20:00	0.71698	36	0.89937	45	1.61635	81
20:00-21:00	0.47799	24	0.66667	33	1.14466	57
21:00-22:00	0.18471	9	0.49045	25	0.67516	34
Daily Trip Rates:	8.60609	430	8.38352	419	16.98961	849

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)
Calculation Factor: 1 hect
Count Type: TAXIS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip

Time Range	Days	AREA	Rate	Days	AREA	Rate	Days	AREA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	0.07	0	1	0.07	0	1	0.07	0
06:00-07:0	6	0.27	0	6	0.27	0	6	0.27	0
07:00-08:0	6	0.27	0.629	6	0.27	0.629	6	0.27	1.258
08:00-09:0	6	0.27	0.629	6	0.27	0.629	6	0.27	1.258
09:00-10:0	6	0.27	0.629	6	0.27	0.629	6	0.27	1.258
10:00-11:0	6	0.27	1.887	6	0.27	1.887	6	0.27	3.774
11:00-12:0	6	0.27	1.887	6	0.27	1.887	6	0.27	3.774
12:00-13:0	6	0.27	2.516	6	0.27	1.887	6	0.27	4.403
13:00-14:0	6	0.27	2.516	6	0.27	3.145	6	0.27	5.661
14:00-15:0	6	0.27	0.629	6	0.27	0.629	6	0.27	1.258
15:00-16:0	6	0.27	0	6	0.27	0	6	0.27	0
16:00-17:0	6	0.27	0	6	0.27	0	6	0.27	0
17:00-18:0	6	0.27	1.887	6	0.27	1.887	6	0.27	3.774
18:00-19:0	6	0.27	0	6	0.27	0	6	0.27	0
19:00-20:0	6	0.27	0.629	6	0.27	0.629	6	0.27	1.258
20:00-21:0	6	0.27	0.629	6	0.27	0.629	6	0.27	1.258
21:00-22:0	5	0.31	0	5	0.31	0	5	0.31	0
22:00-23:0	4	0.27	0	4	0.27	0	4	0.27	0
23:00-24:00									
Daily Trip Rates:			14.467			14.467			28.934

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)
Calculation Factor: 1 hect
Count Type: CYCLISTS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	AREA	Rate	Days	AREA	Rate	Days	AREA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	0.07	0	1	0.07	0	1	0.07	0
06:00-07:0	6	0.27	0.629	6	0.27	0	6	0.27	0.629
07:00-08:0	6	0.27	1.887	6	0.27	0	6	0.27	1.887
08:00-09:0	6	0.27	4.403	6	0.27	3.145	6	0.27	7.548
09:00-10:0	6	0.27	4.403	6	0.27	3.774	6	0.27	8.177
10:00-11:0	6	0.27	3.145	6	0.27	4.403	6	0.27	7.548
11:00-12:0	6	0.27	5.031	6	0.27	6.289	6	0.27	11.32
12:00-13:0	6	0.27	2.516	6	0.27	1.887	6	0.27	4.403
13:00-14:0	6	0.27	3.774	6	0.27	4.403	6	0.27	8.177
14:00-15:0	6	0.27	3.145	6	0.27	2.516	6	0.27	5.661
15:00-16:0	6	0.27	6.289	6	0.27	3.774	6	0.27	10.063
16:00-17:0	6	0.27	3.774	6	0.27	5.031	6	0.27	8.805
17:00-18:0	6	0.27	6.918	6	0.27	6.289	6	0.27	13.207
18:00-19:0	6	0.27	4.403	6	0.27	3.774	6	0.27	8.177
19:00-20:0	6	0.27	0	6	0.27	2.516	6	0.27	2.516
20:00-21:0	6	0.27	0.629	6	0.27	1.887	6	0.27	2.516
21:00-22:0	5	0.31	4.459	5	0.31	1.911	5	0.31	6.37
22:00-23:0	4	0.27	0.935	4	0.27	3.738	4	0.27	4.673
23:00-24:00									
Daily Trip Rates:			56.34			55.337			111.677

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)
Calculation Factor: 1 hect
Count Type: VEHICLE OCCUPANTS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	AREA	Rate	Days	AREA	Rate	Days	AREA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	0.07	28.571	1	0.07	0	1	0.07	28.571
06:00-07:0	6	0.27	40.252	6	0.27	14.465	6	0.27	54.717
07:00-08:0	6	0.27	52.201	6	0.27	35.849	6	0.27	88.05
08:00-09:0	6	0.27	47.17	6	0.27	38.994	6	0.27	86.164
09:00-10:0	6	0.27	104.403	6	0.27	37.107	6	0.27	141.51
10:00-11:0	6	0.27	68.553	6	0.27	74.843	6	0.27	143.396
11:00-12:0	6	0.27	54.717	6	0.27	52.83	6	0.27	107.547
12:00-13:0	6	0.27	50.314	6	0.27	50.314	6	0.27	100.628
13:00-14:0	6	0.27	51.572	6	0.27	52.201	6	0.27	103.773
14:00-15:0	6	0.27	55.975	6	0.27	50.314	6	0.27	106.289
15:00-16:0	6	0.27	72.327	6	0.27	73.585	6	0.27	145.912
16:00-17:0	6	0.27	92.453	6	0.27	76.101	6	0.27	168.554
17:00-18:0	6	0.27	120.755	6	0.27	103.145	6	0.27	223.9
18:00-19:0	6	0.27	89.308	6	0.27	118.239	6	0.27	207.547
19:00-20:0	6	0.27	86.792	6	0.27	116.981	6	0.27	203.773
20:00-21:0	6	0.27	56.604	6	0.27	86.164	6	0.27	142.768
21:00-22:0	5	0.31	22.293	5	0.31	57.325	5	0.31	79.618
22:00-23:0	4	0.27	4.673	4	0.27	50.467	4	0.27	55.14
23:00-24:00									
Daily Trip Rates:			1098.933			1088.924			2187.857

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)
Calculation Factor: 1 hect
Count Type: PEDESTRIANS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	AREA	Rate	Days	AREA	Rate	Days	AREA	Rate

Floor Area **5000** 0.5

Time Range	ARRIVALS Trip Rate		DEPARTURES Trip Rate		TOTALS Trip Rate	
06:00-07:00	0.629	0	0	0	0.629	0
07:00-08:00	1.887	1	0	0	1.887	1
08:00-09:00	4.403	2	3.145	2	7.548	4
09:00-10:00	4.403	2	3.774	2	8.177	4
10:00-11:00	3.145	2	4.403	2	7.548	4
11:00-12:00	5.031	3	6.289	3	11.32	6
12:00-13:00	2.516	1	1.887	1	4.403	2
13:00-14:00	3.774	2	4.403	2	8.177	4
14:00-15:00	3.145	2	2.516	1	5.661	3
15:00-16:00	6.289	3	3.774	2	10.063	5
16:00-17:00	3.774	2	5.031	3	8.805	4
17:00-18:00	6.918	3	6.289	3	13.207	7
18:00-19:00	4.403	2	3.774	2	8.177	4
19:00-20:00	0	0	2.516	1	2.516	1
20:00-21:00	0.629	0	1.887	1	2.516	1
21:00-22:00	4.459	2	1.911	1	6.37	3
Daily Trip Rates:	55.405	28	51.599	26	107.004	54

00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	0.07	0	1	0.07	0	1	0.07	0
06:00-07:0	6	0.27	1.887	6	0.27	1.887	6	0.27	3.774
07:00-08:0	6	0.27	9.434	6	0.27	1.887	6	0.27	11.321
08:00-09:0	6	0.27	8.805	6	0.27	16.352	6	0.27	25.157
09:00-10:0	6	0.27	13.208	6	0.27	18.868	6	0.27	32.076
10:00-11:0	6	0.27	27.044	6	0.27	11.95	6	0.27	38.994
11:00-12:0	6	0.27	18.868	6	0.27	26.415	6	0.27	45.283
12:00-13:0	6	0.27	23.27	6	0.27	17.61	6	0.27	40.88
13:00-14:0	6	0.27	20.126	6	0.27	20.126	6	0.27	40.252
14:00-15:0	6	0.27	23.27	6	0.27	10.692	6	0.27	33.962
15:00-16:0	6	0.27	16.981	6	0.27	24.528	6	0.27	41.509
16:00-17:0	6	0.27	19.497	6	0.27	16.981	6	0.27	36.478
17:00-18:0	6	0.27	21.384	6	0.27	19.497	6	0.27	40.881
18:00-19:0	6	0.27	15.723	6	0.27	17.61	6	0.27	33.333
19:00-20:0	6	0.27	14.465	6	0.27	22.013	6	0.27	36.478
20:00-21:0	6	0.27	8.805	6	0.27	13.836	6	0.27	22.641
21:00-22:0	5	0.31	0	5	0.31	1.911	5	0.31	1.911
22:00-23:0	4	0.27	4.673	4	0.27	3.738	4	0.27	8.411
23:00-24:00									
Daily Trip Rates:			247.44			245.901			493.341

06:00-07:00	1.887	1	1.887	1	3.774	2			
07:00-08:00	9.434	5	1.887	1	11.321	6			
08:00-09:00	8.805	4	16.352	8	25.157	13			
09:00-10:00	13.208	7	18.868	9	32.076	16			
10:00-11:00	27.044	14	11.95	6	38.994	19			
11:00-12:00	18.868	9	26.415	13	45.283	23			
12:00-13:00	23.27	12	17.61	9	40.88	20			
13:00-14:00	20.126	10	20.126	10	40.252	20			
14:00-15:00	23.27	12	10.692	5	33.962	17			
15:00-16:00	16.981	8	24.528	12	41.509	21			
16:00-17:00	19.497	10	16.981	8	36.478	18			
17:00-18:00	21.384	11	19.497	10	40.881	20			
18:00-19:00	15.723	8	17.61	9	33.333	17			
19:00-20:00	14.465	7	22.013	11	36.478	18			
20:00-21:00	8.805	4	13.836	7	22.641	11			
21:00-22:00	0	0	1.911	1	1.911	1			
Daily Trip Rates:	242.767	121	242.163	121	484.93	242			

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)
Calculation Factor: 1 hect
Count Type: BUS/TRAM PASSENGERS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	AREA	Rate	Days	AREA	Rate	Days	AREA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	0.07	0	1	0.07	0	1	0.07	0
06:00-07:0	6	0.27	0.629	6	0.27	0	6	0.27	0.629
07:00-08:0	6	0.27	1.258	6	0.27	0.629	6	0.27	1.887
08:00-09:0	6	0.27	2.516	6	0.27	6.918	6	0.27	9.434
09:00-10:0	6	0.27	2.516	6	0.27	3.145	6	0.27	5.661
10:00-11:0	6	0.27	11.95	6	0.27	2.516	6	0.27	14.466
11:00-12:0	6	0.27	1.887	6	0.27	7.547	6	0.27	9.434
12:00-13:0	6	0.27	1.887	6	0.27	1.258	6	0.27	3.145
13:00-14:0	6	0.27	2.516	6	0.27	1.887	6	0.27	4.403
14:00-15:0	6	0.27	3.774	6	0.27	0.629	6	0.27	4.403
15:00-16:0	6	0.27	3.145	6	0.27	2.516	6	0.27	5.661
16:00-17:0	6	0.27	2.516	6	0.27	3.145	6	0.27	5.661
17:00-18:0	6	0.27	2.516	6	0.27	0.629	6	0.27	3.145
18:00-19:0	6	0.27	5.66	6	0.27	1.887	6	0.27	7.547
19:00-20:0	6	0.27	3.774	6	0.27	6.289	6	0.27	10.063
20:00-21:0	6	0.27	1.258	6	0.27	2.516	6	0.27	3.774
21:00-22:0	5	0.31	0	5	0.31	1.274	5	0.31	1.274
22:00-23:0	4	0.27	0	4	0.27	1.869	4	0.27	1.869
23:00-24:00									
Daily Trip Rates:			47.802			44.654			92.456

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)
Calculation Factor: 1 hect
Count Type: TOTAL RAIL PASSENGERS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	AREA	Rate	Days	AREA	Rate	Days	AREA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	0.07	0	1	0.07	0	1	0.07	0
06:00-07:0	6	0.27	0	6	0.27	0	6	0.27	0
07:00-08:0	6	0.27	0	6	0.27	0	6	0.27	0
08:00-09:0	6	0.27	0.629	6	0.27	0.629	6	0.27	1.258
09:00-10:0	6	0.27	0.629	6	0.27	0	6	0.27	0.629
10:00-11:0	6	0.27	1.258	6	0.27	0	6	0.27	1.258
11:00-12:0	6	0.27	1.258	6	0.27	1.258	6	0.27	2.516
12:00-13:0	6	0.27	0.629	6	0.27	0.629	6	0.27	1.258
13:00-14:0	6	0.27	1.258	6	0.27	1.258	6	0.27	2.516
14:00-15:0	6	0.27	0.629	6	0.27	0	6	0.27	0.629
15:00-16:0	6	0.27	0	6	0.27	1.258	6	0.27	1.258
16:00-17:0	6	0.27	0	6	0.27	0	6	0.27	0
17:00-18:0	6	0.27	0.629	6	0.27	0.629	6	0.27	1.258
18:00-19:0	6	0.27	0	6	0.27	0.629	6	0.27	0.629
19:00-20:0	6	0.27	0	6	0.27	1.258	6	0.27	1.258
20:00-21:0	6	0.27	0	6	0.27	0.629	6	0.27	0.629
21:00-22:0	5	0.31	0	5	0.31	0	5	0.31	0
22:00-23:0	4	0.27	0	4	0.27	0.935	4	0.27	0.935
23:00-24:00									
Daily Trip Rates:			6.919			9.112			16.031

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)
Calculation Factor: 1 hect
Count Type: PUBLIC TRANSPORT USERS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	AREA	Rate	Days	AREA	Rate	Days	AREA	Rate
00:00-01:00									

Floor Area **5000** 0.5

	ARRIVALS	DEPARTURES	TOTALS
	Trip	Trip	Trip
Time Range	Rate	Rate	Rate
06:00-07:00	0.629 0	0 0	0.629 0

01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	0.07	0	1	0.07	0	1	0.07	0
06:00-07:0	6	0.27	0.629	6	0.27	0	6	0.27	0.629
07:00-08:0	6	0.27	1.258	6	0.27	0.629	6	0.27	1.887
08:00-09:0	6	0.27	3.145	6	0.27	7.547	6	0.27	10.692
09:00-10:0	6	0.27	3.145	6	0.27	3.145	6	0.27	6.29
10:00-11:0	6	0.27	13.208	6	0.27	2.516	6	0.27	15.724
11:00-12:0	6	0.27	3.145	6	0.27	8.805	6	0.27	11.95
12:00-13:0	6	0.27	2.516	6	0.27	1.887	6	0.27	4.403
13:00-14:0	6	0.27	3.774	6	0.27	3.145	6	0.27	6.919
14:00-15:0	6	0.27	4.403	6	0.27	0.629	6	0.27	5.032
15:00-16:0	6	0.27	3.145	6	0.27	3.774	6	0.27	6.919
16:00-17:0	6	0.27	2.516	6	0.27	3.145	6	0.27	5.661
17:00-18:0	6	0.27	3.145	6	0.27	1.258	6	0.27	4.403
18:00-19:0	6	0.27	5.66	6	0.27	2.516	6	0.27	8.176
19:00-20:0	6	0.27	3.774	6	0.27	7.547	6	0.27	11.321
20:00-21:0	6	0.27	1.258	6	0.27	3.145	6	0.27	4.403
21:00-22:0	5	0.31	0	5	0.31	1.274	5	0.31	1.274
22:00-23:0	4	0.27	0	4	0.27	2.804	4	0.27	2.804
23:00-24:00									
Daily Trip Rates:			54.721			53.766			108.487

07:00-08:00	1.258	1	0.629	0	1.887	1
08:00-09:00	3.145	2	7.547	4	10.692	5
09:00-10:00	3.145	2	3.145	2	6.29	3
10:00-11:00	13.208	7	2.516	1	15.724	8
11:00-12:00	3.145	2	8.805	4	11.95	6
12:00-13:00	2.516	1	1.887	1	4.403	2
13:00-14:00	3.774	2	3.145	2	6.919	3
14:00-15:00	4.403	2	0.629	0	5.032	3
15:00-16:00	3.145	2	3.774	2	6.919	3
16:00-17:00	2.516	1	3.145	2	5.661	3
17:00-18:00	3.145	2	1.258	1	4.403	2
18:00-19:00	5.66	3	2.516	1	8.176	4
19:00-20:00	3.774	2	7.547	4	11.321	6
20:00-21:00	1.258	1	3.145	2	4.403	2
21:00-22:00	0	0	1.274	1	1.274	1
Daily Trip Rates:	54.721	27	50.962	25	105.683	53

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)
Calculation Factor: 1 hect
Count Type: TOTAL PEOPLE

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	AREA	Rate	Days	AREA	Rate	Days	AREA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	0.07	28.571	1	0.07	0	1	0.07	28.571
06:00-07:0	6	0.27	43.396	6	0.27	16.352	6	0.27	59.748
07:00-08:0	6	0.27	64.78	6	0.27	38.365	6	0.27	103.145
08:00-09:0	6	0.27	63.522	6	0.27	66.038	6	0.27	129.56
09:00-10:0	6	0.27	125.157	6	0.27	62.893	6	0.27	188.05
10:00-11:0	6	0.27	111.95	6	0.27	93.711	6	0.27	205.661
11:00-12:0	6	0.27	81.761	6	0.27	94.34	6	0.27	176.101
12:00-13:0	6	0.27	78.616	6	0.27	71.698	6	0.27	150.314
13:00-14:0	6	0.27	79.245	6	0.27	79.874	6	0.27	159.119
14:00-15:0	6	0.27	86.792	6	0.27	64.151	6	0.27	150.943
15:00-16:0	6	0.27	98.742	6	0.27	105.66	6	0.27	204.402
16:00-17:0	6	0.27	118.239	6	0.27	101.258	6	0.27	219.497
17:00-18:0	6	0.27	152.201	6	0.27	130.189	6	0.27	282.39
18:00-19:0	6	0.27	115.094	6	0.27	142.138	6	0.27	257.232
19:00-20:0	6	0.27	105.031	6	0.27	149.057	6	0.27	254.088
20:00-21:0	6	0.27	67.296	6	0.27	105.031	6	0.27	172.327
21:00-22:0	5	0.31	26.752	5	0.31	62.42	5	0.31	89.172
22:00-23:0	4	0.27	10.28	4	0.27	60.748	4	0.27	71.028
23:00-24:00									
Daily Trip Rates:			1457.425			1443.923			2901.348

Floor Area	**5000**	0.5				
	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate		Rate		Rate	
06:00-07:00	111.95	56	93.711	47	205.661	103
07:00-08:00	81.761	41	94.34	47	176.101	88
08:00-09:00	78.616	39	71.698	36	150.314	75
09:00-10:00	79.245	40	79.874	40	159.119	80
10:00-11:00	86.792	43	64.151	32	150.943	75
11:00-12:00	98.742	49	105.66	53	204.402	102
12:00-13:00	118.239	59	101.258	51	219.497	110
13:00-14:00	152.201	76	130.189	65	282.39	141
14:00-15:00	115.094	58	142.138	71	257.232	129
15:00-16:00	105.031	53	149.057	75	254.088	127
16:00-17:00	67.296	34	105.031	53	172.327	86
17:00-18:00	26.752	13	62.42	31	89.172	45
18:00-19:00	10.28	5	60.748	30	71.028	36
19:00-20:00	0	0	0	0	0	0
20:00-21:00	1457.425	729	1443.923	722	2901.348	1451
21:00-22:00	0	0	0	0	0	0
Daily Trip Rates:	2589.424	1295	2704.198	1352	5293.622	2647

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)
Calculation Factor: 1 hect
Count Type: CARS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	AREA	Rate	Days	AREA	Rate	Days	AREA	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:0	1	0.07	28.571	1	0.07	0	1	0.07	28.571
06:00-07:0	6	0.27	37.736	6	0.27	11.95	6	0.27	49.686
07:00-08:0	6	0.27	44.654	6	0.27	33.333	6	0.27	77.987
08:00-09:0	6	0.27	36.478	6	0.27	33.962	6	0.27	70.44
09:00-10:0	6	0.27	75.472	6	0.27	29.56	6	0.27	105.032
10:00-11:0	6	0.27	49.057	6	0.27	61.006	6	0.27	110.063
11:00-12:0	6	0.27	40.881	6	0.27	41.509	6	0.27	82.39
12:00-13:0	6	0.27	35.849	6	0.27	35.22	6	0.27	71.069
13:00-14:0	6	0.27	37.736	6	0.27	38.365	6	0.27	76.101
14:00-15:0	6	0.27	40.881	6	0.27	38.994	6	0.27	79.875
15:00-16:0	6	0.27	57.233	6	0.27	51.572	6	0.27	108.805
16:00-17:0	6	0.27	72.956	6	0.27	55.346	6	0.27	128.302
17:00-18:0	6	0.27	84.277	6	0.27	75.472	6	0.27	159.749
18:00-19:0	6	0.27	69.811	6	0.27	89.308	6	0.27	159.119
19:00-20:0	6	0.27	68.553	6	0.27	88.05	6	0.27	156.603
20:00-21:0	6	0.27	47.17	6	0.27	61.635	6	0.27	108.805
21:00-22:0	5	0.31	18.471	5	0.31	47.771	5	0.31	66.242
22:00-23:0	4	0.27	4.673	4	0.27	38.318	4	0.27	42.991
23:00-24:00									
Daily Trip Rates:			850.459			831.371			1681.83

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)
Calculation Factor: 1 hect
Count Type: LGVS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	AREA	Rate	Days	AREA	Rate	Days	AREA	Rate
00:00-01:00									
01:00-02:00									

TRICS 7.11.4
Trip Rate P: No of Dwellings

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

2	SOUTH EAST	
	ES	EAST SUSS 6 days
	EX	ESSEX 1 days
	HC	HAMPSHIR 6 days
	HF	HERTFORD 2 days
	KC	KENT 7 days
	SC	SURREY 3 days
	SP	SOUTHAMI 1 days
	WB	WEST BERK 1 days
	WS	WEST SUS: 8 days
3	SOUTH WEST	
	DC	DORSET 1 days
4	EAST ANGLIA	
	NF	NORFOLK 13 days
5	EAST MIDLANDS	
	DY	DERBY 1 days
6	WEST MIDLANDS	
	ST	STAFFORD 1 days
9	NORTH	
	DH	DURHAM 1 days
	IM	ISLE OF MA 2 days

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

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.
Parameter: No of Dwellings
Actual Ran: 105 to 1817 (units:)
Range Sele 100 to 1817 (units:)

Public Transport Provision:
Selection b Include all surveys

Date Range 01/01/16 to 28/06/24

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.
Selected survey days:
Monday 8 days
Tuesday 22 days
Wednesda 11 days
Thursday 11 days
Friday 2 days
This data displays the number of selected surveys by day of the week.

Selected survey types:
Manual cou 54 days
Directional 0 days
This data di the total ac whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centr	0
Edge of Tov	0
Suburban A	2
Edge of Tov	41
Neighbourh	11
Free Standi	0
Not Known	0

This data di Edge of To Suburban A Neighbourh Edge of To Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Z	0
Commerci	0
Developme	0
Residential	40
Retail Zone	0
Built-Up Zo	0
Village	10
Out of Tow	2
High Street	0
No Sub Cat	2

This data di Industrial Z Developm Residential Retail Zone Built-Up Zo Village Out of Tow High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	54 days

This data di which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Population within 1 mile:

1,001 to 5,	10 days
5,001 to 1(	13 days
10,001 to 1	14 days
15,001 to 2	10 days
20,001 to 2	6 days
25,001 to 5	1 days

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

Population within 5 miles:

5,001 to 2	8 days
25,001 to 5	10 days
50,001 to 7	5 days
75,001 to 1	7 days
100,001 to	4 days
125,001 to	16 days
250,001 to	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	12 days
1.1 to 1.5	36 days
1.6 to 2.0	6 days

This data di within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	42 days
No	12 days

This data di and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Pr	54 days

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

LIST OF SITES relevant to selection parameters

1 DC-03-A-1: MIXED HOL DORSET
A350

SHAFTESBURY
Edge of Town
No Sub Category
Total No of Dwellings: 141
Survey date TUESDAY 31/10/2023 Survey Type MANUAL

2 DH-03-A-0: MIXED HOL DURHAM

LEAZES LANE
ST HELEN AUCKLAND
BISHOP AUCKLAND
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 125
Survey date MONDAY 27/03/2017 Survey Type MANUAL

3 DY-03-A-01 MIXED HOU DERBY
RADBOURNE LANE

DERBY
Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date TUESDAY 10/07/2018 Survey Type MANUAL

4 ES-03-A-03 MIXED HOU EAST SUSSEX
SHEPHAM LANE

POLEGATE
Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date MONDAY 11/07/2016 Survey Type MANUAL

5 ES-03-A-08 MIXED HOU EAST SUSSEX
WRESTWOOD ROAD

BEXHILL
Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date WEDNESDA 12/10/2022 Survey Type MANUAL

6 ES-03-A-10 MIXED HOU EAST SUSSEX
WATERGATE

BEXHILL-ON-SEA
Edge of Town
Residential Zone
Total No of Dwellings: 139
Survey date THURSDAY 28/09/2023 Survey Type MANUAL

7 ES-03-A-11 MIXED HOU EAST SUSSEX
BISHOPS LANE

RINGMER
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 105
Survey date THURSDAY 28/09/2023 Survey Type MANUAL

8 ES-03-A-12 MIXED HOU EAST SUSSEX
HOREBEECH LANE

HORAM
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 123
Survey date TUESDAY 03/10/2023 Survey Type MANUAL

9 ES-03-A-14 MIXED HOU EAST SUSSEX
RATTLE ROAD
STONE CROSS
NEAR EASTBOURNE
Edge of Town
Residential Zone
Total No of Dwellings: 120
Survey date TUESDAY 30/04/2024 Survey Type MANUAL

10 EX-03-A-03 MIXED HOU ESSEX
KESTREL GROVE

RAYLEIGH
Edge of Town

	Residential Zone					
	Total No of Dwellings:	123				
	Survey date	MONDAY	27/09/2021	Survey Type	MANUAL	
11	HC-03-A-2	MIXED HOU	HAMPSHIRE			
	EAGLE AVENUE					
	LOVEDEAN					
	WATERLOOVILLE					
	Edge of Town					
	Residential Zone					
	Total No of Dwellings:	125				
	Survey date	MONDAY	08/11/2021	Survey Type	MANUAL	
12	HC-03-A-3	MIXED HOU	HAMPSHIRE			
	GREEN LANE					
	WEYBOURNE					
	FARNHAM					
	Neighbourhood Centre (PPS6 Local Centre)					
	Residential Zone					
	Total No of Dwellings:	105				
	Survey date	THURSDAY	29/06/2023	Survey Type	MANUAL	
13	HC-03-A-3	MIXED HOU	HAMPSHIRE			
	STONEHAM LANE					
	EASTLEIGH					
	Edge of Town					
	Residential Zone					
	Total No of Dwellings:	243				
	Survey date	TUESDAY	14/11/2023	Survey Type	MANUAL	
14	HC-03-A-3	MIXED HOU	HAMPSHIRE			
	EAGLE AVENUE					
	LOVEDEAN					
	WATERLOOVILLE					
	Edge of Town					
	Residential Zone					
	Total No of Dwellings:	289				
	Survey date	TUESDAY	31/10/2023	Survey Type	MANUAL	
15	HC-03-A-3	MIXED HOU	HAMPSHIRE			
	HAVANT ROAD					
	EMSWORTH					
	Edge of Town					
	Residential Zone					
	Total No of Dwellings:	145				
	Survey date	TUESDAY	12/09/2023	Survey Type	MANUAL	
16	HC-03-A-3	MIXED HOU	HAMPSHIRE			
	CROW LANE					
	CROW					
	RINGWOOD					
	Edge of Town					
	Residential Zone					
	Total No of Dwellings:	195				
	Survey date	WEDNESD	26/06/2024	Survey Type	MANUAL	
17	HF-03-A-0	MIXED HOU	HERTFORDSHIRE			
	HARE STREET ROAD					
	BUNTINGFORD					
	Edge of Town					
	Residential Zone					
	Total No of Dwellings:	160				
	Survey date	MONDAY	08/07/2019	Survey Type	MANUAL	
18	HF-03-A-0	MIXED HOU	HERTFORDSHIRE			
	A505					
	ROYSTON					
	Edge of Town					
	Residential Zone					
	Total No of Dwellings:	180				
	Survey date	TUESDAY	28/11/2023	Survey Type	MANUAL	
19	IM-03-A-03	MIXED HOU	ISLE OF MAN			

MAIN ROAD

COLBY
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 111
Survey date TUESDAY 21/05/2024 Survey Type MANUAL

20 IM-03-A-06 MIXED HOU ISLE OF MAN
MOORAGH PROMENADE

RAMSEY
Edge of Town
Residential Zone
Total No of Dwellings: 129
Survey date THURSDAY 23/05/2024 Survey Type MANUAL

21 KC-03-A-04 SEMI-DETA KENT
KILN BARN ROAD
DITTON
AYLESFORD
Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date FRIDAY 22/09/2017 Survey Type MANUAL

22 KC-03-A-0(MIXED HOU KENT
MARGATE ROAD

HERNE BAY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date WEDNESD/ 27/09/2017 Survey Type MANUAL

23 KC-03-A-07 MIXED HOU KENT
RECULVER ROAD

HERNE BAY
Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date WEDNESD/ 27/09/2017 Survey Type MANUAL

24 KC-03-A-0(MIXED HOU KENT
MAIDSTONE ROAD

CHARING
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 159
Survey date TUESDAY 22/05/2018 Survey Type MANUAL

25 KC-03-A-1(MIXED HOU KENT
HEADCORN ROAD

STAPLEHURST
Edge of Town
Residential Zone
Total No of Dwellings: 106
Survey date TUESDAY 09/05/2023 Survey Type MANUAL

26 KC-03-A-11 MIXED HOU KENT
COLDHARBOUR ROAD

GRAVESEND
Edge of Town
No Sub Category
Total No of Dwellings: 375
Survey date MONDAY 20/03/2023 Survey Type MANUAL

27 KC-03-A-12 MIXED HOU KENT
WESTERN LINK
DAVINGTON
FAVERSHAM
Edge of Town

Residential Zone
Total No of Dwellings: 186
Survey date TUESDAY 19/09/2023 Survey Type MANUAL

28 NF-03-A-06 MIXED HOU NORFOLK
BEAUFORT WAY
BRADWELL
GREAT YARMOUTH
Edge of Town
Residential Zone
Total No of Dwellings: 275
Survey date MONDAY 23/09/2019 Survey Type MANUAL

29 NF-03-A-08 MIXED HOU NORFOLK
SIR ALFRED MUNNINGS RD
COSTESSEY
NEAR NORWICH
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 1817
Survey date THURSDAY 19/09/2019 Survey Type MANUAL

30 NF-03-A-09 MIXED HOU NORFOLK
ROUND HOUSE WAY
CRINGLEFORD
NORWICH
Edge of Town
Residential Zone
Total No of Dwellings: 984
Survey date TUESDAY 24/09/2019 Survey Type MANUAL

31 NF-03-A-23 MIXED HOU NORFOLK
SILFIELD ROAD

WYMONDHAM
Edge of Town
Out of Town
Total No of Dwellings: 514
Survey date WEDNESDA 22/09/2021 Survey Type MANUAL

32 NF-03-A-28 MIXED HOU NORFOLK
ATLANTIC AVENUE
SPROWSTON
NORWICH
Edge of Town
Residential Zone
Total No of Dwellings: 1146
Survey date THURSDAY 22/09/2022 Survey Type MANUAL

33 NF-03-A-30 MIXED HOU NORFOLK
BRANDON ROAD

SWAFFHAM
Edge of Town
Residential Zone
Total No of Dwellings: 266
Survey date THURSDAY 23/09/2021 Survey Type MANUAL

34 NF-03-A-33 MIXED HOU NORFOLK
LONDON ROAD

ATTLEBOROUGH
Edge of Town
Residential Zone
Total No of Dwellings: 143
Survey date THURSDAY 29/09/2022 Survey Type MANUAL

35 NF-03-A-35 MIXED HOU NORFOLK
REPTON AVENUE

NORWICH
Edge of Town
Residential Zone
Total No of Dwellings: 116
Survey date WEDNESDA 28/09/2022 Survey Type MANUAL

36 NF-03-A-38 MIXED HOU NORFOLK

BEAUFORT WAY
BRADWELL
GREAT YARMOUTH
Edge of Town
Residential Zone
Total No of Dwellings: 537
Survey date TUESDAY 20/09/2022 Survey Type MANUAL
37 NF-03-A-3 MIXED HOL NORFOLK
HEATH DRIVE

HOLT
Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date TUESDAY 27/09/2022 Survey Type MANUAL
38 NF-03-A-4 MIXED HOL NORFOLK
MILL LANE
HORSFORD
NEAR NORWICH
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 125
Survey date WEDNESD 15/09/2021 Survey Type MANUAL
39 NF-03-A-4 MIXED HOL NORFOLK
BURGH ROAD

AYLSHAM
Edge of Town
Residential Zone
Total No of Dwellings: 300
Survey date TUESDAY 14/09/2021 Survey Type MANUAL
40 NF-03-A-5 MIXED HOL NORFOLK
LYNNSPORT WAY

KING'S LYNN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 130
Survey date TUESDAY 07/11/2023 Survey Type MANUAL
41 SC-03-A-0 MIXED HOL SURREY
REIGATE ROAD

HORLEY
Edge of Town
Residential Zone
Total No of Dwellings: 790
Survey date WEDNESD 04/05/2022 Survey Type MANUAL
42 SC-03-A-0 MIXED HOL SURREY
AMLETS LANE

CRANLEIGH
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 136
Survey date TUESDAY 24/05/2022 Survey Type MANUAL
43 SC-03-A-1 MIXED HOL SURREY
AARONS HILL

GODALMING
Edge of Town
Residential Zone
Total No of Dwellings: 252
Survey date WEDNESD 12/06/2024 Survey Type MANUAL
44 SP-03-A-02 MIXED HOL SOUTHAMPTON
BARNFIELD WAY
HEDGE END
NEAR SOUTHAMPTON
Edge of Town

Out of Town
Total No of Dwellings: 250
Survey date TUESDAY 12/10/2021 Survey Type MANUAL
45 ST-03-A-07 DETACHED STAFFORDSHIRE
BEACONSIDE
MARSTON GATE
STAFFORD
Edge of Town
Residential Zone
Total No of Dwellings: 248
Survey date WEDNESDA 22/11/2017 Survey Type MANUAL
46 WB-03-A-0 MIXED HOU WEST BERKSHIRE
DORKING WAY
CALCOT
READING
Edge of Town
Residential Zone
Total No of Dwellings: 108
Survey date FRIDAY 09/09/2022 Survey Type MANUAL
47 WS-03-A-0 MIXED HOU WEST SUSSEX
ROUNDSTONE LANE
ANGMERING
Edge of Town
Residential Zone
Total No of Dwellings: 180
Survey date THURSDAY 19/04/2018 Survey Type MANUAL
48 WS-03-A-1 MIXED HOU WEST SUSSEX
ELLIS ROAD
S BROADBRIDGE HEATH
WEST HORSHAM
Edge of Town
Residential Zone
Total No of Dwellings: 918
Survey date TUESDAY 02/04/2019 Survey Type MANUAL
49 WS-03-A-1 MIXED HOU WEST SUSSEX
TODDINGTON LANE
WICK
LITTLEHAMPTON
Edge of Town
Residential Zone
Total No of Dwellings: 117
Survey date WEDNESDA 20/10/2021 Survey Type MANUAL
50 WS-03-A-1 MIXED HOU WEST SUSSEX
LONDON ROAD

HASSOCKS
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 156
Survey date MONDAY 15/05/2023 Survey Type MANUAL
51 WS-03-A-2 MIXED HOU WEST SUSSEX
HILLAND ROAD

BILLINGSHURST
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 480
Survey date THURSDAY 09/11/2023 Survey Type MANUAL
52 WS-03-A-2 MIXED HOU WEST SUSSEX
SHOPWHYKE ROAD

CHICHESTER
Edge of Town
Residential Zone
Total No of Dwellings: 129
Survey date TUESDAY 19/03/2024 Survey Type MANUAL
53 WS-03-A-2 MIXED HOU WEST SUSSEX

TURNERS HILL ROAD

EAST GRINSTEAD
Edge of Town
Residential Zone
Total No of Dwellings: 197
Survey date TUESDAY 14/05/2024 Survey Type MANUAL

54 WS-03-A-2 MIXED HOU WEST SUSSEX
MADGWICK LANE
WESTHAMPNETT
CHICHESTER
Edge of Town
Village
Total No of Dwellings: 300
Survey date THURSDAY 23/05/2024 Survey Type MANUAL

This section it displays the selecte the day of th and whether the survey was a manual classified count or an ATC count.

Manually Deselected Sites

Site Ref	Reason for Deselection
HC-03-A-2(	Covid-19
SF-03-A-09	Covid-19
SF-03-A-10	Covid-19
WS-03-A-1:	Covid-19

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: TOTAL VEHICLES

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.069	54	290	0.293	54	290	0.362
08:00-09:0	54	290	0.138	54	290	0.362	54	290	0.5
09:00-10:0	54	290	0.127	54	290	0.154	54	290	0.281
10:00-11:0	54	290	0.107	54	290	0.128	54	290	0.235
11:00-12:0	54	290	0.114	54	290	0.121	54	290	0.235
12:00-13:0	54	290	0.134	54	290	0.129	54	290	0.263
13:00-14:0	54	290	0.137	54	290	0.126	54	290	0.263
14:00-15:0	54	290	0.14	54	290	0.154	54	290	0.294
15:00-16:0	54	290	0.231	54	290	0.154	54	290	0.385
16:00-17:0	54	290	0.252	54	290	0.149	54	290	0.401
17:00-18:0	54	290	0.327	54	290	0.15	54	290	0.477
18:00-19:0	54	290	0.278	54	290	0.139	54	290	0.417
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			2.054			2.059			4.113

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: TAXIS

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00-01:00									

01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.002	54	290	0.002	54	290	0.004
08:00-09:0	54	290	0.006	54	290	0.006	54	290	0.012
09:00-10:0	54	290	0.002	54	290	0.002	54	290	0.004
10:00-11:0	54	290	0.001	54	290	0.002	54	290	0.003
11:00-12:0	54	290	0.001	54	290	0.001	54	290	0.002
12:00-13:0	54	290	0.002	54	290	0.002	54	290	0.004
13:00-14:0	54	290	0.002	54	290	0.001	54	290	0.003
14:00-15:0	54	290	0.002	54	290	0.002	54	290	0.004
15:00-16:0	54	290	0.004	54	290	0.004	54	290	0.008
16:00-17:0	54	290	0.003	54	290	0.003	54	290	0.006
17:00-18:0	54	290	0.003	54	290	0.003	54	290	0.006
18:00-19:0	54	290	0.002	54	290	0.002	54	290	0.004
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.03			0.03			0.06

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: OGVS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.001	54	290	0.001	54	290	0.002
08:00-09:0	54	290	0.002	54	290	0.001	54	290	0.003
09:00-10:0	54	290	0.002	54	290	0.002	54	290	0.004
10:00-11:0	54	290	0.002	54	290	0.002	54	290	0.004
11:00-12:0	54	290	0.002	54	290	0.002	54	290	0.004
12:00-13:0	54	290	0.002	54	290	0.002	54	290	0.004
13:00-14:0	54	290	0.001	54	290	0.002	54	290	0.003
14:00-15:0	54	290	0.002	54	290	0.001	54	290	0.003
15:00-16:0	54	290	0.001	54	290	0.002	54	290	0.003
16:00-17:0	54	290	0.001	54	290	0.001	54	290	0.002
17:00-18:0	54	290	0.001	54	290	0.001	54	290	0.002
18:00-19:0	54	290	0	54	290	0	54	290	0
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.017			0.017			0.034

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: PSVS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									

03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.001	54	290	0.001	54	290	0.002
08:00-09:0	54	290	0.001	54	290	0.001	54	290	0.002
09:00-10:0	54	290	0.001	54	290	0.001	54	290	0.002
10:00-11:0	54	290	0	54	290	0	54	290	0
11:00-12:0	54	290	0.001	54	290	0.001	54	290	0.002
12:00-13:0	54	290	0	54	290	0	54	290	0
13:00-14:0	54	290	0.001	54	290	0.001	54	290	0.002
14:00-15:0	54	290	0.001	54	290	0.001	54	290	0.002
15:00-16:0	54	290	0.001	54	290	0.001	54	290	0.002
16:00-17:0	54	290	0.001	54	290	0.001	54	290	0.002
17:00-18:0	54	290	0.001	54	290	0.001	54	290	0.002
18:00-19:0	54	290	0	54	290	0	54	290	0
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.009			0.009			0.018

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: CYCLISTS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.002	54	290	0.007	54	290	0.009
08:00-09:0	54	290	0.004	54	290	0.015	54	290	0.019
09:00-10:0	54	290	0.002	54	290	0.003	54	290	0.005
10:00-11:0	54	290	0.002	54	290	0.002	54	290	0.004
11:00-12:0	54	290	0.001	54	290	0.002	54	290	0.003
12:00-13:0	54	290	0.002	54	290	0.002	54	290	0.004
13:00-14:0	54	290	0.003	54	290	0.001	54	290	0.004
14:00-15:0	54	290	0.003	54	290	0.003	54	290	0.006
15:00-16:0	54	290	0.009	54	290	0.004	54	290	0.013
16:00-17:0	54	290	0.01	54	290	0.006	54	290	0.016
17:00-18:0	54	290	0.009	54	290	0.005	54	290	0.014
18:00-19:0	54	290	0.006	54	290	0.004	54	290	0.01
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.053			0.054			0.107

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: VEHICLE OCCUPANTS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									

05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.082	54	290	0.432	54	290	0.514
08:00-09:0	54	290	0.17	54	290	0.615	54	290	0.785
09:00-10:0	54	290	0.164	54	290	0.221	54	290	0.385
10:00-11:0	54	290	0.145	54	290	0.182	54	290	0.327
11:00-12:0	54	290	0.157	54	290	0.169	54	290	0.326
12:00-13:0	54	290	0.184	54	290	0.175	54	290	0.359
13:00-14:0	54	290	0.189	54	290	0.169	54	290	0.358
14:00-15:0	54	290	0.203	54	290	0.205	54	290	0.408
15:00-16:0	54	290	0.405	54	290	0.216	54	290	0.621
16:00-17:0	54	290	0.41	54	290	0.213	54	290	0.623
17:00-18:0	54	290	0.495	54	290	0.217	54	290	0.712
18:00-19:0	54	290	0.406	54	290	0.211	54	290	0.617
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			3.01			3.025			6.035

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: PEDESTRIANS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.013	54	290	0.036	54	290	0.049
08:00-09:0	54	290	0.028	54	290	0.085	54	290	0.113
09:00-10:0	54	290	0.026	54	290	0.025	54	290	0.051
10:00-11:0	54	290	0.017	54	290	0.019	54	290	0.036
11:00-12:0	54	290	0.02	54	290	0.02	54	290	0.04
12:00-13:0	54	290	0.023	54	290	0.021	54	290	0.044
13:00-14:0	54	290	0.022	54	290	0.021	54	290	0.043
14:00-15:0	54	290	0.025	54	290	0.028	54	290	0.053
15:00-16:0	54	290	0.073	54	290	0.033	54	290	0.106
16:00-17:0	54	290	0.044	54	290	0.025	54	290	0.069
17:00-18:0	54	290	0.036	54	290	0.029	54	290	0.065
18:00-19:0	54	290	0.032	54	290	0.025	54	290	0.057
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.359			0.367			0.726

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: BUS/TRAM PASSENGERS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									

07:00-08:0	54	290	0.001	54	290	0.019	54	290	0.02
08:00-09:0	54	290	0.003	54	290	0.026	54	290	0.029
09:00-10:0	54	290	0.003	54	290	0.009	54	290	0.012
10:00-11:0	54	290	0.003	54	290	0.006	54	290	0.009
11:00-12:0	54	290	0.005	54	290	0.006	54	290	0.011
12:00-13:0	54	290	0.004	54	290	0.004	54	290	0.008
13:00-14:0	54	290	0.005	54	290	0.004	54	290	0.009
14:00-15:0	54	290	0.007	54	290	0.005	54	290	0.012
15:00-16:0	54	290	0.021	54	290	0.005	54	290	0.026
16:00-17:0	54	290	0.018	54	290	0.003	54	290	0.021
17:00-18:0	54	290	0.013	54	290	0.003	54	290	0.016
18:00-19:0	54	290	0.009	54	290	0.003	54	290	0.012
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.092			0.093			0.185

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: TOTAL RAIL PASSENGERS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0	54	290	0.007	54	290	0.007
08:00-09:0	54	290	0	54	290	0.007	54	290	0.007
09:00-10:0	54	290	0	54	290	0.002	54	290	0.002
10:00-11:0	54	290	0.001	54	290	0.001	54	290	0.002
11:00-12:0	54	290	0.001	54	290	0.001	54	290	0.002
12:00-13:0	54	290	0.001	54	290	0.001	54	290	0.002
13:00-14:0	54	290	0.001	54	290	0.001	54	290	0.002
14:00-15:0	54	290	0.001	54	290	0.001	54	290	0.002
15:00-16:0	54	290	0.002	54	290	0	54	290	0.002
16:00-17:0	54	290	0.003	54	290	0	54	290	0.003
17:00-18:0	54	290	0.006	54	290	0	54	290	0.006
18:00-19:0	54	290	0.006	54	290	0	54	290	0.006
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.022			0.021			0.043

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: COACH PASSENGERS

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0	54	290	0	54	290	0
08:00-09:0	54	290	0	54	290	0.001	54	290	0.001

09:00-10:0	54	290	0	54	290	0	54	290	0
10:00-11:0	54	290	0	54	290	0	54	290	0
11:00-12:0	54	290	0	54	290	0	54	290	0
12:00-13:0	54	290	0	54	290	0	54	290	0
13:00-14:0	54	290	0	54	290	0	54	290	0
14:00-15:0	54	290	0	54	290	0	54	290	0
15:00-16:0	54	290	0.001	54	290	0	54	290	0.001
16:00-17:0	54	290	0	54	290	0	54	290	0
17:00-18:0	54	290	0	54	290	0	54	290	0
18:00-19:0	54	290	0	54	290	0	54	290	0
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.001			0.001			0.002

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: PUBLIC TRANSPORT USERS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.001	54	290	0.026	54	290	0.027
08:00-09:0	54	290	0.003	54	290	0.033	54	290	0.036
09:00-10:0	54	290	0.003	54	290	0.011	54	290	0.014
10:00-11:0	54	290	0.004	54	290	0.007	54	290	0.011
11:00-12:0	54	290	0.005	54	290	0.007	54	290	0.012
12:00-13:0	54	290	0.005	54	290	0.005	54	290	0.01
13:00-14:0	54	290	0.006	54	290	0.005	54	290	0.011
14:00-15:0	54	290	0.007	54	290	0.005	54	290	0.012
15:00-16:0	54	290	0.024	54	290	0.005	54	290	0.029
16:00-17:0	54	290	0.021	54	290	0.003	54	290	0.024
17:00-18:0	54	290	0.019	54	290	0.003	54	290	0.022
18:00-19:0	54	290	0.015	54	290	0.003	54	290	0.018
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.113			0.113			0.226

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: TOTAL PEOPLE

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.098	54	290	0.501	54	290	0.599
08:00-09:0	54	290	0.205	54	290	0.747	54	290	0.952
09:00-10:0	54	290	0.195	54	290	0.261	54	290	0.456
10:00-11:0	54	290	0.167	54	290	0.21	54	290	0.377

11:00-12:0	54	290	0.184	54	290	0.199	54	290	0.383
12:00-13:0	54	290	0.214	54	290	0.204	54	290	0.418
13:00-14:0	54	290	0.22	54	290	0.196	54	290	0.416
14:00-15:0	54	290	0.238	54	290	0.241	54	290	0.479
15:00-16:0	54	290	0.512	54	290	0.259	54	290	0.771
16:00-17:0	54	290	0.486	54	290	0.247	54	290	0.733
17:00-18:0	54	290	0.559	54	290	0.253	54	290	0.812
18:00-19:0	54	290	0.458	54	290	0.243	54	290	0.701
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			3.536			3.561			7.097

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: CARS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.055	54	290	0.258	54	290	0.313
08:00-09:0	54	290	0.114	54	290	0.328	54	290	0.442
09:00-10:0	54	290	0.107	54	290	0.134	54	290	0.241
10:00-11:0	54	290	0.087	54	290	0.107	54	290	0.194
11:00-12:0	54	290	0.094	54	290	0.1	54	290	0.194
12:00-13:0	54	290	0.112	54	290	0.108	54	290	0.22
13:00-14:0	54	290	0.115	54	290	0.103	54	290	0.218
14:00-15:0	54	290	0.12	54	290	0.135	54	290	0.255
15:00-16:0	54	290	0.207	54	290	0.13	54	290	0.337
16:00-17:0	54	290	0.223	54	290	0.13	54	290	0.353
17:00-18:0	54	290	0.294	54	290	0.134	54	290	0.428
18:00-19:0	54	290	0.255	54	290	0.126	54	290	0.381
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.783			1.793			3.576

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: LGVS

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.01	54	290	0.029	54	290	0.039
08:00-09:0	54	290	0.015	54	290	0.023	54	290	0.038
09:00-10:0	54	290	0.016	54	290	0.015	54	290	0.031
10:00-11:0	54	290	0.015	54	290	0.016	54	290	0.031
11:00-12:0	54	290	0.016	54	290	0.017	54	290	0.033
12:00-13:0	54	290	0.017	54	290	0.016	54	290	0.033

13:00-14:0	54	290	0.017	54	290	0.018	54	290	0.035
14:00-15:0	54	290	0.014	54	290	0.014	54	290	0.028
15:00-16:0	54	290	0.016	54	290	0.015	54	290	0.031
16:00-17:0	54	290	0.023	54	290	0.014	54	290	0.037
17:00-18:0	54	290	0.027	54	290	0.011	54	290	0.038
18:00-19:0	54	290	0.017	54	290	0.01	54	290	0.027
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.203			0.198			0.401

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: MOTOR CYCLES

			ARRIVALS			DEPARTURES			TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:0	54	290	0.001	54	290	0.002	54	290	0.003
08:00-09:0	54	290	0	54	290	0.003	54	290	0.003
09:00-10:0	54	290	0.001	54	290	0.001	54	290	0.002
10:00-11:0	54	290	0.001	54	290	0.001	54	290	0.002
11:00-12:0	54	290	0.001	54	290	0.001	54	290	0.002
12:00-13:0	54	290	0.001	54	290	0.001	54	290	0.002
13:00-14:0	54	290	0.001	54	290	0.001	54	290	0.002
14:00-15:0	54	290	0.001	54	290	0.001	54	290	0.002
15:00-16:0	54	290	0.002	54	290	0.002	54	290	0.004
16:00-17:0	54	290	0.002	54	290	0.001	54	290	0.003
17:00-18:0	54	290	0.003	54	290	0.001	54	290	0.004
18:00-19:0	54	290	0.003	54	290	0.001	54	290	0.004
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.017			0.016			0.033

Parameter summary

Trip rate pa	105 - 1817 (units:)
Survey dat	01/01/16 - 28/06/24
Number of	54
Number of	0
Number of	0
Surveys au	9
Surveys ma	4

This sectio followed b the total nu the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix E – MSM Ratings Rationale

Table 1.1: 2028 Opening Year - Theme Ratings Applied

Site	Trip length	Theme	Rating	Rationale
BA1 (25 units)	Internal trips (8% of trips)	Public transport	1	It is not expected that any interventions relating to public transport would be delivered at this stage. There would not be any ancillary uses provided on BA1 during this scenario, which would result in the internalisation of trips. Therefore, the impact of public transport on mode share is considered limited.
		Active Travel	1	It is not expected that any interventions relating to active travel would be delivered at this stage. No ancillary uses would be provided on BA1 during this scenario, which would result in the internalisation of trips. Therefore, the impact of active travel on mode share for these trips is considered limited.
		Traffic and Parking Management	1	Traffic and parking management would be implemented in full as the scheme is developed; during this scenario, traffic and parking management interventions would have a limited impact compared to a BAU scenario.
		Placemaking and Land Use	1	There would not be any ancillary uses provided on BA1 during this scenario, which would result in the internalisation of trips. Therefore, the impact of placemaking and land use on mode share for these trips is considered to be limited.
	Baldock / station / Letchworth trips (52% of trips)	Public transport	2	The majority of residents will be within a short walk of a bus stop, connecting them to Baldock. This rating assumes the operation of existing services, which would be complemented by an initial bus offer commensurate with the potential forecast patronage. Further interventions will be provided as part of future scenarios.
		Active Travel	2	It has been assumed that direct connections to the existing active travel network would be provided as part of the initial build out of BA1. Further on and off-site interventions would be provided as part of future scenarios. Therefore, active travel measures would have a modest impact compared to a BAU scenario.
		Traffic and Parking Management	2	It is envisaged that the integration of local CPZs to cover areas in the vicinity of the site is not likely to be feasible for the low quantum of development provided during this scenario. However, the shuttle system provided at the A507 Station Road bridge would be in operation during the 2028 opening year and would have a positive traffic management impact.
		Placemaking and Land Use	1	Given the minimal level of initial development on BA1 during this scenario, the proposed walking, cycling and public transport interventions which will support safe and convenient access to Baldock town centre would be limited during the opening year.
	Residual trips (40% of trips)	Public transport	1	It is anticipated that there would be limited scope for bus travel to impact residual trips. However, given the proximity to Baldock station, there is potential for rail trips to serve trips outside of Baldock/Letchworth. Overall, the impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer-distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	The relative distance of residual journeys would mean that there is reduced scope for influence from traffic and parking management measures. Further traffic management interventions would be provided during future scenarios. Therefore, the impact of traffic and parking management measures on mode share for these trips is expected to be limited in comparison to a BAU scenario.

Site	Trip length	Theme	Rating	Rationale
		Placemaking and Land Use	1	The proposed placemaking and land use measures would have a limited impact on residual trips.
BA2 (200 units)	Internal trips (0% of trips)	Public transport	1	The proposed public transport measures are not relevant to these trips. Therefore, the impact of public transport on mode share is considered limited.
		Active Travel	1	It is not expected that any interventions relating to active travel would be delivered at this stage. No ancillary uses would be provided on BA2 which would result in the internalisation of trips. Therefore, the impact of active travel on mode share for these trips is considered limited.
		Traffic and Parking Management	1	Traffic and parking management would be implemented in full as the scheme is developed; during this scenario, traffic and parking management interventions would have a limited impact, when compared to a BAU scenario.
		Placemaking and Land Use	1	There would not be any ancillary uses provided on BA2 during this scenario, which would result in the internalisation of trips. Therefore, the impact of placemaking and land use on mode share for these trips is considered to be limited.
	Baldock / station / Letchworth trips (60% of trips)	Public transport	1	It is understood that minimal access to existing public transport and some proposed additional bus services would be accessible at the opening year. Therefore, the impact of public transport on mode share for these trips would be limited.
		Active Travel	2	It has been assumed that direct connections to the existing active travel network would be provided as part of the build out of BA2. There are several existing services and amenities which are accessible on foot or by cycle in the vicinity of the BA2 site. This includes the Tesco Extra, and the High Street located to the north of the site. Therefore, active travel measures would have a modest impact in comparison to a BAU scenario.
		Traffic and Parking Management	1	It is envisaged that the integration of local CPZs to cover areas in the vicinity of the site is not likely to be feasible for the low quantum of development provided during this scenario. However, the shuttle system provided at the A507 Station Road bridge would be in operation during the 2028 opening year and would have a positive traffic management impact.
		Placemaking and Land Use	1	Given the minimal level of initial development during this scenario, the proposed walking, cycling and public transport interventions which will support safe and convenient access to Baldock town centre would be limited during the opening year.
	Residual trips (40% of trips)	Public transport	1	It is assumed that there would be minimal scope for bus travel for residual trips, while the distance from Baldock station would mean that rail trips are less appealing than they would be for residents of BA1. Therefore, the impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	The longer distance journeys are less likely to be undertaken via active travel modes, especially prior to the delivery of all active travel interventions proposed as part of the scheme. Therefore, the impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	The relative distance of residual journeys would mean that there is reduced scope for influence from traffic and parking management measures. Further traffic management interventions would be provided during future scenarios. Therefore, the impact of traffic and parking management measures on mode share for these trips is expected to be limited in comparison to a BAU scenario.
		Placemaking and Land Use	1	The proposed placemaking and land use measures would have a limited impact on residual trips.

Site	Trip length	Theme	Rating	Rationale
BA3	Internal trips (2% of trips)	Public transport	1	The proposed public transport measures are not relevant to these trips, given the relatively small size of the site.
		Active Travel	1	It is envisaged that residents would yet to have access to the proposed high-quality walking and cycling routes, including traffic-free routes. Therefore, the impact of the active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	The proposed traffic and parking management measures, which would be implemented during the full-build-out scenario, would not be fully implemented at this stage. Therefore, the impact of the traffic and parking management measures on mode share for these trips is expected to be limited in comparison to a BAU scenario.
		Placemaking and Land Use	1	Given the scale of the site, a relatively limited range of day-to-day uses will be provided on-site. The high-quality public realm and landscaping, which will encourage walking and cycling, will be provided during future stages of development. The impact of the placemaking and land use measures on mode share for these trips is expected to be limited in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (58% of trips)	Public transport	1	Proposed upgrades to the local public transport network, including local bus and rail accessibility, will be delivered as part of future scenarios. Therefore, the impact of public transport on mode share for these trips is therefore expected to be limited in comparison to a BAU scenario.
		Active Travel	1	The site will connect to a network of traffic-free and low-traffic cycle routes, including a dedicated active travel bridge over the railway, with new connections made to the town centre and station in particular. However, it is envisaged that these improvements will not be delivered in the opening year. Therefore, the impact of the active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	In the full build-out scenario, traffic and parking management will be implemented, on and off-site, to reduce the attractiveness of driving for short trips to Baldock in particular, as well as to Letchworth. It is envisaged that the majority of proposed traffic and parking management will yet to be implemented in the opening year. Therefore, the impact of the traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Placemaking and Land Use	1	The proposed walking, cycling and public transport interventions, which will support safe and convenient access to Baldock town centre, will not be delivered during the opening year. The impact of the placemaking and land use measures on mode share for these trips is expected to be limited in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	While the changes to capacity and access could have some limited on long distance trip making on balance, the impact of traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Placemaking and Land Use	1	The proposed placemaking and land use measures are not relevant to these trips.

Site	Trip length	Theme	Rating	Rationale
BA10	Internal trips (4% of trips)	Public transport	1	The proposed public transport measures are not relevant to these trips, given that the proposed bus service will not run within it.
		Active Travel	1	The proposed active travel route within the site, connecting the land uses and proposed green and social spaces and filtered permeability ensuring walking and cycling is the quickest mode within the site, will not be delivered in the opening year. Therefore, the impact of the active travel measures on mode share for these trips is expected to be limited in comparison to a BAU scenario.
		Traffic and Parking Management	1	Parking levels below adopted levels are proposed. Vehicle access will be managed to individual plot accesses while walking and cycling will be direct. This will be implemented as the scheme is fully built out.
		Placemaking and Land Use	1	A mix of uses will be provided on-site, as well as an active travel bridge to the local centre proposed in BA1. The quality of the public realm and landscaping will be exemplary. This will be developed as the scheme is built out and will not be provided in the opening year. Therefore, the impact of the placemaking and land use measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (56% of trips)	Public transport	1	The site will be well connected to the train station, including with proposed improved quality walking routes. The site will be served by the proposed bus service, supported by priority measures. These measures will be delivered as the scheme is fully built out and not delivered during the opening year. Therefore, the impact of the public transport measures on mode share for these trips is expected to be limited in comparison to a BAU scenario.
		Active Travel	1	The site will be directly connected to the proposed on- and off-site traffic walking and cycling routes to BA1, Clothall Common, the station and Baldock town centre. It is not anticipated that these routes would be provided in the opening year. The impact of the active travel measures on mode share for these trips is expected to be limited in comparison to a BAU scenario.
		Traffic and Parking Management	1	Changes to traffic access at the Whitehorse Street junction and speed restrictions (reduced speed limit along Royston Road), combined with enhanced walking and cycling routes and bus services will influence modal choice. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. However, these measures will not be delivered in the opening year, and therefore, the impact of the traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Placemaking and Land Use	1	The site will have access to BA1, Clothall Common, the station and Baldock town centre via high-quality traffic-free and lightly trafficked routes, including via a new bridge. These active travel routes will not be delivered in the opening year, however. Therefore, the impact of the placemaking and land use management measures on mode share for these trips is expected to be limited in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	While the changes to capacity and access could have some limited on long distance trip making on balance, the impact of traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.

Site	Trip length	Theme	Rating	Rationale
		Placemaking and Land Use	1	The proposed placemaking and land use measures are not relevant to these trips.

Table 1.2: 2033 Interim Year - Theme Ratings Applied

Site	Trip length	Theme		
BA1 (25 units)	Internal trips (24% of trips)	Public transport	2	PT network will not yet be joined up to Royston Road but the 650 homes will need to be supported by an early bus service and the stops in place to support that.
		Active Travel	2	Reduced active travel assumption at BA1 as no active travel underpass in this scenario.
		Traffic and Parking Management	3	Within the masterplan, parking / traffic management will be maximised from the first phases onwards.
		Placemaking and Land Use	2	Whilst places will be of high quality, the mix of land uses to support liveable neighbourhoods will not be fully delivered by 2033.
	Baldock / station / Letchworth trips (36% of trips)	Public transport	2	PT network will not yet be joined up to Royston Road but the 650 homes will need to be supported by an early bus service and the stops in place to support that.
		Active Travel	2	Reduced active travel assumption at BA1 as no active travel underpass in this scenario.
		Traffic and Parking Management	3	Within the masterplan, parking / traffic management will be maximised from the first phases onwards.
		Placemaking and Land Use	2	Whilst places will be of high quality, the mix of land uses to support liveable neighbourhoods will not be fully delivered by 2033.
	Residual trips (40% of trips)	Public transport	1	Traffic management influenced by interventions introduced in Baldock, which affect longer distance trips (as well as Baldock trips)
		Active Travel	1	
		Traffic and Parking Management	2	
		Placemaking and Land Use	-	
BA2 (200 units)	Internal trips (0% of trips)	Public transport	-	Bus services will not be operational within BA2.
		Active Travel	2	There is limited scope for the active travel network within BA2 to effect modal shift away from business as usual.
		Traffic and Parking Management	2	There is limited scope for the parking / traffic management within BA2 to effect modal shift away from business as usual
		Placemaking and Land Use	2	Placemaking will be high quality but will not significantly affect mode share, no mix of land uses.

Site	Trip length	Theme		
	Baldock / station / Letchworth trips (60% of trips)	Public transport	2	
		Active Travel	2	There is limited scope for the active travel network within BA2 to effect modal shift away from business as usual.
		Traffic and Parking Management	2	There is limited scope for the parking / traffic management within BA2 to effect modal shift away from business as usual
		Placemaking and Land Use	2	Placemaking will be high quality but will not significantly affect mode share, no mix of land uses.
	Residual trips (40% of trips)	Public transport	1	Traffic management influenced by interventions introduced in Baldock, which affect longer distance trips (as well as Baldock trips)
		Active Travel	1	
		Traffic and Parking Management	2	
		Placemaking and Land Use	-	
BA3	Internal trips (4% of trips)	Public transport	1	The quantum of dwellings will be zero or minimal in the interim scenario, so the ratings are redundant / have no influence on trip generation or mode share.
		Active Travel	1	
		Traffic and Parking Management	1	
		Placemaking and Land Use	1	
	Baldock / station / Letchworth trips (56% of trips)	Public transport	1	The quantum of dwellings will be zero or minimal in the interim scenario, so the ratings are redundant / have no influence on trip generation or mode share.
		Active Travel	1	
		Traffic and Parking Management	1	
		Placemaking and Land Use	1	
	Residual trips (40% of trips)	Public transport	1	The quantum of dwellings will be zero or minimal in the interim scenario, so the ratings are redundant / have no influence on trip generation or mode share
		Active Travel	1	

Site	Trip length	Theme		
		Traffic and Parking Management	1	
		Placemaking and Land Use	1	
BA10	Internal trips (8% of trips)	Public transport	-	
		Active Travel	2	Within the masterplan, active travel will be maximised from the first phases onwards.
		Traffic and Parking Management	2	Within the masterplan, parking / traffic management will be maximised from the first phases onwards.
		Placemaking and Land Use	2	Whilst places will be of high quality, the mix of land uses to support liveable neighbourhoods will not be fully delivered by 2033.
	Baldock / station / Letchworth trips (52% of trips)	Public transport	1	
		Active Travel	2	Within the masterplan, active travel will be maximised from the first phases onwards.
		Traffic and Parking Management	2	Within the masterplan, parking / traffic management will be maximised from the first phases onwards.
		Placemaking and Land Use	2	Whilst places will be of high quality, the mix of land uses to support liveable neighbourhoods will not be fully delivered by 2033.
	Residual trips (40% of trips)	Public transport	1	Traffic management influenced by interventions introduced in Baldock, which affect longer distance trips (as well as Baldock trips)
		Active Travel	1	
		Traffic and Parking Management	1	
		Placemaking and Land Use	-	

Table 1.3: Full Build Out No School - Theme Ratings Applied

Site	Trip length	Theme		Rationale
BA1 (25 units)	Internal trips (40% of trips)	Public transport	3	The majority of residents will be within a short walk of a bus stop, connecting them to the full range of on-site facilities. The bus service is expected to be high frequency (~every 10 minutes at peak times) but many short local trips will be quicker and more cost effective on foot and by bike. The impact of public transport on mode share for these trips is therefore expected to be significant, but not transformational in comparison to a BAU scenario.
		Active Travel	4	All residents will have access to high-quality walking and cycling routes, including traffic-free routes. Filtered permeability will make walking and cycling the quickest choice. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	4	The access road will have a 20mph design speed. All residential streets will have a 10mph design speed. Controlled parking zones will be investigated to manage on-street parking. Lower levels of car parking will be provided at points of higher connectivity, with a general principle of applying lower car parking levels than adopted standards across the whole site. A mix of off-plot and unallocated car parking will be provided, alongside on-plot parking. Where parking is off-plot it will be charged for annually. Filtered permeability will make walking and cycling the quickest choice. The impact of the traffic and parking management measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Placemaking and Land Use	4	A full range of day-to-day uses will be provided on-site, including primary schools, health, leisure and retail facilities. The public realm and landscaping will be exemplary, encouraging walking and cycling. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (20% of trips)	Public transport	4	The majority of residents will be within a short walk of a bus stop, connecting them to Baldock. The bus service is expected to be high frequency (~every 10 minutes at peak times). A range of on- and off-site bus priority measures are proposed in order to provide journey time advantage. A new access to the rail station is proposed, as well as improvements to the rail station building, which will encourage use of rail for trips to Letchworth and longer distance trips to destinations such as London and Cambridge. The impact of public transport on mode share for these trips is therefore expected to be transformational in comparison to a BAU scenario.
		Active Travel	4	A network of traffic-free and low traffic cycle routes is to be provided both on- and off-site, including a dedicated active travel bridge over the railway, with connections made to the town centre and Knights Templar school. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	The on-site street network will ensure result in it being quicker to get off the site and into Baldock by bike and bus than by car. The package of off-site highway interventions include a range of reductions in highway capacity and access restrictions in order to allow for reallocation of roadspace for improved walking, cycling and bus infrastructure. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed, however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	4	The proposed walking, cycling and public transport interventions will support safe and convenient access to Baldock town centre, with many facilities within 20 minutes of walk of much of the site. Baldock town centre is an attractive and vibrant centre with a full range of uses. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.

Site	Trip length	Theme		Rationale
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	2	The potential changes to vehicle access and capacity within and particularly for trips through Baldock will influence mode choice for some longer distance trips. The impact of traffic and parking management measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
		Placemaking and Land Use	-	The proposed placemaking and land use measures are not relevant to these trips.
BA2 (200 units)	Internal trips (0% of trips)	Public transport	-	The proposed public transport measures are not relevant to these trips. Therefore, the impact of public transport on mode share is considered limited.
		Active Travel	3	All residents will have access to high-quality walking and cycling routes, including traffic-free routes, making active travel often the quickest and most convenient choice. The impact of the active travel measures on mode share for these trips is expected to be significant but not transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	The access road will have a 20mph design speed. All residential streets will have a 10mph design speed. Controlled parking zones will be investigated to manage on-street parking. The general principle will be to apply lower car parking levels than adopted standards across the whole site. A mix of off-plot and unallocated car parking will be provided, alongside on-plot parking. Where parking is off-plot it will be charged for annually. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	4	A full range of day-to-day uses will be provided on-site. The public realm and landscaping will be exemplary, encouraging walking and cycling. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (60% of trips)	Public transport	3	Most residents will be within a short walk of a bus stop, connecting them to Baldock and Baldock station. The bus service is expected to be high frequency (~every 10 minutes at peak times). A new access to the rail station is proposed, as well as improvements to the rail station building, which will encourage use of rail for trips to Letchworth and longer distance trips to destinations such as London and Cambridge. The impact of public transport on mode share for these trips is therefore expected to be significant in comparison to a BAU scenario.
		Active Travel	3	A network of traffic-free and low traffic cycle routes is to be provided both on- and off-site, including a new connection to the local PRoW network, connecting the site directly to Baldock town centre. The impact of the active travel measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Traffic and Parking Management	3	The package of off-site highway interventions includes a range of reductions in highway capacity and access restrictions in order to allow for reallocation of road space for improved walking, cycling and bus infrastructure. Taken together with the on-site measures which will prioritise active travel, this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking

Site	Trip length	Theme		Rationale
				demand. Limited changes to parking within Baldock or Letchworth are proposed, however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	3	The proposed walking, cycling and public transport interventions will support safe and convenient access to Baldock town centre, with many facilities within 20 minutes of walk of much of the site. Baldock town centre is an attractive and vibrant centre with a full range of uses. The impact of the placemaking and land use measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	2	The potential changes to vehicle access and capacity within and particularly for trips through Baldock will influence mode choice for some longer distance trips. The impact of traffic and parking management measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
		Placemaking and Land Use	-	The proposed placemaking and land use measures are not relevant to these trips.
BA3	Internal trips (9% of trips)	Public transport	-	The proposed public transport measures are not relevant to these trips, given the relatively small size of the site.
		Active Travel	3	All residents will have access to high-quality walking and cycling routes, including traffic-free routes. The impact of the active travel measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Traffic and Parking Management	2	The internal road network will be designed to encourage slow speeds (10mph to 20mph design speed, depending on the street). A general principle of applying lower car parking levels than adopted standards is proposed across the site. A mix of off-plot and unallocated car parking will be provided, alongside on-plot parking. Where parking is off-plot it will be charged for annually. The impact of the traffic and parking management measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
		Placemaking and Land Use	2	Given the scale of the site, a relatively limited range of day-to-day uses will be provided on-site. The public realm and landscaping will be exemplary, encouraging walking and cycling. The impact of the placemaking and land use measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (51% of trips)	Public transport	3	The majority of residents will be within a short walk of a bus stop, connecting them to Baldock. The bus service is expected to be high frequency (~every 10 minutes at peak times). A range of on- and off-site bus priority measures are proposed in order to provide journey time advantage. Improvements to the rail station building are proposed, which will encourage use of rail for trips to Letchworth and longer distance trips to destinations such as London and Cambridge. The impact of public transport on mode share for these trips is therefore expected to be significant in comparison to a BAU scenario.
		Active Travel	3	The site will connect to a network of traffic-free and low traffic cycle routes, including to a dedicated active travel bridge over the railway, with new connections made to the town centre and station in particular. The impact of the active travel measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.

Site	Trip length	Theme		Rationale
		Traffic and Parking Management	3	The on-site street network will ensure result in it being quicker to get off the site and into Baldock by bike and bus than by car. The package of off-site highway interventions include a range of reductions in highway capacity and access restrictions in order to allow for reallocation of roadspace for improved walking, cycling and bus infrastructure. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed, however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	3	The proposed walking, cycling and public transport interventions will support safe and convenient access to Baldock town centre, with many facilities within 20 minutes of walk of much of the site. Baldock town centre is an attractive and vibrant centre with a full range of uses. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	While the changes to capacity and access could have some limited on long distance trip making on balance, the impact of traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Placemaking and Land Use	-	The proposed placemaking and land use measures are not relevant to these trips.
BA10	Internal trips (11% of trips)	Public transport	-	The proposed public transport measures are not relevant to these trips, given that the proposed bus service will not run within it.
		Active Travel	4	A traffic-free active travel route is proposed within the site, connecting the land uses and proposed green and social spaces. This, combined with filtered permeability will ensure that walking and cycling is the quickest mode within the site. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	Parking levels below adopted levels are proposed. Vehicle access will be managed to individual plot accesses while walking and cycling will be directly
		Placemaking and Land Use	3	A mix of uses will be provided on-site, as well as an active travel bridge to the local centre proposed in BA1. The quality of the public realm and landscaping will be exemplary. The impact of the placemaking and land use measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
	Baldock / station /	Public transport	4	The site will be well connected to the train station, including with proposed improved quality walking routes. The site will be served by the proposed bus service, supported by priority measures. The impact of the public transport measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.

Site	Trip length	Theme		Rationale
	Letchworth trips (49% of trips)	Active Travel	4	The site will be directly connected to the proposed on- and off-site traffic walking and cycling routes to BA1, Clothall Common, the station and Baldock town centre. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	Changes to traffic access at the Whitehorse Street junction and speed restrictions (reduced speed limit along Royston Road), combined with enhanced walking and cycling routes and bus services will influence modal choice. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed, however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	4	The site will have access to BA1, Clothall Common, the station and Baldock town centre via high-quality traffic free and lightly trafficked routes, including via a new bridge. This provides access to a wide range of day to day uses that will be more quickly accessed by modes other than the car. This will complement the mix of uses on-site. The impact of the placemaking and land use management measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	While the changes to capacity and access could have some limited on long distance trip making on balance, the impact of traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Placemaking and Land Use	-	The proposed placemaking and land use measures are not relevant to these trips.

Table 1.4: Full Build Out With School - Theme Ratings Applied

Site	Trip length	Theme		Rationale
BA1 (25 units)	Internal trips (40% of trips)	Public transport	3	The majority of residents will be within a short walk of a bus stop, connecting them to the full range of on-site facilities. The bus service is expected to be high frequency (~every 10 minutes at peak times) but many short local trips will be quicker and more cost effective on foot and by bike. The impact of public transport on mode share for these trips is therefore expected to be significant, but not transformational in comparison to a BAU scenario.
		Active Travel	4	All residents will have access to high-quality walking and cycling routes, including traffic-free routes. Filtered permeability will make walking and cycling the quickest choice. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	4	The access road will have a 20mph design speed. All residential streets will have a 10mph design speed. Controlled parking zones will be investigated to manage on-street parking. Lower levels of car parking will be provided at points of higher connectivity, with a general principle of applying lower car parking levels than adopted standards across the whole site. A mix of off-plot and unallocated car parking will be provided, alongside on-plot parking. Where parking is off-plot it will be charged for annually. Filtered permeability will make walking and cycling the quickest choice. The impact of the traffic and parking management measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Placemaking and Land Use	4	A full range of day-to-day uses will be provided on-site, including primary schools, health, leisure and retail facilities. The public realm and landscaping will be exemplary, encouraging walking and cycling. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (20% of trips)	Public transport	4	The majority of residents will be within a short walk of a bus stop, connecting them to Baldock. The bus service is expected to be high frequency (~every 10 minutes at peak times). A range of on- and off-site bus priority measures are proposed in order to provide journey time advantage. A new access to the rail station is proposed, as well as improvements to the rail station building, which will encourage use of rail for trips to Letchworth and longer distance trips to destinations such as London and Cambridge. The impact of public transport on mode share for these trips is therefore expected to be transformational in comparison to a BAU scenario.
		Active Travel	4	A network of traffic-free and low traffic cycle routes is to be provided both on- and off-site, including a dedicated active travel bridge over the railway, with connections made to the town centre and Knights Templar school. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	The on-site street network will ensure result in it being quicker to get off the site and into Baldock by bike and bus than by car. The package of off-site highway interventions include a range of reductions in highway capacity and access restrictions in order to allow for reallocation of roadspace for improved walking, cycling and bus infrastructure. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed, however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	4	The proposed walking, cycling and public transport interventions will support safe and convenient access to Baldock town centre, with many facilities within 20 minutes of walk of much of the site. Baldock town centre is an attractive and vibrant centre with a full range of uses. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.

Site	Trip length	Theme		Rationale
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	2	The potential changes to vehicle access and capacity within and particularly for trips through Baldock will influence mode choice for some longer distance trips. The impact of traffic and parking management measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
		Placemaking and Land Use	-	The proposed placemaking and land use measures are not relevant to these trips.
BA2 (200 units)	Internal trips (0% of trips)	Public transport	1	The proposed public transport measures are not relevant to these trips. Therefore, the impact of public transport on mode share is considered limited.
		Active Travel	3	All residents will have access to high-quality walking and cycling routes, including traffic-free routes, making active travel often the quickest and most convenient choice. The impact of the active travel measures on mode share for these trips is expected to be significant but not transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	The access road will have a 20mph design speed. All residential streets will have a 10mph design speed. Controlled parking zones will be investigated to manage on-street parking. The general principle will be to apply lower car parking levels than adopted standards across the whole site. A mix of off-plot and unallocated car parking will be provided, alongside on-plot parking. Where parking is off-plot it will be charged for annually. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	4	A full range of day-to-day uses will be provided on-site. The public realm and landscaping will be exemplary, encouraging walking and cycling. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (60% of trips)	Public transport	3	Most residents will be within a short walk of a bus stop, connecting them to Baldock and Baldock station. The bus service is expected to be high frequency (~every 10 minutes at peak times). A new access to the rail station is proposed, as well as improvements to the rail station building, which will encourage use of rail for trips to Letchworth and longer distance trips to destinations such as London and Cambridge. The impact of public transport on mode share for these trips is therefore expected to be significant in comparison to a BAU scenario.
		Active Travel	3	A network of traffic-free and low traffic cycle routes is to be provided both on- and off-site, including a new connection to the local PRoW network, connecting the site directly to Baldock town centre. The impact of the active travel measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Traffic and Parking Management	3	The package of off-site highway interventions includes a range of reductions in highway capacity and access restrictions in order to allow for reallocation of road space for improved walking, cycling and bus infrastructure. Taken together with the on-site measures which will prioritise active travel, this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking

Site	Trip length	Theme		Rationale
				demand. Limited changes to parking within Baldock or Letchworth are proposed, however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	3	The proposed walking, cycling and public transport interventions will support safe and convenient access to Baldock town centre, with many facilities within 20 minutes of walk of much of the site. Baldock town centre is an attractive and vibrant centre with a full range of uses. The impact of the placemaking and land use measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	2	The potential changes to vehicle access and capacity within and particularly for trips through Baldock will influence mode choice for some longer distance trips. The impact of traffic and parking management measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
		Placemaking and Land Use	-	The proposed placemaking and land use measures are not relevant to these trips.
BA3	Internal trips (16% of trips)	Public transport	1	The proposed public transport measures are not relevant to these trips, given the relatively small size of the site.
		Active Travel	3	All residents will have access to high-quality walking and cycling routes, including traffic-free routes. The impact of the active travel measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Traffic and Parking Management	2	The internal road network will be designed to encourage slow speeds (10mph to 20mph design speed, depending on the street). A general principle of applying lower car parking levels than adopted standards is proposed across the site. A mix of off-plot and unallocated car parking will be provided, alongside on-plot parking. Where parking is off-plot it will be charged for annually. The impact of the traffic and parking management measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
		Placemaking and Land Use	2	Given the scale of the site, a relatively limited range of day-to-day uses will be provided on-site. The public realm and landscaping will be exemplary, encouraging walking and cycling. The impact of the placemaking and land use measures on mode share for these trips is expected to be modest in comparison to a BAU scenario.
	Baldock / station / Letchworth trips (44% of trips)	Public transport	3	The majority of residents will be within a short walk of a bus stop, connecting them to Baldock. The bus service is expected to be high frequency (~every 10 minutes at peak times). A range of on- and off-site bus priority measures are proposed in order to provide journey time advantage. Improvements to the rail station building are proposed, which will encourage use of rail for trips to Letchworth and longer distance trips to destinations such as London and Cambridge. The impact of public transport on mode share for these trips is therefore expected to be significant in comparison to a BAU scenario.
		Active Travel	3	The site will connect to a network of traffic-free and low traffic cycle routes, including to a dedicated active travel bridge over the railway, with new connections made to the town centre and station in particular. The impact of the active travel measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.

Site	Trip length	Theme		Rationale
		Traffic and Parking Management	3	The on-site street network will ensure result in it being quicker to get off the site and into Baldock by bike and bus than by car. The package of off-site highway interventions include a range of reductions in highway capacity and access restrictions in order to allow for reallocation of road space for improved walking, cycling and bus infrastructure. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed, however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	3	The proposed walking, cycling and public transport interventions will support safe and convenient access to Baldock town centre, with many facilities within 20 minutes of walk of much of the site. Baldock town centre is an attractive and vibrant centre with a full range of uses. The impact of the placemaking and land use measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	While the changes to capacity and access could have some limited on long distance trip making on balance, the impact of traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Placemaking and Land Use	-	The proposed placemaking and land use measures are not relevant to these trips.
BA10	Internal trips (11% of trips)	Public transport	1	The proposed public transport measures are not relevant to these trips, given that the proposed bus service will not run within it.
		Active Travel	4	A traffic-free active travel route is proposed within the site, connecting the land uses and proposed green and social spaces. This, combined with filtered permeability will ensure that walking and cycling is the quickest mode within the site. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	Parking levels below adopted levels are proposed. Vehicle access will be managed to individual plot accesses while walking and cycling will be directly
		Placemaking and Land Use	3	A mix of uses will be provided on-site, as well as an active travel bridge to the local centre proposed in BA1. The quality of the public realm and landscaping will be exemplary. The impact of the placemaking and land use measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
	Baldock / station /	Public transport	4	The site will be well connected to the train station, including with proposed improved quality walking routes. The site will be served by the proposed bus service, supported by priority measures. The impact of the public transport measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.

Site	Trip length	Theme		Rationale
	Letchworth trips (49% of trips)	Active Travel	4	The site will be directly connected to the proposed on- and off-site traffic walking and cycling routes to BA1, Clothall Common, the station and Baldock town centre. The impact of the active travel measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
		Traffic and Parking Management	3	Changes to traffic access at the Whitehorse Street junction and speed restrictions (reduced speed limit along Royston Road), combined with enhanced walking and cycling routes and bus services will influence modal choice. Taken together this will reduce the attractiveness of driving for short trips to Baldock in particularly, as well as to Letchworth. An expansion of off-site Controlled Parking Zones around the station are proposed to manage potential parking demand. Limited changes to parking within Baldock or Letchworth are proposed, however. The impact of the traffic and parking management measures on mode share for these trips is expected to be significant in comparison to a BAU scenario.
		Placemaking and Land Use	4	The site will have access to BA1, Clothall Common, the station and Baldock town centre via high-quality traffic free and lightly trafficked routes, including via a new bridge. This provides access to a wide range of day to day uses that will be more quickly accessed by modes other than the car. This will complement the mix of uses on-site. The impact of the placemaking and land use management measures on mode share for these trips is expected to be transformational in comparison to a BAU scenario.
	Residual trips (40% of trips)	Public transport	1	Long distance rail trips are captured in the trip distance above, it is not anticipated that the package of public transport measures will influence longer distance trip making. The impact of public transport measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Active Travel	1	Very few longer distance trips are made by active travel. The impact of active travel measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Traffic and Parking Management	1	While the changes to capacity and access could have some limited on long distance trip making on balance, the impact of traffic and parking management measures on mode share for these trips is expected to be insignificant in comparison to a BAU scenario.
		Placemaking and Land Use	-	The proposed placemaking and land use measures are not relevant to these trips.

Appendix F – MSM Sensitivity Test Note

a company of Royal HaskoningDHV

Note / Memo

HaskoningDHV UK Ltd.
Mobility & Infrastructure

To: Geoff Burrage
From: Billy Thornett
Date: 28 March 2025
Copy: Click to enter "CopyTo"
Our reference: PC7029-RHD-ZZ-XX-ME-R-0001
Classification: Project related
Checked by Click or tap here to enter text.

Subject: **Theme Ratings - Sensitivity Test**

1 Theme Ratings

1.1 Current

Site	Trip length	Theme	Rating
BA1	Internal trips (30% of trips)	Public transport	3
		Active travel	4
		Traffic and parking management	4
		Placemaking and land use	4
	Baldock / station / Letchworth trips (30% of trips)	Public transport	4
		Active travel	4
		Traffic and parking management	3
		Placemaking and land use	4
	Residual trips (40% of trips)	Public transport	1
		Active travel	1
		Traffic and parking management	2
		Placemaking and land use	N/A
BA3	Internal trips (10% of trips)	Public transport	N/A
		Active travel	3
		Traffic and parking management	3
		Placemaking and land use	3
	Baldock / station / Letchworth trips (50% of trips)	Public transport	3
		Active travel	3
		Traffic and parking management	3
		Placemaking and land use	3
	Residual trips (40% of trips)	Public transport	1
		Active travel	1

		Traffic and parking management	1
		Placemaking and land use	N/A
BA10	Internal trips (20% of trips)	Public transport	N/A
		Active travel	4
		Traffic and parking management	4
		Placemaking and land use	3
	Baldock / station / Letchworth trips (40% of trips)	Public transport	4
		Active travel	4
		Traffic and parking management	3
		Placemaking and land use	4
	Residual trips (40% of trips)	Public transport	1
		Active travel	1
		Traffic and parking management	1
		Placemaking and land use	N/A

1.2 After Comments

1.2.1 Decreases to theme ratings are indicated by red text, increases are indicated by green.

Site	Trip length	Theme	Rating
BA1	Internal trips (30% of trips)	Public transport	1
		Active travel	4
		Traffic and parking management	3
		Placemaking and land use	2
	Baldock / station / Letchworth trips (30% of trips)	Public transport	2
		Active travel	3
		Traffic and parking management	2
		Placemaking and land use	N/A
	Residual trips (40% of trips)	Public transport	3
		Active travel	1
		Traffic and parking management	1
		Placemaking and land use	N/A
BA3	Internal trips (10% of trips)	Public transport	N/A
		Active travel	3
		Traffic and parking management	2
		Placemaking and land use	2
		Public transport	2

	Baldock / station / Letchworth trips (50% of trips)	Active travel	2
		Traffic and parking management	2
		Placemaking and land use	N/A
	Residual trips (40% of trips)	Public transport	3
		Active travel	1
		Traffic and parking management	1
		Placemaking and land use	N/A
BA10	Internal trips (20% of trips)	Public transport	N/A
		Active travel	4
		Traffic and parking management	3
		Placemaking and land use	2
	Baldock / station / Letchworth trips (40% of trips)	Public transport	2
		Active travel	4
		Traffic and parking management	2
		Placemaking and land use	N/A
	Residual trips (40% of trips)	Public transport	3
		Active travel	1
		Traffic and parking management	1
		Placemaking and land use	N/A

2 Trip Rates

2.1 Current

Total external trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	202	543	556	232	3222	3165
	Public transport	6	66	50	12	291	299
	Active travel	88	329	136	96	1104	1121
BA3	Vehicles	41	111	112	47	653	641
	Public transport	2	14	11	3	63	64
	Active travel	13	51	16	14	150	154
BA10	Vehicles	337	60	34	234	1532	1565
	Public transport	67	12	17	66	441	440
	Active travel	74	9	50	80	599	598
Whole site	Vehicles	580	714	702	514	5407	5371
	Public transport	75	92	77	81	794	803
	Active travel	174	389	201	190	1854	1873
BA10	HGVs	8	4	4	3	45	45

Total trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	216	587	591	248	3441	3382
	Public transport	15	94	72	22	431	438
	Active travel	191	658	396	215	2724	2729
BA3	Vehicles	43	118	118	50	687	676
	Public transport	2	14	11	3	64	65
	Active travel	17	63	26	18	211	214
BA10	Vehicles	430	77	42	298	1950	1991
	Public transport	84	15	21	83	554	553
	Active travel	84	10	62	95	712	710
Whole site	Vehicles	689	782	751	596	6078	6049
	Public transport	100	123	104	108	1049	1057
	Active travel	292	731	483	328	3647	3653
BA10	HGVs	10	5	5	4	56	56

2.2 After Comments

Total external trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	189	493	447	204	2829	2835
	Public transport	8	59	36	8	220	220
	Active travel	48	149	67	50	618	631
BA2	Vehicles	22	57	53	24	332	333
	Public transport	3	13	8	3	54	54
	Active travel	7	22	10	7	92	93
BA3	Vehicles	102	97	67	64	489	510
	Public transport	1	9	6	1	35	35
	Active travel	9	27	13	9	115	117
BA10	Vehicles	387	84	72	260	2156	2177
	Public transport	64	21	26	67	523	517
	Active travel	45	5	115	94	840	856
Whole site	Vehicles	626	705	636	518	5721	5750
	Public transport	76	101	75	80	832	826
	Active travel	108	203	206	161	1665	1698
BA10	HGVs	12	11	0	0	130	130

Total trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	231	613	541	249	3455	3465
	Public transport	9	63	39	10	242	242
	Active travel	142	420	279	152	2033	2054
BA2	Vehicles	22	57	53	24	332	333
	Public transport	3	13	8	3	54	54
	Active travel	7	22	10	7	92	93
BA3	Vehicles	108	101	70	68	509	531
	Public transport	1	9	6	1	36	36
	Active travel	10	31	17	11	139	141
BA10	Vehicles	416	91	75	278	2304	2326
	Public transport	69	23	28	73	567	561
	Active travel	53	7	128	106	954	972
Whole site	Vehicles	697	833	735	582	6508	6542
	Public transport	82	108	81	87	898	892
	Active travel	213	480	435	276	3218	3261

BA10	HGVs	13	12	0	0	141	142

3 Summary

3.1.1 The changes to the theme ratings recommended by comments from NHDC resulted in a 1.42% and 17.48% increase in total vehicle trips for sites BA1 and BA10 respectively. They resulted in a 23.70% decrease in total vehicle trips for site BA3.

3.1.2 Across all sites, the changes to theme ratings recommended by NHDC comments resulted in a 7.61% increase in total vehicle trips.

Appendix G – Interim Year Testing Note

a company of Royal HaskoningDHV

Memo

HaskoningDHV UK Ltd.
Mobility & Infrastructure

To:	Urban & Civic
From:	Nicola Lodge
Date:	04 April 2025
Copy:	N/A
Our reference:	TP1116-ITP-ME-0001-P02
Classification:	Project related
Checked by	Geoff Burrage

Subject: **Interim Year Testing Exercise**

Purpose

This exercise builds on work undertaken internally in May 2024 to estimate a 'trigger point' for delivery of the multi-modal bridge over the rail line in BA1. At that time, the number of homes which could be delivered on BA1 before the B656 / A507 crossroads began to operate over capacity was estimated based on the junction headroom indicated by an earlier LinSig modelling exercise.

This updated work uses a VISSIM model built of the A507 corridor, inclusive of the crossroads. It is a more dynamic model than LinSig and looks at interactions along the whole corridor, rather than at the crossroads in isolation. This exercise is based on the more developed land use and phasing assumptions, plus refined trip generation work and updated assumptions around background traffic growth, intervention delivery, mode shift and internalisation (developed through preparation of the Transport Scoping Report [TSR]). ITP's Mode Shift Model is used to derive the vision-led (vehicle) trip generation feeding into the tests.

The objective of this exercise is to identify the maximum residential and employment development which could be delivered across all sites before the multi-modal bridge is needed (to provide an alternative route for traffic currently using the B656 and A507). Identifying this point will aid with phasing and infrastructure delivery planning, and the optimum scenario will form the 'Interim Year' scenario fed into the COMET model testing the impacts of the development.

Four runs of the VISSIM model have been undertaken, each based on slightly different assumptions. The assumptions feeding into each run are described on the following pages, with a summary and recommendations to the rear of this note.

Run 1 – based on initial U&C aspirations

Phasing Assumptions

Initially modelled vehicle trips associated with a 2033 scenario, informed early development specification information from U&C:

Year	Total	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Housing completions (dwelling)	2,953	5	45	80	182	204	**333**	340	340	340	340	287	280	177
Cumulative			50	130	312	516	**849**	1,189	1,529	1,869	2,209	2,496	2,776	2,953
Employment space completed (BA10) gross sq ft	800,000				131,501	263,002	**263,002**	142,495						
Cumulative						394,503	**657,505**	800,000						
Primary schools on BA1					1	1	**1**	1	1	2	2	2	2	2
Secondary school								Yes	Yes	Yes	Yes	Yes	Yes	Yes
Non-resi					Some	Some	**Some**	Some	Some	Some	Some	Some	All	All

BA10 sqm		12,217	24,433	**24,433**	13,238
Cumulative		12,217	36,650	**61,084**	74,322
sqft to sqm factor	10.764				

Land Use Assumptions

Informed by the above and email exchanges:

- 850 homes; 200 complete on BA2 and 650 on BA1
- BA3 is not yet commenced and the school (if on BA3) is either not yet commenced or not yet generating material trips
- 61,085sqm at BA10, comprising a pro-ratad mix of:
    - 1,500sqm medical centre
    - 5,000sqm total of combined waste transfer station and vehicle depot
    - 26,500 of office
    - 26,500 of light industrial
    - 26,500 of B2 industrial
- Some non-residential land uses at BA1, based on assumptions, comprising:
    - Primary school
    - Convenience shop
    - A community and / or leisure facility

Note that in practice the employment land use mix would not be pro-ratad across the board, but instead build up incrementally and with a focus on some facilities / employment before others. So this exercise does not provide a totally accurate picture of trips generated by BA10 in each interim year.

Internalisation Assumptions

Assumptions which had gone into Transport Scoping Report (TSR), with a commitment to further refinement (which has been done through Runs 2 to 4):

- ~20% internalisation at BA1, driven by primary school and minimal other uses
- 10% internalisation at BA10
- 5% on BA2

Background Traffic Growth Assumptions

The TSR proposed using the 'Mode balanced decarbonisation' growth factors derived through the TEMPro software. This takes a more optimistic view about background traffic growth than the 'core' scenario conventionally used in traffic modelling. A 2022 to 2033 mode balanced decarbonisation growth factor was used in this exercise.

Infrastructure Assumptions

The following development related infrastructure is assumed to be in place in the Interim Scenario:

- Station Road shuttle working system, resulting in a 30% reduction to background trips on the *A507 only*.
- Closure of Football Close and Icknield Way. Note that the modelling does not account for reassignment of the background trips currently using these junctions; they would likely reassign onto B656 and through the crossroads. This is a limitation of the modelling but is difficult to estimate without additional survey data in the area around Norton Road.
- Active travel underpass delivered, resulting in better active travel opportunities for BA1 and BA10.

Results

The modelled network performs worse than present day. On some arms in some time periods, the junction performs slightly better (using queue lengths as a metric) than the present day, because some background traffic is assumed to displace and the signal timings have been altered in the VISSIM model.

The operation of the junction in Run 1 is just about within acceptable limits. This judgement is based on experience, blocking back / safety implications and HCC's policy to avoid increasing highway capacity in response to queuing.

Morning peak hour:

- Queues extend from the crossroads north towards the shuttle system, but do not queue through it for the majority of the time (the average maximum queue is 149m from the crossroads northwards). Within the peak hour, the longest queue simulated is however 222m. The average maximum queue results in maximum delay per vehicle of 176 seconds (Clothall Road).
- Queues do extend into Mallard Court / Icknield Way East, and onto Bygrave Road (average maximum of 150m on Mallard Court and Icknield Way, 95m on Bygrave Road).
- The queues on Whitehorse Street, Clothall Road and Royston Road are not significant and are often 'rolling' – vehicles are constantly moving at a slow speed.
- Significant queues do not form at the BA1 North Road access junction.

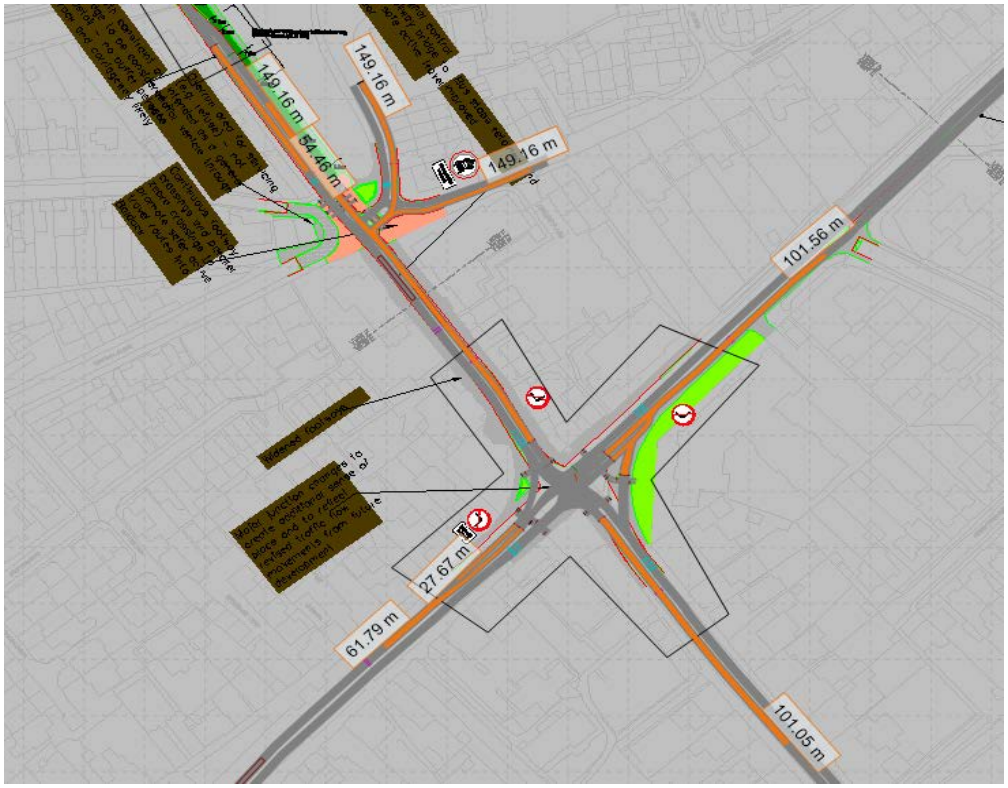
Evening peak hour:

- Right turners from Royston Road to Station Road queue to a typical maximum of 162m, with an absolute maximum (within the hour) of 360m; signal times are altered to optimise the green time given to this movement, and overall delay per vehicle is less than in the morning peak – up to 88 seconds delay per vehicle (on Royston Road). The total cycle time of the crossroads junction is 100 seconds, which means that all queueing vehicles can get through in one cycle.
- On the other arms of the crossroads, queues are shorter than in the morning peak.
- Queues are marginally longer on Bygrave Road than in the morning peak, extending to 110m.
- Shuttle working is given more green time in the northbound direction, to prevent queues extending through the crossroads.
- Queues similar at the BA1 North Road.

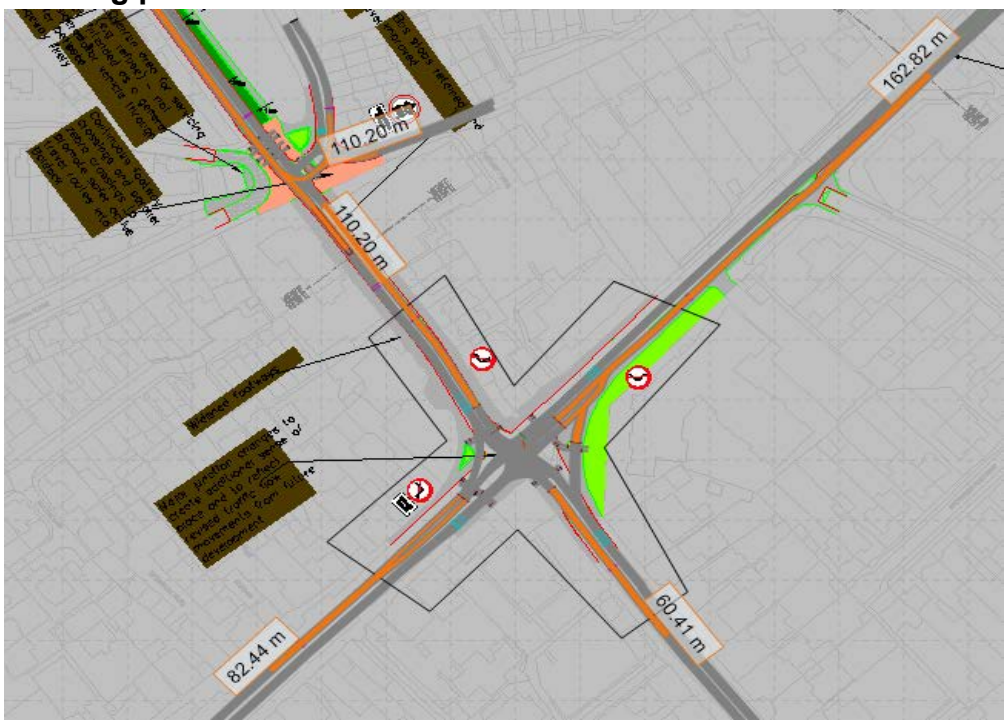
Visualisations of the crossroads are shown overleaf, and similar can be provided for the other junctions on the corridor.

Morning peak

Note that in all these diagrams there are symbols indicating banned turns at the crossroads. The symbols are hangover from previous design work and are not coded into the model – all turns are possible in all runs presented in this note.



Evening peak



Run 2 – revised land use assumptions

Key changes to Run 1 are highlighted in **bold**.

Phasing Assumptions

U&C indicated that employment could all move back by one year, plus office floorspace is reduced.

Year	Total	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Housing completions (dwelling)	2,953	5	45	80	182	204	**333**	340	340	340	340	287	280	177
Cumulative			50	130	312	516	**849**	1,189	1,529	1,869	2,209	2,496	2,776	2,953
Employment space completed (BA10) gross sq ft	800,000					131,501	**263,002**	263,002	142,495					
Cumulative						394,503	**657,505**	800,000						
Primary schools on BA1					1	1	**1**	1	1	2	2	2	2	2
Secondary school								Yes	Yes	Yes	Yes	Yes	Yes	Yes
Non-resi					Some	Some	**Some**	Some	Some	Some	Some	Some	All	All

BA10 sqm		12,217	**24,433**	24,433	13,238
Cumulative		12,217	**36,650**	61,084	74,322
sqft to sqm factor	10.764				

Land Use Assumptions

- 850 homes; 200 complete on BA2 and 650 on BA1*
- BA3 is not yet commenced and the school (if on BA3) is either not yet commenced or not yet generating material trips
- 36,650sqm at BA10, comprising a pro-ratad mix of:
  - 1,500sqm medical centre
  - **5,000sqm gym**
  - 5,000sqm total of combined waste transfer station and vehicle depot
  - **20,000sqm of office**
  - **26,500 of light industrial****
  - 26,500 of B2 industrial
- Some non-residential land uses at BA1, based on assumptions, comprising:
  - Primary school
  - Convenience shop
  - A community and / or leisure facility

*residential trip rates were updated between Runs 1 and 2, in response to NHDC's comments on the TSR

**trip rates for the light industrial land use were revised after Run 1 following an internal review highlighting an error. This results in lower vehicle trip generation than that presented in the TSR.

Internalisation Assumptions

Revised to account for recent refinement (a commitment in the TSR), daily weighted averages shown below for simplicity:

- **24% internalisation at BA1**, driven by primary school and some other uses
- **8% internalisation at BA10**
- **4% on BA3**
- **0% on BA2**

Background Traffic Growth Assumptions

A 2022 to 2033 mode balanced decarbonisation growth factor is used, as per Run 1.

Infrastructure Assumptions

- Shuttle working, resulting in a 30% reduction to background trips on the *A507 only.*
- Closure of Football Close and Icknield Way.
- **Active travel underpass *not* in place**. The MSM ratings have reduced ratings for active travel at BA1 and BA10.

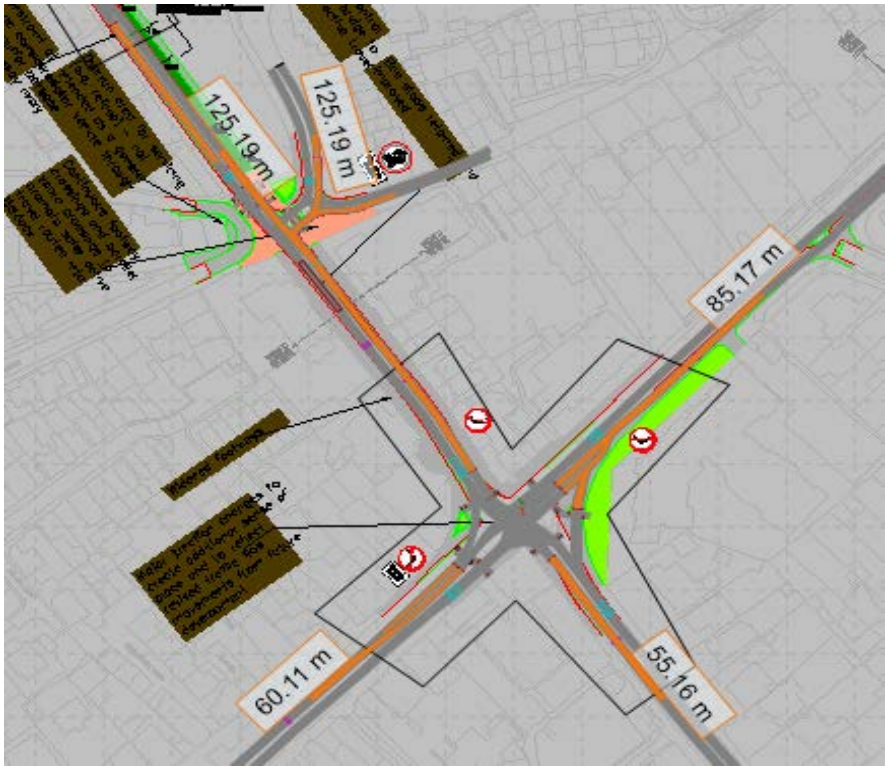
Results

The assumptions above result overall in fewer vehicles generated by the development sites and therefore the network operates better than in Run 1.

In the morning peak hour, the maximum average queue on any arm of the crossroads is 125m (Station Road) and the maximum delay per vehicle is 92 seconds (Royston Road). Queues on Mallard Court, Icknield Way and the BA1 site access are relatively similar to Run 1. All queueing vehicles should get through in one cycle.

In the evening peak hour, the maximum average queue on any arm is 91m (Royston Road) and the maximum delay per vehicle is 57 seconds (Clothall Road). Queues on Mallard Court, Icknield Way and the BA1 site access are relatively similar to Run 1. Some queueing vehicles would need to wait one full cycle to get through the shuttle system signals.

Morning peak



Evening peak



Run 3 – remove assumption of displaced traffic on A507

Key changes to Run 2 are highlighted in **bold**.

Phasing Assumptions

Retaining same assumptions to Run 2.

Year	Total	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Housing completions (dwelling)	2,953	5	45	80	182	204	**333**	340	340	340	340	287	280	177
Cumulative			50	130	312	516	**849**	1,189	1,529	1,869	2,209	2,496	2,776	2,953
Employment space completed (BA10) gross sq ft	800,000					131,501	**263,002**	263,002	142,495					
Cumulative						394,503	**657,505**	800,000						
Primary schools on BA1					1	1	**1**	1	1	2	2	2	2	2
Secondary school								Yes	Yes	Yes	Yes	Yes	Yes	Yes
Non-resi					Some	Some	**Some**	Some	Some	Some	Some	Some	All	All

BA10 sqm		12,217	**24,433**	24,433	13,238
Cumulative		12,217	**36,650**	61,084	74,322
sqft to sqm factor	10.764				

Land Use Assumptions

- 850 homes; 200 complete on BA2 and 650 on BA1
- BA3 is not yet commenced and the school (if on BA3) is either not yet commenced or not yet generating material trips
- 36,650sqm at BA10, comprising a pro-ratad mix of:
  - 1,500sqm medical centre
  - 5,000sqm gym
  - 5,000sqm total of combined waste transfer station and vehicle depot
  - 20,000sqm of office
  - 26,500 of light industrial
  - 26,500 of B2 industrial
- Some non-residential land uses at BA1, based on assumptions, comprising:
  - Primary school
  - Convenience shop
  - A community and / or leisure facility

Internalisation Assumptions

- 24% internalisation at BA1, driven by primary school and some other uses
- 8% internalisation at BA10
- 4% on BA3
- 0% on BA2

Background Traffic Growth Assumptions

A 2022 to 2033 mode balanced decarbonisation growth factor is used, as per previous runs.

Infrastructure Assumptions

- Shuttle working, **but assume this results in no displacement / reduction of background trips on the A507**.
- Closure of Football Close and Icknield Way.
- Active travel underpass not in place.

Results

This is a sensitivity test to understand the implications of fewer vehicles displacing on the A507 than initially assumed. The revised assumptions set out above result the same volume of vehicles generated by the development sites as in Run 2, but there is more background traffic on the A507. As a result the network operates worse than in Runs 1 and 2.

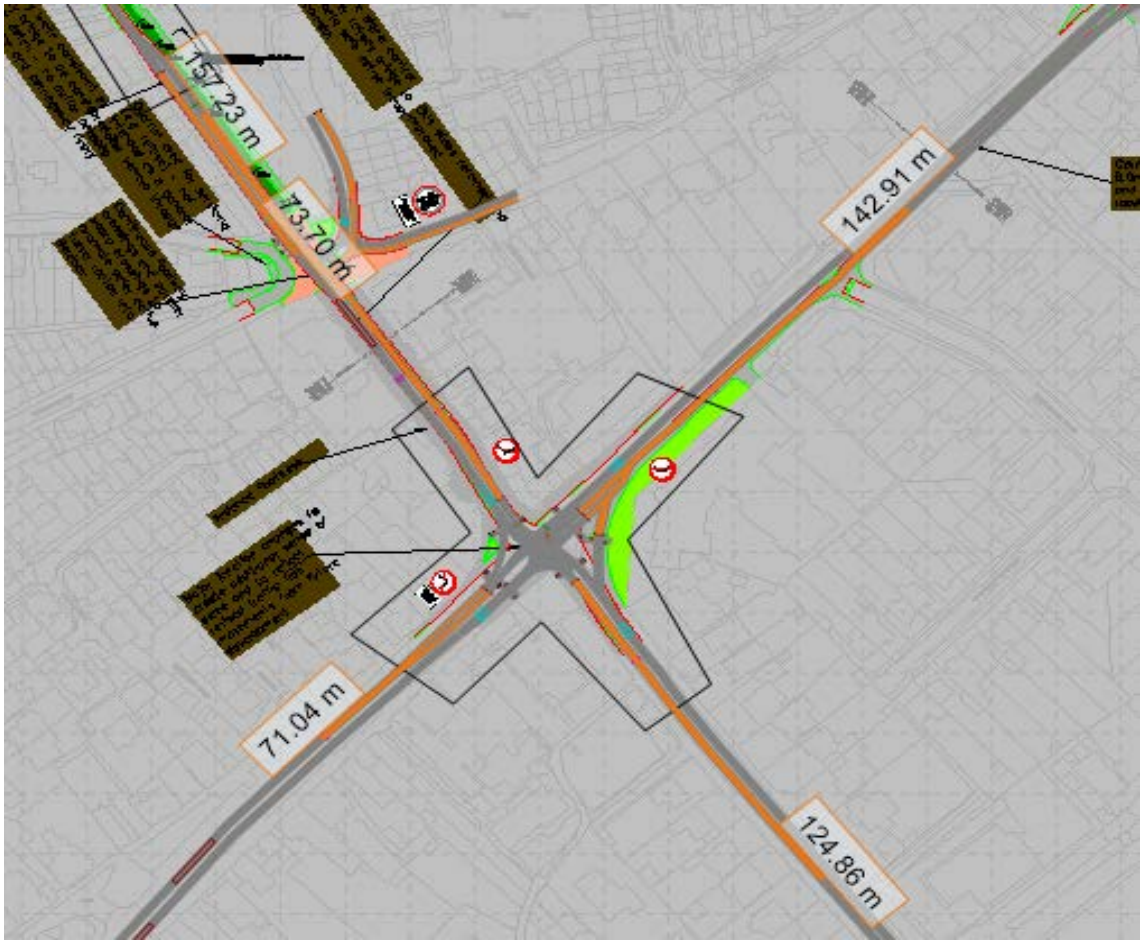
In the morning peak hour, the maximum average queue on any arm of the crossroads is 157m (Station Road) and the maximum delay per vehicle is 170 seconds (Royston Road). This means that some vehicles queue for more than one cycle of the signals at the crossroads. The maximum queue across the time period is 332m (Royston Road) Queues on Mallard Court, Icknield Way, Bygrave Road and the BA1 site access are similar to but slightly longer than in Runs 1 and 2, due to there being fewer gaps to pull out onto the A507.

In the evening peak hour, the maximum average queue on any arm is 168m (Royston Road) and the maximum delay per vehicle is 102 seconds (Rosyton Road). The maximum queue across the time period is 351m on Royston Road. Queues at the BA1 site access and Mallard Court / Icknield Way are relatively similar to other runs, but the queues on Bygrave Road and Salisbury Road are longer than in any other run, extending past the end of Salisbury Road on Byrgrave Road. Additionally, the queue back from the shuttle system for vehicles travelling in the southbound extends to the BA1 bus access. In effect, vehicles queue from the stop line on Station Road at the crossroads junction all the way to BA1, with a break in the queue at the shuttle working, resulting in an overall average maximum queue length of around 351m. Vehicles could be waiting several cycles to get through the traffic signals.

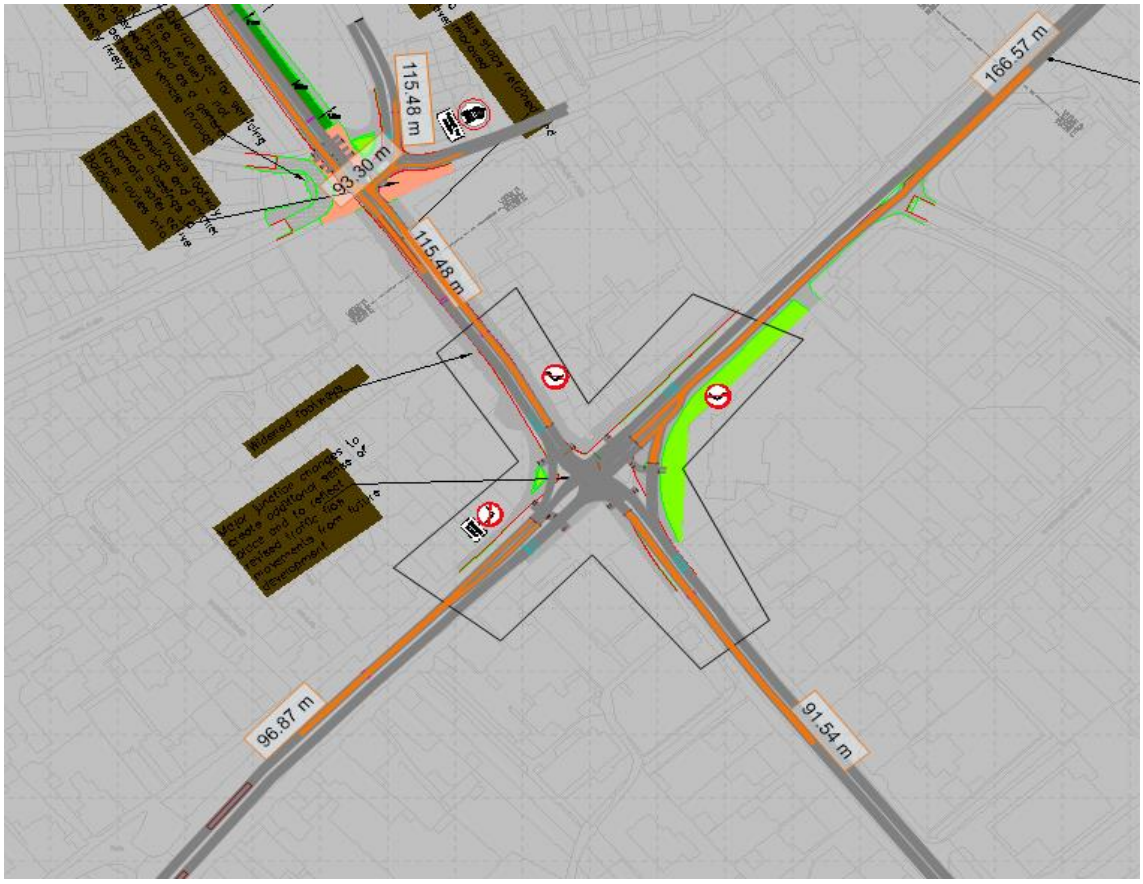
The lengths of queues and the resultant vehicle delays in this run are material and would likely result in other parts of the local network (not included in the VISSIM model) also operating with significant congestion. There would be significant impacts on bus journeys times in the area. Whilst HCC policy no longer gives significant weight to congestion as a barrier to development, for the above reasons this level of delay is unlikely to be acceptable to HCC and other stakeholders such as bus operators.

This run is a sensitivity test to understand the implications of fewer vehicles displacing from the network (as a result of the shuttle working system) than initially assumed. Changing this assumption has a significant impact on delays on the modelled network. It demonstrates the importance of delivering this intervention early and working with HCC to include this assumption in the COMET inputs.

Morning peak



Evening peak



Run 4 – revised to test trigger of 2034, re-introducing the assumption of displaced traffic on A507

Key changes to Run 3 are highlighted in **bold**.

Phasing Assumptions

Testing 2034 quantum as opposed to 2033 (tested in Runs 1 to 3).

Year	Total	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Housing completions (dwelling)	2,953	5	45	80	182	204	**333**	**340**	340	340	340	287	280	177
Cumulative			50	130	312	516	849	**1,189**	1,529	1,869	2,209	2,496	2,776	2,953
Employment space completed (BA10) gross sq ft	800,000					131,501	263,002	**263,002**	142,495					
Cumulative						394,503	657,505	**800,000**						
Primary schools on BA1					1	1	1	**1**	1	2	2	2	2	2
Secondary school								**Yes**	Yes	Yes	Yes	Yes	Yes	Yes
Non-resi					Some	Some	Some	**Some**	Some	Some	Some	Some	All	All

BA10 sqm			12,217	24,433	**24,433**	13,238	
Cumulative			12,217	36,650	**61,084**	74,322	
sqft to sqm factor	10.764						

Land Use Assumptions

- **1,189 homes; 200 complete on BA2 and 989 on BA1**
- BA3 is not yet generating material trips
- **61,085sqm at BA10**, comprising a pro-ratad mix of:
  - 1,500sqm medical centre
  - 5,000sqm gym
  - 5,000sqm total of combined waste transfer station and vehicle depot
  - 20,000sqm of office
  - 26,500 of light industrial
  - 26,500 of B2 industrial
- Some non-residential land uses at BA1, based on assumptions, comprising:
  - Primary school
  - Convenience shop
  - A community and / or leisure facility

Internalisation Assumptions

- 24% internalisation at BA1, driven by primary school and some other uses
- 8% internalisation at BA10
- 4% on BA3
- 0% on BA2

Background Traffic Growth Assumptions

A 2022 to 2034 mode balanced decarbonisation growth factor was used in this exercise. This is the same scenario as previous runs but reflects a later future year so is marginally higher.

Infrastructure Assumptions

- Shuttle working, **resulting in a 30% reduction to background trips on the *A507 only***.
- Closure of Football Close and Icknield Way.
- Active travel underpass not in place.

Results

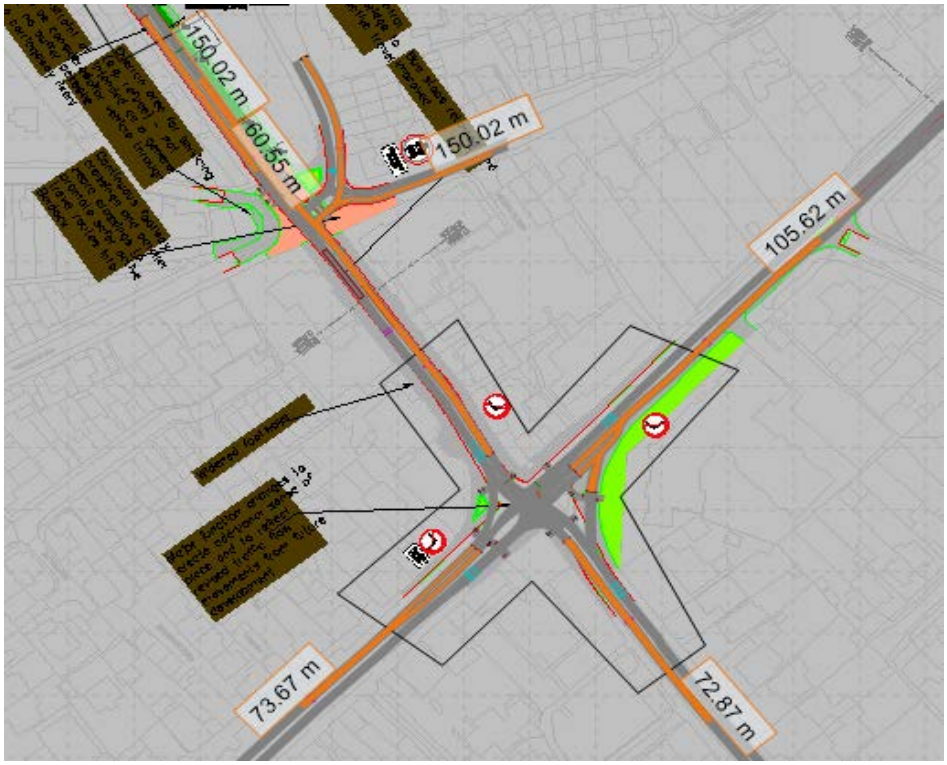
The results are quite similar to Runs 1 and 2, being more similar to Run 1 where there was more development (and thus more development vehicles) assumed. This demonstrates that the assumptions about background traffic displacement have a greater impact on network performance than the development assumptions being fed into this exercise.

In the morning peak hour, the maximum average queue on any arm of the crossroads is 150m (Station Road) and the maximum delay per vehicle is 107 seconds (Clothall Road). Queues on Mallard Court, Icknield Way and the BA1 site access are relatively similar to Run 1.

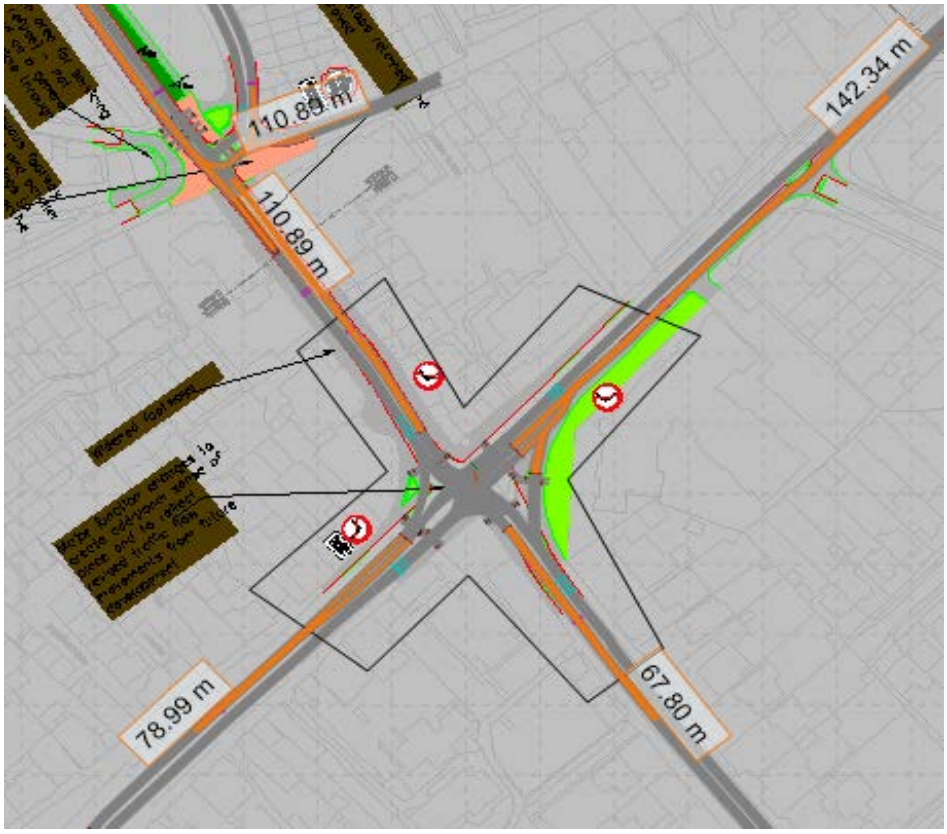
In the evening peak hour, the maximum average queue on any arm is 142m (Royston Road) and the maximum delay per vehicle is 77 seconds (Clothall Road). Queues on Mallard Court, Icknield Way and the BA1 site access are relatively similar to Run 1. The effect described above for Run 3 where queues on Station Road southbound extend all the way from BA1 to the crossroads is not seen in Run 4.

Overall, Run 4 likely represents the maximum development quantum which could be delivered before queuing and delays become uncomfortable or unacceptable. The queues would not block back across other junctions in the modelled network, but would be noticeable if sat waiting in a vehicle.

Morning peak



Evening peak



Summary and Recommendations

Overall Network Performance

In crude terms, the overall network performance for each run can be ranked as follows, with the best performing first and the worst performing last:

- Run 2: 850 homes delivered with 650 on BA1, 657,505sqft/36,650sqm employment delivered on BA10, and some other supporting land uses on BA1. As a result of the shuttle system, 30% of background traffic on the A507 is assumed to displace.
- Run 1 / Run 4: 850 and 1,189 homes delivered respectively, 36,650sqm and 61,084sqm employment delivered respectively. Both assume 30% displacement of traffic on the A507. The changes to the land use mix, internalisation assumptions and trip rates mean that the results are broadly similar.
- Run 3: 850 homes and 36,650sqm employment, no displacement of background traffic on A507.

Recommendations

Run 3 demonstrated that the assumption about displaced traffic on the A507 has a significant impact on network performance. The 30% displacement figure is an assumption, based on judgement, and it may not be reflected in COMET (see further detail in Limitations section below). Furthermore, if COMET displaces traffic only by re-routeing, rather than taking it off the network altogether through retiming trips or mode shift, traffic may be routed via Ashwell and Bygrave. This would not be an acceptable outcome. Alternatively, if less traffic displaces, then network performance worsens, and so the development quanta suggested in Run 4 (as the example with the highest quantum) would likely result in more significant, and perhaps unacceptable, impacts.

Therefore, the recommendation is to adopt the development quanta and future year tested in Run 2 for the Interim Year scenario in COMET. The network performs relatively well in this scenario, and so if less than 30% of traffic displaces, or COMET does not deal well with reassigning the displaced traffic, then there should still be capacity on the network to accommodate it.

Given this uncertainty, a further mitigation measure which could be introduced in this eventuality is to ‘gate’ traffic exiting BA1. This means re-timing the traffic signals at the BA1 North Road junction so that vehicles wait longer to exit onto North Road. It would mean less delay on the A507 corridor for background traffic and buses because they are given more green signal time. HCC have suggested this as a potential measure in their TSR comments, and whilst it has not been tested in this exercise (as aside from Run 3, queues are acceptable), it could be tested as a response to the COMET results.

Limitations

This exercise has several limitations, as expected in any traffic modelling exercise:

- No modelling exercise can predict what will happen in the future with precision; the inputs are based on several assumptions (as outlined in this note) and the outputs are predictions of metres of queueing and seconds of delay nearly ten years into the future. All results should be viewed as ballparks rather than precise values.
- COMET is a coarser (less detailed) traffic model than VISSIM. It may not be able to reflect the impacts of the shuttle working system on Station Road, or it may not reflect the same assumptions we have made. If less traffic is displaced in COMET then the network could perform as it does in Run 3 (or worse).
- The displaced traffic will either travel on different routes, travel at different times, or shift modes. COMET is less capable of dealing with the latter two outcomes, so it is possible that the shuttle working system does displace traffic from the A507 but it instead uses side roads or other roads which are inappropriate for accommodating these volumes of traffic. Whilst this may not happen in practice, the visual outputs of COMET could be interpreted by local / neighbouring communities as severe.
- This exercise has assumed a linear increase in floorspace at BA10 over time, crudely applying a pro-rata calculation to the trip generation expected by all BA10 land uses in the final year. Therefore it essentially assumes that in the Interim Year, there is some floorspace relating to offices, industry, waste transfer centre, medical centre, gym etc. delivered. In practice, a land use such as the gym would constructed in full before it opens, and this could all be completed before, or all completed after, the Interim Year. The trip generation profile of BA10 over time is therefore only crudely represented in this exercise and changes to the modelling results could be expected depending on what is delivered first. For reference, when delivered in full, the office floorspace is the highest peak hour and daily vehicle trip generator, followed by the gym, light industrial, B2 industrial, medical centre and waste transfer centre in descending order.

Appendix H – Shuttle Bus Route Plans



Prepared	Reviewed	Date
RP	MLG	March 2025

Key

- Site area
- Shuttle Bus Route
- Shuttle Bus Route (as build out continues)
- Indicative Bus Stops
- Existing Bus Stops
- 400m bus stop buffer
- 600m bus stop buffer

a company of Royal HaskoningDHV

Client

Urban&Civic

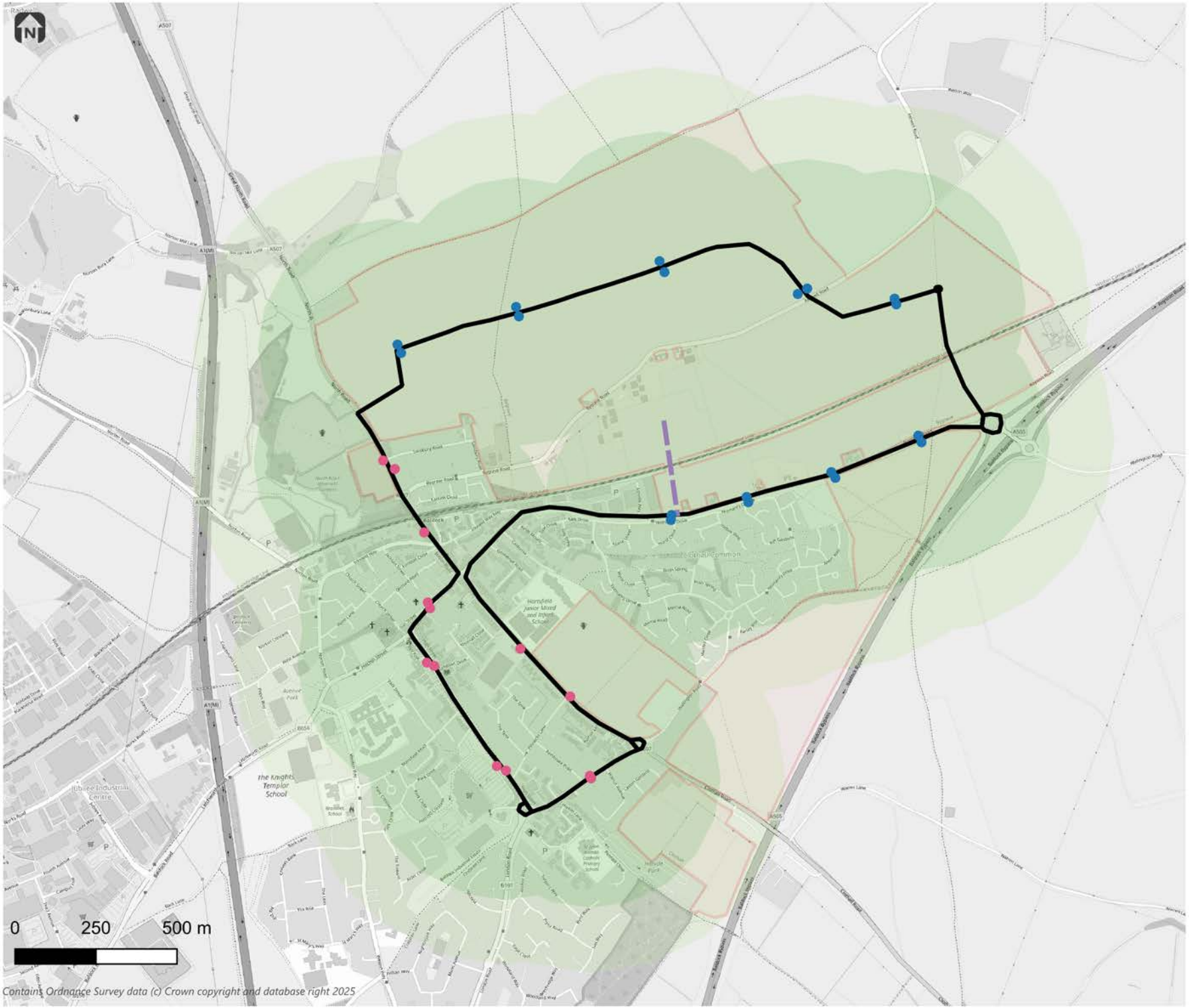
Project

Baldock OPA

Figure title

Proposed Shuttle Bus - Interim Scenario

Revision	Project number
A	PC7209
Figure number	**Date**
Figure A-1	March 2025



Prepared	Reviewed	Date
RP	MLG	March 2025

Key

- Site area
- Shuttle Bus Route
- Indicative Bus Stops
- Existing Bus Stops
- 400m bus stop buffer
- 600m bus stop buffer
- Pedestrian route available via proposed railway underpass

itp
a company of Royal HaskoningDHV

Client

Urban&Civic

Project

Baldock OPA

Figure title

Proposed Shuttle Bus - Full Build Out Scenario

Revision	Project number
A	PC7209
Figure number	**Date**
Figure B-1	March 2025

Note

HaskoningDHV UK Ltd.
Mobility & Infrastructure

To:	HCC
From:	NL
Date:	06 June 2025
Copy:	NHDC, National Highways
Our reference:	PC7029-ITP-TN-0003- FINAL
Classification:	Project related
Checked by	GB

Subject: **Growing Baldock Modelling Approach Note**

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1 Introduction

1.1 Purpose

This Modelling Approach Note has been prepared to supplement the Transport Scoping Report (TSR, ref: TP1035-ITP-RP-TP-0001-P03) and TSR Addendum (ref: PC7029-ITP-TN-0002) prepared by ITP in February and April 2025, respectively. The reports were initially issued to Hertfordshire County Council (HCC) and North Hertfordshire District Council (NHDC), and subsequently to National Highways in May 2025.

The TSR and TSR Addendum set out the approach to modelling the impacts of the Growing Baldock development, making use of HCC's COMET strategic transport model. The outputs from COMET would be used to inform local modelling, and both sets of results would be set out in the Transport Assessment (TA). The modelling programme (and ultimately the programme of the TA) was predicated on the latest release of COMET, targeted for Spring 2025.

Recent communication with HCC has confirmed that the full new COMET suite will not be ready for use until at least July 2025. This has implications for the planning application submission, which is targeted for September 2025.

ITP and Urban & Civic have therefore explored an alternative approach to modelling the highway-based development impacts. This would involve submission of a full TA which includes local junction modelling (e.g. using LinSig, Junctions 10), followed by a TA Addendum post-submission which uses the new COMET to validate results and further inform the Monitor and Manage approach. This has been discussed at a high level with HCC, NHDC and National Highways and all parties have indicated that this would be acceptable, subject to agreeing the details of the methodology.

On this basis, this Note sets out the proposed revised approach to modelling impacts of the development. The intention is to agree this with HCC, NHDC and National Highways such that work on the local modelling can commence and reach completion in line with the targeted planning application submission.

2 Local Modelling

2.1 Study Area

Whilst use of COMET first would have refined the study area for local modelling, a likely area has been identified through the development of the transport strategy and TA. This has been informed by previous COMET runs (related to the withdrawn application for the site), discussions with HCC, and early trip generation and assignment work to inform tests around redistribution and intervention trigger points. These junctions of interest have also been identified through development of the draft COMET proforma, which will be used to model the development when the full COMET suite is available for use.

The proposed local model study area therefore comprises the following junctions:

- Station Road / Royston Road / Whitehorse Street / Clothall Road
- Station Road / Icknield Way / Football Close
- Clothall Road / Wallington Road / South Road
- London Road / South Road / High Street Roundabout
- A1 (M) Junction 9
- A1 (M) Junction 10

These are in addition to the site access junctions proposed on North Road, Royston Road, Wallington Road and Clothall Road.

Traffic survey data was collected in 2022 covering all study area and access junctions and will be used to inform the base models. This is with the exception of the A505 / Royston Road junction, where there was an error during the data collection exercise. Hence 2025 survey data will be used to inform the base model at the proposed site access junction onto this roundabout.

2.2 Manual Spreadsheet Distribution Model

Based on this likely study area, a set of 'network flow diagrams' have been developed. The diagrams have been useful in early development of the strategy and TSR, giving an indication of where there are likely to be the greatest development impacts and helping to understand the potential implications of traffic rerouting (e.g. as a result of the proposed off-site interventions).

The network flow diagrams have also been used to inform the interim year modelling scenario, which aligns with the trigger point for the multi-modal bridge. This exercise was appended to the TSR Addendum and gained broad consensus from HCC and NHDC. The principles of the network flow diagrams are therefore well established and socialised amongst the key parties.

The network flow diagrams will need to be updated and refined to account for the modelling methodology now proposed, which places greater onus on the assumptions made; some of this information could otherwise have been informed by the COMET outputs. For example, assumptions will need to be made about how much through-traffic might reassign from the B656 onto the A1(M).

The sections below set out the assumptions which will feed into the trip generation, trip assignment, reassignment and traffic growth included in the network flow diagrams.

2.2.1 Trip Generation

The development trip generation is based on a vision-led approach and uses ITP's Mode Shift Model (MSM). The principle and methodology of the MSM is well documented in the TSR and built upon in the TSR Addendum and so the methodology is not repeated here. No changes to the MSM vision-led trip

generation for each scenario are proposed as part of the approach set out in this Note. Network flow diagrams showing the vision-led trip scenarios derived using the MSM will be provided with the TA.

2.2.2 Trip Distribution

The 2011 Census *Location of usual residence and place of work by method of travel to work* (WU03EW) dataset will be used to derive development trip assignment in the network flow diagrams. This is a more representative dataset than that which was collected during the 2021 Census, due to the effects of the Covid-19 pandemic on commuting patterns. The Census data have been sense checked against other data reviewed in the strategy development, such as Teralytics mobile phone data and ANPR data.

The Census data for the North Hertfordshire 004 Middle Super Output Area (considered a proxy for the proposed development sites) as place of residence have been extracted and the driving route to / from all places of work MSOAs has been derived using the Google Maps route tool.

The percentages of trips to / from place of work MSOAs are shown in Figure 2-1, with the following origins / destinations indicated by each letter:

- A = MSOAs towards Bygrave and Ashwell and beyond, using Ashwell Road
- B = MSOAs reached by the A505 Northbound
- C = MSOAs reached by Wallington Road
- D = A component of the 'internal' trips to / from the North Hertfordshire 004 MSOA that are assumed to relate to the Clothall Road area
- E = MSOAs reached by the A507 Clothall Road (S)
- F = MSOAs reached by the A1 (S)
- G = MSOAs in Letchworth and beyond, reached by the B656 (W)
- H = MSOAs reached by Norton Road, primarily around Norton and Stotfold
- I = MSOAs reached by the A1 (N)
- J = A component of the 'internal' trips to / from the North Hertfordshire 004 MSOA that are assumed to relate to the London Road area
- K = A component of the 'internal' trips to / from the North Hertfordshire 004 MSOA that are assumed to relate to the High Street area

The same exercise will be undertaken for the North Hertfordshire 004 MSOA as a place of work, with the driving route from all place of residence MSOAs being derived using Google Maps. This trip assignment will be applied to BA10, which will comprise predominantly employment land uses.

Figure 2-1: Census 2011 Trip Distribution



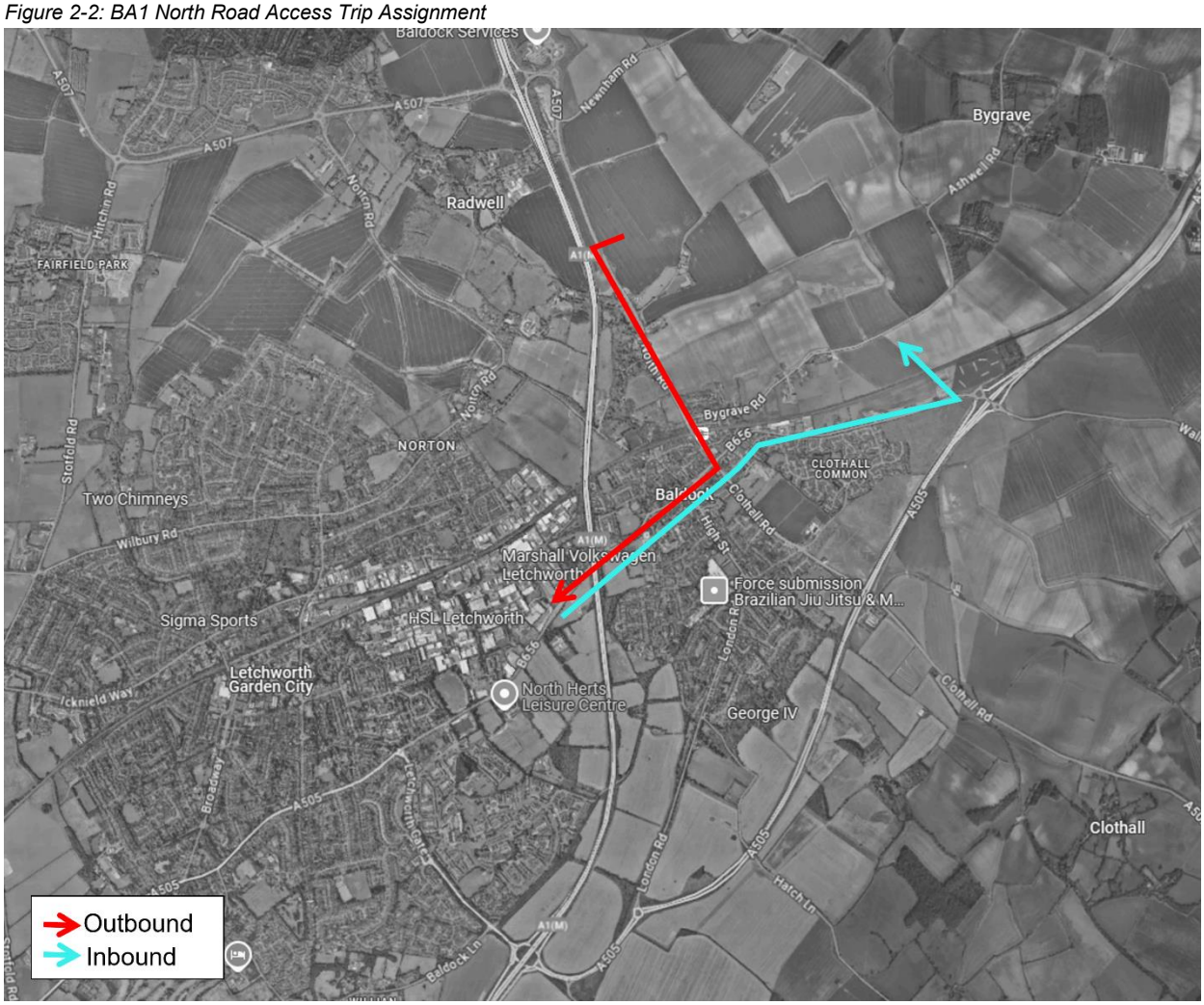
Note that a value of 0% does not necessarily mean that no trips would travel to / from the area, but that it is a very low value relative to the ~130 MSOAs included in the analysis, for example 0.3%. Also, a circular arrow indicates that trips are distributed to a destination internal within Baldock (North Hertfordshire 004) and could use a variety of minor roads within that area.

The network flow diagrams will present the trip distribution for each individual development site, i.e. BA1, BA2 etc. The development trip distribution will also take into account the effects of the proposed off-site interventions, i.e. where there are banned turning movements proposed, development traffic will not undertake these turns.

An example of this is at BA1, as shown in Figure 2-2. It will be assumed that 50% of dwellings use the North Road access, and 50% of dwellings use the Royston Road access. However, in practice, this does not mean that 50% of all journeys use each point of access in each peak hour, as the interventions proposed mean that not all movements are possible for outbound and return journeys. For example, dwellings towards the north of BA1 may use the North Road access to travel to Letchworth via Station Road and Whitehorse Street. On their return journeys, they would need to use Whitehorse Street and

then the Royston Road site access to return home (as a result of the proposed left turn ban at the Whitehorse Street crossroads[1]).

Figure 2-2: BA1 North Road Access Trip Assignment



2.2.3 Redistribution of Background Traffic

The interventions proposed will also mean that background trips will be displaced and redistributed across the local and strategic road networks. The network flow diagrams will reflect the rerouting described below.

A507

Most of the off-site interventions are intended to provide more space for active and sustainable modes, balanced against space for private vehicles. The result will be improved place function and lower movement function on many streets in Baldock. This will work to reduce through traffic in the town, with trips either retiming, redistributing, or 'evaporating' from the network entirely.

[1] This banned left turn is proposed only when necessary to contain traffic volumes within an acceptable capacity of the road, taking into account the proposed interventions along the corridor. The point at which it is introduced will form part of the Monitor and Manage approach. In this instance it is used to explain an example of the potential for different routes on outbound vs. inbound journeys.

Specifically, it is envisaged that through trips on the A507 (North Road, Station Road, Clothall Road) will be affected, and as there are minimal options for rerouting, some are likely to stop making the journey on the A507 altogether. In the network flow diagrams, it will be assumed that 30% of existing background traffic using these routes will be removed, i.e. a 30% reduction will be made to observed background traffic flows. The principle of evaporating traffic as a result of capacity reduction is well established across several studies[2] (with the opposite also evidenced when capacity is increased and induces demand) and the proportion of disappearing traffic can vary significantly depending on context.

Bygrave Road

It is proposed that the section of Bygrave Road between Bygrave village and Station Road is closed for general traffic and used as an active and sustainable travel corridor. This will be introduced as soon as possible once the link road is delivered. Given that the proposed BA1 link road will include a junction with Bygrave Road at the northeastern corner of the site, most trips which currently use Bygrave Road will be able to use the new link road (see Figure 2-3). Trips to destinations towards the north and north and west will use the North Road access and trips to the south and east will use the Royston Road access. The same assumptions described above around return journeys using different BA1 access junctions will apply as a result of the banned left turn at the Whitehorse Street crossroads.

Figure 2-3: Bygrave Road Reassignment



[2] For example, the 'Disappearing traffic?' paper: https://nacto.org/wp-content/uploads/disappearing_traffic_cairns.pdf and follow up work: https://www.transportxtra.com/publications/local-transport-today/news/48672/-disappearing-traffic--the-report-that-didn-t-quite-disappear/ and https://reconnectaustin.com/resources/cnus-highways-to-boulevards-2/traffic-studies/

Whitehorse Street Crossroads

As above, a banned left turn from Whitehorse Street to Station Road is being considered at development completion, or as part of the Monitor and Manage approach. If introduced, this would have implications for local movements in the town, reinforced by the eastern ends of Football Close and Icknield Way also being closed for traffic (in association with improving the Station Road / Icknield Way East junction).

The network flow diagrams will remove the left turning traffic from the Whitehorse Street crossroads and also from the section of the B656 to the west of the crossroads, assuming that all rerouting vehicles take a new route which does not make use of the B656. For the purposes of this assessment, it will be assumed that rerouting vehicles are coming from Letchworth and will assign to the A1(M) using Junction 9 (see Figure 2-4). There will be some highly localised movements displaced, for example those travelling to Ivel Springs, which may take a range of alternative routes using local roads within Baldock.

Figure 2-4: Whitehorse Street Left Turn Reassignment



It is also proposed to ban the left turn from Station Road to Royston Road, and the opposite movement from Royston Road to Station Road. The proposed BA1 link road will essentially replicate this north/east movement in Baldock. Therefore trips which currently make these turns at the crossroads will, in general, travel through BA1 instead (see Figure 2-5).

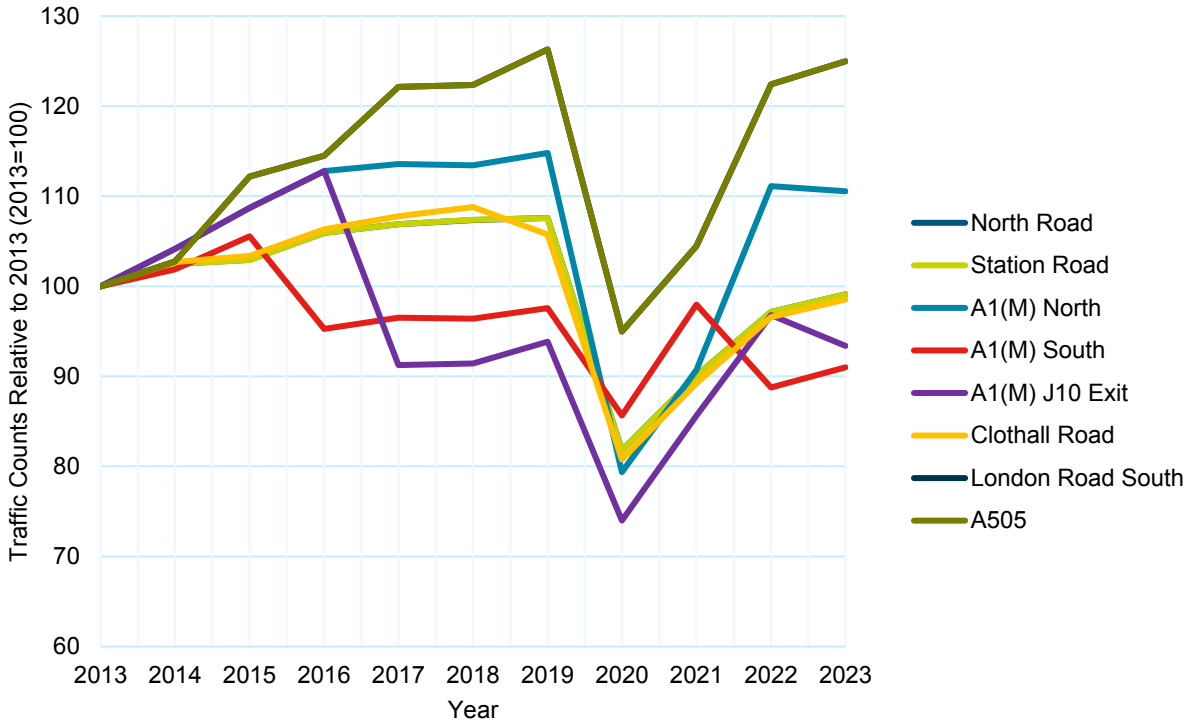
Figure 2-5: BA1 Link Road Reassignment



2.2.4 Traffic Growth

The TSR set out a suggested approach to capturing background traffic growth in both the COMET and local modelling exercises. This reflects the growing recognition that traffic in the UK has not increased in alignment with DfT forecasts. To further evidence this, an analysis of permanent DfT traffic count points around Baldock has been undertaken and is shown in Figure 2-6, overleaf.

Figure 2-6: DfT Count Data



The approach to background traffic set out in the TSR is reflected in Table 2-1, alongside the proposed TEMPro growth factors for use in the network flow diagrams and local modelling.

Table 2-1: TEMPro Growth Factors (North Hertfordshire 004)

Time Period	TEMPRo Scenario	AM Peak Factor	PM Peak Factor
2022 – 2028 (Traffic Count Data to Opening Year)	Core	1.0486	1.0470
2028 – 2033 (Opening Year to Interim Year)	Mode Balanced Decarbonisation	1.0220	1.0217
2033 – 2040 (Interim Year to Final Year)	Behavioural Change	0.9635	0.9623

To avoid double counting trips, it is assumed that TEMPro will capture traffic growth associated with new development in the area. This said, ITP is aware of the emerging plans for the 'LG1' development to the north of Gaunts Way in Letchworth. Whilst it is not proposed that vehicles associated with this development are quantitively included in the network flow diagrams and local modelling, a qualitative appraisal of the potential interactions between the proposed development and LG1 will be undertaken in the TA. For example, where there is potential for off-site interventions to conflict with each other and have unintended negative consequences (this could be relevant to Norton Bury Lane and Norton Road), or where rerouting of traffic associated with the proposed development will have impacts on public transport or active travel proposals associated with LG1.

2.3 Scenarios

The scenarios proposed for assessment in the TA are summarised in Table 2-2 and all relate to morning and evening peak hour assessments. In the Opening Year scenario, <10 homes will be likely complete so it is not necessary to run any distinct 'with development' assessments.

Table 2-2: Local Modelling Scenarios

Year	Background Traffic	Background Traffic + Vision-led Development Trips
2028 Opening Year	✓	
2033 Interim Year	✓	✓
2040 Final Year with secondary school on BA3	✓	✓
2040 Final Year no secondary school on BA3	✓	✓

2.4 Software Packages

As stated in the TSR, three software packages will be used in the local modelling exercise; LinSig, Junctions 10 and VISSIM. LinSig will be used to model signal-controlled junctions and Junctions 10 will be used to model priority junctions.

ITP has built a VISSIM model of the A507 corridor between the BA1 site access on North Road and the Whitehorse Street (B656) crossroads. This reflects the complex and sensitive nature of the corridor, particularly once the off-site interventions are introduced. The VISSIM model has been used in initial testing, including of the Interim Year scenario, and is described in the TSR Addendum. It will also allow testing of the proposed left turn ban at the Whitehorse Street crossroads before committing to it up-front as a necessary intervention to deliver the development.

The junction base models will be validated using the queue length data collected in the 2022 surveys (and a handful of updated 2025 surveys). The intention will not be to exactly replicate recorded queue lengths but rather ensure that similar levels of capacity are reflected in the models as are observed on the ground today.

2.5 Interventions

The proposed off-site interventions are the result of significant background work and engagement with HCC and NHDC, and are intended to support the sustainable mobility of the sites from the earliest possible stages of development. Hence, they are integral to achieving the mobility vision and are not simply ‘mitigation’ schemes as are conventionally conceived when modelling the highway impacts of developments. Many of the interventions are also required from a policy compliance perspective.

The off-site interventions will therefore be inherently included in the vision-led scenarios in the local models. They will be assumed to be delivered in order for the development to be built out. The phasing of interventions will align with the spatial focus of development (e.g. BA2 being delivered early) and the Interim Year testing presented in the TSR Addendum.

Should the local modelling identify that amendments are needed to the off-site interventions to reduce unacceptable highway impacts, then updated schemes will be tested and the results presented in the TA. Similarly, if the local modelling suggests that additional vehicle-based mitigation is required at junctions where no off-site interventions are currently being proposed, schemes will be designed and tested in the TA. This is likely to be relevant at J9, and possibly J10, of the A1(M). The local modelling will identify proportionate schemes to mitigate any severe development impacts at these junctions, and in all cases will acknowledge HCC’s LTP4 policy requirement of delivering improvements for active and sustainable modes first.

The designs for the off-site interventions are currently under review with HCC, NHDC and Active Travel England. In the situations described above where additional upgrades are identified through preparation of the TA, the amended designs will be issued to all relevant parties at the earliest possible opportunity so as to expedite approval in principle and maintain momentum on the planning application programme.

3 COMET

3.1 Overview

As set out in the introduction to this Note, the intention is to submit a TA Addendum post-submission which presents the results of COMET modelling. Recognising that the release date of the new COMET model has been delayed, this approach allows for the applicant to meet the targeted planning application submission in Autumn 2025. It is acknowledged that National Highways will issue a Holding Recommendation in response to the application until such a time that the COMET outputs and analysis are available.

Given that the principle of the proposed development, the mobility vision and mode shift ambitions are well established and have been the result of significant engagement with HCC and NHDC over many years, the intention of using COMET has always been to validate the proposals rather than to dictate them. It therefore works well to present a balanced and comprehensive TA which sets out the vision-led approach, followed by work to verify the local modelling outcomes and inform the Monitor and Manage strategy.

3.2 Benefits

The inputs to the COMET exercise will be similar to those outlined in this Note, i.e. the same trip generation, scenarios, phasing and (likely) study area. Many of these assumptions have been recorded in draft versions of the COMET proforma, circulated to stakeholders. It is intended that the commissioning and running of the new COMET model will be undertaken in parallel to preparing the TA, i.e. this process will be well underway when the planning application is submitted. It is therefore expected that the results of the COMET runs will be available within relatively short timescales post-submission, and the TA Addendum can be prepared accordingly.

COMET offers several insights which will complement the manual, local modelling approach in the TA:

- Potential unintended / unanticipated rerouting of trips.
- Additional junctions or links in the study area requiring assessment.
- Impacts of cumulative Local Plan development.

Running COMET will therefore necessitate an additional scenario for consideration compared with the TA – a Local Plan scenario. This will indicate the impacts of all potential (not committed) growth in North Hertfordshire, and thus will be treated as a sensitivity test to help inform the relative contribution of the proposed development to issues on the network, so as not to unduly burden the applicant with solving existing issues that other sites may add to in the future.

3.3 Scenarios

Following issue of the TSR Addendum, HCC suggested testing a series of ‘reduced mode shift’ scenarios. These would include assumptions around lower levels of mode shift being achieved than in the vision-led scenarios. This would reflect a future situation where the interventions associated with the site have been delivered, but the expected level of mode shift has not been achieved.

It is proposed that the reduced mode shift scenarios are included when undertaking the COMET runs, as they are most relevant to developing and refining the Monitor and Manage strategy, regards the timing and location of potential additional mitigation measures.

A summary of the scenarios being considered in the COMET exercise is hence shown in Table 3-1. The assessment years shown in Table 3-1 reflect the forecast years which are built into the new version of COMET and are slightly different to those presented for the local modelling exercise in Table 2-2, which reflect the anticipated development phasing.

Adopting the default COMET future years avoids the need to build bespoke forecast models and ultimately will have relatively little impact on overall results (the only difference being slight changes to level of background growth included in the assessments).

Table 3-1: Summary of COMET Scenarios

Year	Background Traffic	Background Traffic + Vision-Led Development Trips	Background Traffic + Reduced Mode Shift Development Trips	Background Traffic + Local Plan + Development Trips (Vision-led / Reduced)
2029 Opening Year	✓			
2033 Interim Year	✓	✓	✓	✓
2043 Final Year with secondary school on BA3	✓	✓	✓	✓
2043 Final Year no secondary school on BA3	✓	✓	✓	✓

3.4 Use of Outputs

The COMET outputs are expected to be provided in GIS and Excel formats, recording metrics such as volume / capacity ratios, flow changes and travel time. HCC do not generally recommend taking the individual turning movements at junctions in COMET and using these as the basis for local modelling. The outputs will hence be used to inform any areas of the network where further investigation is required, before revisiting the local models built for the TA.

Where updates to, or new, local models are necessary, the COMET development trip distribution will be checked against the network flow diagram assumptions and the decision as to whether to run the local models with the manual or COMET based trip assignment will be discussed with HCC. As above, any significant differences in background traffic growth assumptions between COMET and the initial modelling will also be captured (though none are anticipated).

The TA Addendum will therefore present outputs and confirm:

- Any additional insights on development impact on the local and strategic road networks
- The impacts of considering additional Local Plan cumulative growth
- Updates to trip assignment assumptions presented in the TA
- Any new junctions requiring assessment
- Additional mitigation / amendments to interventions
- Finalised Monitor and Manage strategy

The TA will include an outline Monitor and Manage strategy which sets out how the travel patterns associated with the proposed development will be monitored over time and what mechanisms will be in place to manage any unintended or unanticipated impacts as each phase is built out. This will tie into the measures and monitoring strategy in the Framework Travel Plan.

Use of COMET will allow this approach to be refined, especially when identifying off-site measures which are further afield or less certain in terms of their impact, both in the interim years and at the end of the development build-out. For example, a potential intervention is to close Norton Road to private vehicles, somewhere around its bridge over the A1(M). This could help to avoid undesirable rerouting of trips resulting from banned turns and closure of the eastern ends of Icknield Way and Football Close. The 2043 Final Year scenario in COMET would not include this intervention but would highlight whether rerouting occurs and its degree of significance. If these are deemed undesirable, the Monitor and Manage strategy would set out the mechanism for delivering the intervention if / when conditions on Norton Road surpass a specified threshold (informed by the COMET outputs).

4 Summary

Below is a summary of the steps to take forward the transport modelling elements of the Growing Baldock planning application, as detailed in this Note. It is understood that the general principle of presenting local modelling in the Transport Assessment, followed by an Addendum with COMET analysis, is accepted by HCC, NHDC and National Highways. Agreement is therefore sought from all parties on the content and order of the following:

Pre-submission (Transport Assessment)

1. The proposed local modelling study area.
2. Use of network flow diagrams / a manual spreadsheet model to inform local modelling.
3. The development trip generation and assignment assumptions to be reflected in the network flow diagrams (some of which is replicating information presented in the Transport Scoping Report and Transport Scoping Report Addendum).
4. The trip generation scenarios being considered in the local modelling.
5. The background traffic reassignment and growth assumptions to be reflected in the network flow diagrams (some of which is replicating information presented in the Transport Scoping Report and Transport Scoping Report Addendum).
6. Inclusion of off-site interventions in local models, and additional scenarios to include residual mitigation, if necessary.
7. Inclusion of outline Monitor and Manage strategy.

Post-submission (Transport Assessment Addendum)

8. Present COMET results (COMET being run in parallel to TA preparation)
9. Use of results to identify additional links / junctions of interest which were not covered in the TA.
10. Update or build new local models based on the above, and / or if COMET shows significantly different trip assignment or growth to local modelling assumptions.
11. Update off-site intervention designs, or identify new intervention / mitigation, if required.
12. Refine Monitor and Manage strategy, including phasing considerations.

Appendix C – Comments from Pre-Application Process

REPORT

Design Feedback Comments

Growing Baldock

Client:	Urban & Civic
Reference:	PC7029-RHD-XX-XX-RP-X-0001
Status:	Draft/P01
Date:	11 August 2025

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Your reference	Click or tap here to enter text.
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Date:	11 August 2025
Project name:	Baldock
Project number:	PC7029
Author(s):	Billy Thornett
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1 Introduction

1.1 Overview

Comments were received from several authorities regarding preliminary highway design for the Growing Baldock proposal. The drawings included proposals for land owned by the highways authority to support motor vehicle and active travel movements to and from sites. Drawings also included access designs for each site.

The organisations who kindly provided comment on these designs were Active Travel England (ATE), provided in an Advice Note and specific comments on drawings, and Hertfordshire County Council, provided through specific comments on the outline plan. Additional comments were received from an internal Road Safety Audit.

Comments were
A new set of preliminary design drawings was then produced addressing concerns and recommendations raised from the received comments.

1.2 Categories

For ease of understanding, comments were sorted into the following categories:

- General Design Feedback
- Planning Requirements
- Road Safety
- Pedestrian Access
- Cycling Infrastructure
- Public Transport
- Other

2 Comments

2.1 General Design Feedback

Commenting Authority	Date	Comment	Response	Status
Active Travel England	09/05/2025	Details of lighting arrangement requested.	Will be provided during detailed design.	Completed in due course
Active Travel England	09/05/2025	Consider placemaking along high place status corridors, e.g. conveniently located resting places.	Will be provided during detailed design.	No further tasks at outline stage
Active Travel England	09/05/2025	Details requested of public engagement so far.	A Consultation Statement will be provided as part of the planning application	Completed in due course
Hertfordshire County Council	14/05/2025	No widths or gradients on plans means comments will be high-level in principle.	Details provided on updated drawings.	Completed

2.2 Planning Requirements

Commenting Authority	Date	Comment	Response	Status
Active Travel England	09/05/2025	ATE Planning Application Assessment Toolkit should be completed and submitted as part of the site assessment.	Will be completed and submitted with the TA	Completed
Hertfordshire County Council	14/05/2025	Access points presented cannot form part of a design code or reserved matter, and HCC considers the inclusion of just vehicle /road adjacent designs as a failure to demonstrably meet LTP policy 1.	The access points are shown in detail as these aren't reserved matters. Offsite work is shown indicatively and would be secured in due course.	Completed in due course
Hertfordshire County Council	14/05/2025	Approval will not be granted without a parameter plan of routes.	The Parameter Plan will form part of the planning application.	Completed
Hertfordshire County Council	14/05/2025	"Greenway" design, noting LTN120 and HPMDG, needs agreement.	The route isn't needed to access the site.	Completed in due course

2.3 Road Safety

Commenting Authority	Date	Comment	Response	Status
Hertfordshire County Council	14/05/2025	HCC has a Speed Management Strategy and a Speed Management Group. Changing speed limits requires approval from the SMG to ensure support at TRO change. The environment must be conducive to the posted speed. Review of the Speed Management Strategy is recommended, and Anthony Collier will assist in taking any requests to the Speed Management Group.	We won't be relying on any speed limit changes as these can't be conditioned.	No further tasks at outline stage
Internal Road Safety Audit	28/04/2025	Check visibility at new junctions on A507 North Road, B656 Royston Road, Yeomanry Drive, Wallington Road and Clothall Road	Drawings to be provided with relevant visibility splays (2.4m x 43m) according to Manual for Streets.	Completed
Internal Road Safety Audit	28/04/2025	Check visibility at junction revisions on A507 North Road, B656 Royston Road and Yeomanry Drive	Drawings to be provided with relevant visibility splays (2.4m x 43m) according to Manual for Streets.	Completed
Internal Road Safety Audit	28/04/2025	Check visibility at proposed junctions within development	Drawings to be provided with relevant visibility splays (2.4m x 43m) according to Manual for Streets.	Completed

Internal Road Safety Audit	28/04/2025	Inappropriate gradient on approach to main road from proposed access junctions could lead to roll back or excessive acceleration.	Maximum gradient at junctions to be 1:20, determined by 3D modelling as further design is undertaken.	Completed

2.4 Pedestrian Access

Commenting Authority	Date	Comment	Response	Status
Active Travel England	09/05/2025	Clarity sought regarding continuation of Station Road parallel crossing. Cycle route reverts to shared use around crossing facility which would not be supported by ATE.	Reversion to shared use is necessary due to spatial constraints.	No further tasks at outline stage
Active Travel England	09/05/2025	Further details needed on active travel provision / improvements / wayfinding on Icknield Way.	Due to the width, lack of through traffic, and existing residential usage this route is proposed to be a Quietway type arrangement. This section is shown indicatively for the OPA.	No further tasks at outline stage
Active Travel England	09/05/2025	AT2 Central Crossing is considered sufficient if it connects to segregated walking/cycling infrastructure along Royston Road with logical routes to Baldock railway station. Current design does not do this. Route appears to be indirect and unprotected route along Yeomanry Drive. Active travel link to Yeomanry Drive is supported but should not be a substitute for segregated facilities on Royston Road.	More direct route chosen along Yeomanry Drive / Royston Road	Completed
Active Travel England	09/05/2025	Underpass crossing route is logical and more direct. If chosen, provision should ensure the route ties into new Station Road infrastructure. Underpass should be well lit and surveilled to prevent anti-social behaviour and improve safety.	This option is preferred.	No further tasks at outline stage
Active Travel England	09/05/2025	Overbridge option achieves similar benefits to underpass but concern is raised about usability and gradients for those using mobility aids and cyclists.	This option is not preferred.	No further tasks at outline stage
Active Travel England	09/05/2025	Overbridge landing on south side of Royston Road does not achieve the same routing benefits as other options.	This option is not preferred.	No further tasks at outline stage
Active Travel England	09/05/2025	Route behind north platform using existing underpass is the most direct.	This option is preferred.	No further tasks at outline stage

Active Travel England	09/05/2025	Conflict at Roundabouts and Signal Junctions: >2500vpd cut across main walking, wheeling or cycling streams at Royston Road/A505 junction.	Priority crossing replaced with signal controlled Toucan crossing.	Completed
Active Travel England	09/05/2025	Provision of Crossings: On Wallington Road and Royston Road (>8000vpd) controlled crossings (including zebras) are not present or are more than 400m apart.	Crossings are provided at key desire lines and frontage is not continuous on Royston Road.	No further tasks at outline stage
Active Travel England	09/05/2025	Consider permeability into other built up areas.	New shared use path and parallel crossing into Clothall Common estate is proposed.	No further tasks at outline stage
Active Travel England	09/05/2025	Motor Traffic Speed: 85th percentile speed at Royston Road / A505 junction is over 30mph.	Proposed active travel facilities are well segregated from carriageway.	No further tasks at outline stage
Active Travel England	09/05/2025	The golden thread seems to be along Royston Road, however there appears to be missing sections and severance along the route for these walking, wheeling and cycling.	Continuous walking and cycling route provided along the route of Royston Road and Icknield Way, connecting to the station and town centre.	Completed
Active Travel England	09/05/2025	Crossings for walking, wheeling and cycling appear limited. Consider additional gateways to enable safe and accessible access.	Crossings are provided at key desire lines and frontage is not continuous on Royston Road.	No further tasks at outline stage
Active Travel England	09/05/2025	May need to consider Conflict at Side Roads and Priority Junctions where >2500vpd cut across main walking, wheeling or cycling streams.	Junction here are indicative at this stage, and details will be finalised in due course.	Completed in due course
Active Travel England	09/05/2025	Will pedestrian links not identified here be assessed to ensure those with protected characteristics can access key amenities/services without barriers or longer routes?	Will be assessed during detailed design.	No further tasks at outline stage
Active Travel England	09/05/2025	Are there isochrone maps to show walking and cycling to key trip attractors?	Will be included in TA.	No further tasks at outline stage
Active Travel England	09/05/2025	ATE Toolkit should be considered when designing internal layout.	Will be considered during preliminary design.	No further tasks at outline stage
Active Travel England	09/05/2025	Routes do not feel direct, logical and intuitive in places. Limited north-south links and limited AT infrastructure for BA3 and BA2. May need special consideration if this site is to accommodate school children and those with SEND needs.	Revised pedestrian and cycle access given for BA2, revised access for BA3 to be provided once land-use is determined.	Completed
Active Travel England	09/05/2025	Will there be links to secondary schools in the area and what will be the catchment for the primary	Routing to secondary school is via Royston Road and	Completed

		schools? Assume that some site residents will be accommodated for in other primary schools?	Icknield Way or via the station underpass.	
Hertfordshire County Council	14/05/2025	Key walking/cycling routes exist on various plans but are not included in submitted designs.	The Parameter Plan will form part of the planning application.	Completed
Hertfordshire County Council	14/05/2025	Key principles, notably widths, need agreement for walking/cycling routes	Widths have been added to preliminary drawings, further work to finalise widths for detailed design will be undertaken in due course.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	More information on minimum widths required, complying with HCC's Place & Movement Planning and Design Guide.	Widths have been added to preliminary drawings, further work to finalise widths for detailed design will be undertaken in due course.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	Closure of Bygrave Road needs inclusion and evidence of its suitability as a sustainable travel route.	Policy requirement.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	Suggested indicative school pedestrian and cycle access point is shown with separate vehicle access. This would make crossings and bus locations clearer.	Revised access design will be provided once land-use is confirned.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	Parameter plan required, wider site connections need to be understood and securable.	The Parameter Plan will form part of the planning application.	Completed
Hertfordshire County Council	14/05/2025	Concern around junction layout for HWRC access road. Suggestion to explore a "longabout" solution which. Speed limit north of roundabout should be understood noting the uncontrolled crossings.	Chosen junction design allows future installation of signals. Confirmation of approach once land-use is decided.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	Why are the Pegasus crossing and employment site access so close along Royston Road when there is extensive site frontage?	Crossing aligns with current bridleway in this area.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	BA10 access design needs consideration around widths/HGVs etc.	Swept path analysis to be provided in separate drawings.	No further tasks at outline stage
Internal Road Safety Audit	28/04/2025	Proposed crossings on A507 North Road and B656 Royston Road could create confusion.	Tactile paving to be provided during preliminary design stage.	No further tasks at outline stage
Internal Road Safety Audit	28/04/2025	Inappropriate transition between shared use facilities and footway / cycleway could result in collisions.	Tactile paving to be provided during preliminary design stage.	No further tasks at outline stage
Internal Road Safety Audit	28/04/2025	Insufficient geometry at junctions could cause overrunning of footway or collisions at new junctions	Swept path analysis to be provided in separate drawings, wide junction mouths are contrary to Manual for Streets principles	Completed

			to reduce speeds and improve safety.	
Internal Road Safety Audit	28/04/2025	Insufficient geometry at junctions could cause overrunning of footway or collisions at changed junctions	Swept path analysis to be provided in separate drawings, wide junction mouths are contrary to Manual for Streets principles to reduce speeds and improve safety.	Completed
Internal Road Safety Audit	28/04/2025	Insufficient tactile paving could lead to confusion for visually impaired users	Tactile paving to be provided during preliminary design stage.	No further tasks at outline stage
Internal Road Safety Audit	28/04/2025	Insufficient pedestrian facilities at controlled crossing could result in road user confusion and collisions.	There is no requirement for a formal pedestrian crossing on Mallard Court itself, a revised junction layout is proposed to narrow junction mouths and adjust geometry which will have uncontrolled crossings where Highway Code Rule H1, H2, and H3 apply.	No further tasks at outline stage
Internal Road Safety Audit	28/04/2025	Insufficient tactile arrangement at Pegasus crossings on B656 Royston Road could result in collisions	Tactile paving to be provided during preliminary design stage.	No further tasks at outline stage
Urban & Civic ("the Client")	04/06/2025	The crossing of the Old North Road (A507) of restricted byway Bygrave 014 and bridleway Bygrave 001 which have no connection to the west.	We are providing other improvements / crossings of the A507.	No further tasks at outline stage

2.5 Cycling Infrastructure

Commenting Authority	Date	Comment	Response	Status
Active Travel England	09/05/2025	Concern about use of two-way cycle tracks, but approach may be justified by location constraints.	Bi-directional cycle track has been selected because of spatial constraints and challenges posed by uni-directional tracks.	No further tasks at outline stage
Active Travel England	09/05/2025	Would be good to know anticipated cycle/ped numbers along sections of the corridor.	It is not proposed to include these figures in the outline planning application, but these will be provided in due course.	No further tasks at outline stage
Active Travel England	09/05/2025	Further clarity requested regarding the type of provision intended for Bygrave Road	A Quietway arrangement is proposed, where existing traffic requirements for residential property exist and a segregated greenway (no motor traffic) is proposed.	No further tasks at outline stage

Active Travel England	09/05/2025	Cycle routes on Royston Road (west), Wallington Road and Clothall Road do not join together as part of a holistic connected network.	Route is via new shared-use path and quiet streets in Clothall Common.	No further tasks at outline stage
Active Travel England	09/05/2025	Cyclists are not separated from pedestrians on North Road, the Station Road crossing, Icknield Way / Royston Road connection, the shared route into Clothall Common estate, the eastern end of Royston Road and Wallington Road.	Lack of separation is due to spatial constraints at these locations.	No further tasks at outline stage
Active Travel England	09/05/2025	What is the buffer distance along the 40mph section of Royston Road?	Dimensions provided in updated drawings.	Completed
Hertfordshire County Council	14/05/2025	Additional level of detail needed setting out pedestrian and cycle routes and access point on key desire lines. A settlement wide parameter plan individual plans for each parcel requested. May not need to be designed to high level but will be conditioned so should demonstrate movement network and flexibility at reserved matters/implementation stages.	This will be included in the DAS/Transport Assessment.	Completed
Hertfordshire County Council	14/05/2025	Cycle access on North Road north of Salisbury Road could be main cycle access to site so should be included in detailed designs as a segregated cycle track.	Shown on updated design drawings.	Completed
Hertfordshire County Council	14/05/2025	Detailed design required for Bygrave Road access to the site, including ped/cycle connectivity.	Location in question is outside scope of outline application, details will be provided in due course.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	If the North Road pedestrian and cycle route is the key gateway to the site, with the land available we'd expect this to be better, utilising place making and moving away from a route next to vehicles.	Designs show segregation, but Bygrave Road is likely to be the main active travel route, shown as shared.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	Lack of cycling provision at the Whitehorse Street/Clothall Road junction needs explanation. Noting the level of intervention to the north and east seems to be incongruent with the proposed design.	The junction is bypassed by cycle routing on Icknield Way. There is limited space at this junction so pedestrian comfort was prioritised, since cycles can bypass.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	Expect to see a ped/cycle access to employment land from underpass with relevant route through length of the empty land along Royston Road.	Detail provided during later design stages.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	More understanding of bus routing required, but principle is understood. Due to frequency, can cycle route design be more continuous?	Plans need to be supported with bus routing plans.	No further tasks at outline stage

Hertfordshire County Council	14/05/2025	Clarification around segregation should be known/agreed at this stage for the cycling routes through the development. Wider permeability can be agreed at LTN120 spec as a principle for a design code, but some key corridors should be agreed.	Detail provided during later design stages.	No further tasks at outline stage

2.6 Public Transport

Commenting Authority	Date	Comment	Response	Status??
Active Travel England	09/05/2025	Bus service looked limited. What are the plans to incorporate bus links and services, frequencies and route distribution?	Find details within TA.	No further tasks at outline stage
Active Travel England	09/05/2025	Will there be links or PT to link with rail station?	Find details within TA.	No further tasks at outline stage
Active Travel England	09/05/2025	Will there be any bus stops along Royston Road?	Bus stops are proposed along the frontage of BA10.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	Northern station access will need to form part of the outline application to a level where it can be conditioned.	Ongoing discussion with Network Rail as multiple constraints / delivery considerations. We are not wholly reliant on this connection for the strategy, it's one of many interventions.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	Reference to "future north platform link" is unhelpful. Is this being delivered by the site?	This forms part of the ongoing discussions with Network Rail.	No further tasks at outline stage

2.7 Other

Commenting Authority	Date	Comment	Response	Status??
Active Travel England	09/05/2025	Travel Plans must outline mode share targets and proposed measures to achieve them. Monitoring strategy and remedial measures should be in place if targets not met.	Travel Plan will follow this guidance.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	What are the routes used by equestrian users and how has this been incorporated into designs?	Existing brideways would be retained or improved.	No further tasks at outline stage

Hertfordshire County Council	14/05/2025	Discussion required around route priority at BA1 / link road access junction. Does the southern section of North Road become the minor route, meaning junction arrangement should be set out accordingly?	If we want to reduce traffic through Baldock, can this be achieved more through attractiveness of this rather than left turn ban at central crossroads.	Completed
Hertfordshire County Council	14/05/2025	Expect a connection between Bygrave Road BW001 to shared route, rationalizing its connection, noting your on-highway connectivity.	This can just be arrows. Same goes for the Bygrave Road connection.	Completed
Hertfordshire County Council	14/05/2025	Principle of turning bans is an issue which we remain concerned about. Position is that the need for the bans may be removed/diminished through the measures to North Road/A507	Reviewed and revised strategy presented in TA.	Completed
Hertfordshire County Council	14/05/2025	Cannot approve without knowing land use at BA3, could be better designed for school routing or residential and two solutions may be needed/safeguarded.	Details will be provided in due course.	Completed in due course
Hertfordshire County Council	14/05/2025	Further understanding of needs of employment site likely required prior to approving Royston Road / A505 junction designs, notably HGV needs.	Details will be provided in due course.	Completed in due course
Hertfordshire County Council	14/05/2025	Further information needed on “calming feature” on eastern end of Royston Road.	An indicative design has been provided at this stage, more details will be provided in further design stages.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	Our understanding of the employment land use along Royston Road is insufficient to form a view.	Details will be provided in due course.	Completed in due course
Hertfordshire County Council	14/05/2025	Is new mini roundabout on Royston Road needed?	Mini roundabout provides traffic calming.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	Employment site access design at western end of Royston Road is unclear.	An indicative design has been provided at this stage, more details will be provided in further design stages.	No further tasks at outline stage
Hertfordshire County Council	14/05/2025	Signalised access junction to employment site on Royston Road needs more explanation. The layout appears unconventional.	Layout minimises spatial impact of junction while slowing vehicle speeds.	No further tasks at outline stage
Internal Road Safety Audit	28/04/2025	Damaged road carriageway surface at Clothall Road/Royston Road/Whitehorse Street junction	Resurfacing to be undertaken where appropriate.	No further tasks at outline stage

Authority	Format	Date Received	Comment	Suggested Resolution from Comments	TSR Page	TSR Reference	Topic	ITP Response
North Herts	In Report	10/02/2025	Significance of "study area links"?		21	Referring to Insert 4.4: Proposed Highway Safety Study Area	Collision analysis	To be updated in TA
North Herts	In Report	11/02/2025	BSUE = Baldock Sustainable Urban Extension		49	Insert 7.1, mode shift model approach	Trip generation	Noted
North Herts	In Report	11/02/2025	Plot a gap rather than a dip for missing data.		Annex C Transport and Movement Baseline, page 22	Annual passenger entries/exits to Baldock Station	Errors and typos	Noted, will be updated for TA
North Herts	In Report	11/02/2025	Why?		Annex C, Transport and Movement Baseline Appendix A, page 52	"The AM peak is missing" - movements around proposed development site	Errors and typos	Issues with data collection
North Herts	In Report	14/02/2025	As discussed, this could reflect the general economic backdrop ("cost of living crisis"), and not a trend to be extrapolated reliably. Changing work patterns have not yet played out fully. Under-used office space will eventually be filled by workers (new businesses filling vacated premises; co-working spaces, perhaps with lower rates on Mondays and Fridays); or, office buildings/land will be redeveloped for other purposes, potentially residential. There is another trend beginning to be evident, of EV owners driving more because the marginal cost (principally, cost of electricity per mile) is lower. See: https://www.rac.co.uk/drive/news/electric-vehicles-news/what-range-anxiety-ev-drivers-rack-up-more-miles-than-those-using-tradition/ Although government should and could introduce some form of road pricing to replace fuel duty, it has no intention of doing so in the current Parliament. (I have this on good authority – road pricing is my specialist topic!) In short, I caution against extrapolating trends that may artificially diminish the scale of the transport challenge. I would rather start with something that we are fairly confident is towards the upper end of the likely range for background and generated trips (all modes) and be forced by that to consider more, bigger and more effective interventions to achieve higher modal shares for sustainable travel.		47	TRICS decide and provide rates	Trip generation	The D&P trends are extrapolated from data reaching back to the 1990s. We are not proposing testing every conceivable outcome. Given the endorsement of TRICS and the research supporting it, we are confident in adopting the D&P approach. The TSR is seeking to agree one set of reasonable scenarios that reflect the vision-led ambition for the site, and a range of DfT forecasts re background traffic growth.
North Herts	In Report	14/02/2025	I'm not clear what the word "mathematically" is adding to this sentence?		47	"It is noted that while mathematically there has been a reduction in vehicle trips over the period…."	Trip generation	Noted
North Herts	In Report	14/02/2025	Would be good to have a demo/walk-through of this.		48	Referring to MSM spreadsheet tool	Trip generation	Agreed, TWG would be an appropriate forum
North Herts	In Report	14/02/2025	I'm all in favour of ambitious targets, but Gilston is not yet a demonstration case of achieving an ambitious target.		Annex A scoping meeting minutes, page 4	Use of Gilston as an example of targets		Noted
North Herts	In Report	14/02/2025	This needs to set out the methodology, not just the inputs and outputs.		Annex G	Decide and provide methodology, referring to the whole annex	Decide and provide	Noted, data will be provided in TA
North Herts	In Report	14/02/2025	What data is this comparing?		Annex G	Historic trends - change over time (resi)	Decide and provide	Trip generation data
North Herts	In Report	14/02/2025	What does "total vehicles" mean. In this context, it should mean vehicle drivers (as opposed to passengers), otherwise it's mixing vehicle-trips and people-trips?		Annex G	Historic trends - change over time (resi)	Decide and provide	Agreed, this is what it's showing
North Herts	In Report	14/02/2025	Vehicle passengers or does it include drivers?		Annex G	Historic trends - change over time (resi)	Decide and provide	Vehicle occupants includes drivers and passengers
North Herts	In Report	14/02/2025	What are these percentages based on?		Annex G	External trips (resi)	Decide and provide	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
North Herts	In Report	14/02/2025	If I understood correctly from our discussion, PT includes only bus, not rail. For rail trips, it is the first/last mile connection mode that is counted? In which case say "bus" not "public transport".		Annex G	D&P Trip rates based on trend extrapolation (resi)	Decide and provide	To review in context of request for clarification on MSM methodology
North Herts	In Report	14/02/2025	…?		Annex G	Resi assumptions	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	14/02/2025	These all look quite low assumptions because of the low baseline for sustainable modes. Does this fit with the masterplan target of 50% of trips being by sustainable modes?		Annex G	Resi assumptions	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	14/02/2025	Vehicle-trips per household?		Annex G	Trip forecast fan table (resi)	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	14/02/2025	Is this limited to sites similar to Baldock, or at least excluding large metropolitan areas?		Annex G	Trip forecast fan table (resi)	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	14/02/2025	vehicle trips		Annex G	Trip forecast fan graph(resi)	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	14/02/2025	What time period, and is this based on a best-fit trend line (not just the difference between two years)?		Annex G	historic trends - change over time (commercial)	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	17/02/2025	I think this is quoting CoMoUK's research.		36	Parking strategy, Car Clubs, Zipcar statistics research	Car Club	To note in TA
North Herts	In Report	17/02/2025	This assumes that commercial space will continue to be underused, which is unlikely in the long run. It is more likely that more businesses will use less space, and landlords will find ways to incentivise use on Mondays and Fridays (e.g. with lower rates on co-working spaces).		62	Table 7-19 Commercial use resultant trip gen comparison	Decide and provide	To review in context of request for clarification on MSM methodology
North Herts	In Report	17/02/2025	This presumably should have been deleted?		Annex G	Resi assumptions	Decide and provide	The TA will expand more on the methodology adopted and provide further narrative on the factors which have/will like influence these trends
North Herts	In Report	17/02/2025	I think a stronger commitment than "investigate" is probably needed here. There is also some congestion in the AM peak at the London Road roundabout on going southbound on the A505.		34	"Investigating" highway capacity improvements at Junction 9 of A1(M)	Local modelling	Agreed, this is likely to be a hotspot in COMET, requiring further analysis and mitigation in the local junction modelling in the TA
North Herts	In Report	17/02/2025	Is this the national Transport Decarbonisation Plan? This is heavily reliant on switching from ICEVs to BEVs (with little if any consideration of the embodied carbon); is severely underfunded (small and inconsistent grants for active travel and buses that are far from being transformative); and, crucially, the plan does not set a target for reducing vehicle-miles (by ~25% to be in line with 1.5C, which is now well beyond reach, so a deeper reduction is probably necessary). As a result, the plan is way off track.		Annex G	Resi assumptions	Decide and provide	Noted. An updated method, drawing on refined assumptions, will be included in TA
North Herts	In Report	17/02/2025	Needs clarifying		34	**Referring to:** The access road and the access junctions at either end of it, on Royston Road and North Road and its role in allowing interventions on- and off-site to be completed by providing additional connections around the town	Interventions	To be updated in TA
North Herts	In Report	17/02/2025	Need to be clear that these bans are only possible once the all-modes railway bridge is open. There may need to be some accounting for trips that miss the turning to the new access road, and therefore have to divert around Baldock to get through the junction. The left turn from Whitehorse St has less support from HCC as well as residents and members, so will need to be tested separately.		34	Banning turns from Station Road to Royston Road (and vice versa) and from Whitehorse Street to Station Road	Interventions	To note in TA, and TP / MMF regards the threshold and process for introducing the left turn ban
North Herts	In Report	17/02/2025	Presumably internalisation means internal to each allocated site (i.e. doesn't include trips between, say, BA1 and BA3)?		38	Definition of trip internalisation	Trip internalisation	Internalisation involves trips within each site and not between the individual application sites, these are effectively treated as external
North Herts	In Report	17/02/2025	It is unclear how these percentages have been derived. It would be helpful to see a table like 7-1, showing the sites that have been used to inform these percentages.		38	Percentage of trips internalised	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
North Herts	In Report	17/02/2025	Cambourne is in South Cambridgeshire, 13km west of Cambridge. It is also not a poster child for sustainable transport. Its nickname is "Carborne".		38	Use of Cambourne as a comparable development	Trip internalisation	This is noted in the refined internalisation process
North Herts	In Report	17/02/2025	A mean is only meaningful if the distribution is symmetrical. In some of these cases, the distribution will be skewed by outliers or non-normal patterns of distribution (e.g. where comparing developments with/without a secondary school). It would be better to use judgement to either pick or exclude rates, based on similarity to this development.		41	Trip containment factor, Table 7-3	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
North Herts	In Report	17/02/2025	The shopping and leisure figures look exceptionally high, given that few developments include supermarkets and popular leisure venues (cinemas, restaurants, gyms, etc.). Therefore, I am unclear if some of the sites considered are relevant comparators.		41	Trip containment factor, Table 7-3	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario

Authority	Format	Date Received	Comment	Suggested Resolution from Comments	TSR Page	TSR Reference	Topic	ITP Response
North Herts	In Report	17/02/2025	I don't see a link between the benchmarking study and these percentages.		41	Assumed internalisation percentages	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
North Herts	In Report	17/02/2025	Are these relevant any longer? Wouldn't you take more up-to-date TRICS trip rates as the BaU scenario?		41	TRICS trip rates adopted in the TAs from withdrawn applications	Trip generation	The BAU trip rates have been updated based on a new TRICS search, and these rates are in the MSMs that feed into the COMET proforma
North Herts	In Report	17/02/2025	Wrong table reference. Table 7.7?		49	Vehicle mode share for pupil trips , table reference	Errors and typos	Noted
North Herts	In Report	17/02/2025	BA2 is missing, even though it is now to be included in the outline application.		59	Table 7-14 Vision led scenario internal trips	Errors and typos	To be captured in TA
North Herts	In Report	17/02/2025	Is there double-counting here? Does it exclude residents of BA1/2/3 commuting to work in BA10?		59	Table 7-14 Vision led scenario internal trips	Trip generation	Clarification to be provided. Run through of MSM to be provided at TWG
North Herts	In Report	17/02/2025	Internal trips for "public transport" (bus?) seem unlikely given the relatively short distances involved.		59	Table 7-14 Vision led scenario internal trips	Trip generation	Clarification to be provided. Run through of MSM to be provided at TWG
North Herts	In Report	17/02/2025	These are big changes. What is the probability that the actual rates will be at or better than these forecasts? The threshold probability should be at least 50%.		61	Table 7-18 Residential use resultant trip gen comparison	Trip generation	We are not proposing a separate statistical analysis of certainty in relation mode shift percentages
North Herts	In Report	17/02/2025	Where will LG1 and Central Beds developments fit into this?		66	Table 8-1 Indicative modelling scenario overview - Interim phase	COMET	COMET will include relevant committed and allocated sites - ITP to confirm with HCC in COMET scoping discussions
North Herts	In Report	17/02/2025	Isn't this what we are moving away from doing? Aren't we starting from the assumption that the sites have already been tested through the Local Plan examination, and that what we are seeking to establish now is the scale of interventions needed to ensure that traffic levels are contained within safe and manageable bounds? Given the cost and complexity of running COMET model runs, it would seem far better to focus on testing instead permutations of phasing of development and interventions, including the most radical that may be unpalatable now but may be more palatable and/or necessary in future.		66	Table 8-1 Indicative modelling scenario overview - full development	COMET	The MSM captures the impact of interventions on mode share, based on our vision-led approach. COMET may reassign some trips between modes, depending on network performance but it is being used primarily to understand residual impact on highway network - i.e. whether traffic levels are 'safe and manageable'. This is a different use of the model in comparison to the Local Plan. We are undertaking initial testing now regarding phasing and permutations of infrastructure. This will inform, in particular, the Interim Phase forecast test in COMET. It will allow us to provide clarity on phasing of infrastructure, fine tuned by the local modelling exercise described in the TSR.
North Herts	In Report	17/02/2025	Hitchin and Stevenage are in different directions.		Annex C, page 66	Annex C - Key movements	Errors and typos	Diagram is indicative
North Herts	In Report	17/02/2025	What data is this plotting?		Annex C, page 67	Annex C - Figure 4-17: key movements summary	Errors and typos	Mobile phone data - it will be labelled / updated in TA
North Herts	In Report	17/02/2025	The standards don't need to be challenged, as the policy already allows for providing fewer parking spaces than the standards state if evidence supports it.		34	NHC parking standards	Non-resi parking provision	Noted
North Herts	In Report	17/02/2025	Are there no intermediate years available. Very dangerous to imply a trend from two points!		Annex G	Trip forecast fan graph (resi)	Trip generation	More detail will be provided. The method, as set out in TRICS, draws on data from 1990s.
North Herts	In Report	17/02/2025	As discussed in the context of the masterplan, the aim should be for all homes to be within 400m of a bus stop. Although people are prepared to walk further to catch a high frequency service, it is unlikely that such a service will be viable for this development. Also need to consider the equality impact of not providing bus stops within 400m.		33	We imply that not EVERY house will be within 400m of a bus stop	Public transport	PT assumptions have been further refined regards routing and phasing and this feeds into the COMET proforma. Additional refinement will come through the public transport strategy in the TA
North Herts	In Report	17/02/2025	Need to consider access to Letchworth station too, which offers a faster and more frequent service to London.		34	Rail access from the sites	Public transport	PT assumptions have been further refined regards routing and phasing and this feeds into the COMET proforma. Additional refinement will come through the public transport strategy in the TA
North Herts	In Report	17/02/2025	The difference is stark: for a train to King's Cross, the fastest from Letchworth is 29 minutes, from Baldock 55 minutes. Faster options are possible from Baldock, but only with a change at Stevenage onto an already crowded train. The timetable will change again in December 2025, adding another fast AM service from Letchworth. Season tickets to London are also slightly cheaper from Letchworth.		Annex C, page 21	Time of train journey comparing Letchworth or Baldock to Kings X	Public transport	Noted, we will reflect on this in the revise PT strategy developed as part of the TA and TP
North Herts	In Report	17/02/2025	This can be updated to 2023-24. See https://railstats.co.uk/BDK/Baldock_station Given the point made in §2.47, it would make sense to also provide stats for Letchworth station.		Annex C, page 22	Updated passenger entries/exits to Baldock station	Public transport	Noted, will be updated for TA
North Herts	In Report	17/02/2025	Most services are sporadic, not just low frequency.		Annex C, page 67	Key findings on local bus routes	Public transport	Noted
North Herts	In Report	17/02/2025	Don't overlook the greater attraction of Letchworth station for journeys to London.		Annex C, page 68	Key findings, rail service	Public transport	Noted
North Herts	In Report	17/02/2025	Need designated loading bays as well as restrictions.		37	Servicing strategy restrictions	Servicing strategy	To note in TA
North Herts	In Report	17/02/2025	This is a major undertaking with financial implications. Note that Zedify, the leading provider of last-mile freight services using e-cargo bikes, recently called in the receivers.		37	last mile' consolidation points	Servicing strategy	To consider in TA / TP / MMF
North Herts	By Email	18/02/2025	A circuitous route for the primary road may be (and, in my view, is likely to be) insufficient to deter A1–A505 through-traffic.	We may need to consider, for instance, gating traffic on the link road (quick in, slow out).	N/A	Interventions for BA1	Interventions	To be coded into COMET, noting design principles, with method to be agreed with HCC
North Herts	In Report	18/02/2025	And also non-vehicular - e.g. active travel crossing of Royston Road.		69	Road safety audits for intersection of access points to development	Interventions	Agreed, we will test active travel crossing (and active travel proposals on Station Road)
North Herts	In Report	18/02/2025	Clarify that this is a DMRB document (GG 142), and the EqIA screening referred to is the one recommended in GG 101. May want to refer to GG 104 too (Requirements for safety risk assessment).		69	Audits and ancillary assessments	Interventions	Noted, we will apply the relevant guidance
North Herts	In Report	18/02/2025	Is this the demand from Letchworth pupils that will be displaced? in which case the demand is not "created", but changed.		70	Demand for 2FE "created" to existing KTS	Interventions	Agreed
North Herts	In Report	18/02/2025	Need to be clear what measures are required, and what will be held in reserve.		71	Measures and obligations	Interventions	Agreed, this will be detailed in the TA, TP and MMF
North Herts	By Email	18/02/2025	Decide & Provide methodology not clearly set out, baseline should be a realistic worst-case future scenario – not BaU or an arbitrarily doctored BaU, but a scenario where planned mitigations are, for plausible reasons, less effective than hoped. Don't understand the point of running BAU scenarios through COMET, since we are all agreed it is not a scenario we need to test. The purpose of a TA is to propose and test the effectiveness of a range of interventions and mitigations.	If we are agreed that the baseline scenario is one in which the phasing of interventions is suboptimal and background policies are unhelpful, these are some ideas for discussion about what that scenario might be based on: 1. The active travel underpass and all-modes bridges are opened, say, two years later than would be ideal. 2. Shuttle running on North/Station Road negatively impacts bus timetabling because northbound traffic has to be prioritised at all times to avoid traffic blocking back to the Whitehorse crossroads. 3. Trip rates stabilise rather than decline. Or a more complex assumption is made that BEV mileage increases and ICEV mileage continues to decline. 4. A bus service links BA1 to Baldock station, Letchworth station, Hitchin station and Hitchin town centre every 20 minutes at peak times (Mon to Sat) and hourly off-	N/A	Setting out of Decide and Provide me	COMET	We are not proposing running a set of alternative BAU scenarios through COMET. Rather we have set out the range of factors that a scenario could be built up from and are proposing one scenario at each future year that takes into account a mix of factors. For clarity in the interim and full development future year scenarios, a with and without 'mitigation' scenario are included in the COMET pro-forma. In the without mitigation scenario, BAU trip rates will be used for development trips.
North Herts	By Email	18/02/2025	Confusion about BA2. Understanding was that BA2 will be part of the outline application, and therefore needs to be included in the TA.	none	N/A	BA2 inclusion in outline app	Errors and typos	BA2 will be included in OPA
North Herts	In Report	18/02/2025	To avoid ambiguity, title as "Additional school on BA3"		27	Retitling Insert 5.4	Errors and typos	Noted, will capture in TA as needed
North Herts	In Report	18/02/2025	I understood that the outline application will include BA2?		41	BA2 inclusion in outline app	Errors and typos	Yes, it will
North Herts	In Report	18/02/2025	Would be useful to see the land uses set out separately to the trip rate tables with footprint areas and percentages of BA10 land occupied (to be able to sense-check the figures).		42	non-resi land uses	Trip generation	This is now set out in the COMET proforma and will be detailed in the TA
North Herts	In Report	18/02/2025	Where does the 80% come from? I cannot see, for instance, how 20% of waste transfer trips would be internal to BA10.		44	Trip internalisation	Trip generation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
North Herts	In Report	18/02/2025	What about pupils leaving after-school activities? In the paragraph above, it states that "most" pupils will leave between 3-4pm, but not that all would leave before 5pm.		47	Education BAU trip rates	Trip generation	These trips are likely to be modest but this will be clarified in the TA
North Herts	In Report	18/02/2025	Where - other than in London? According to the county's Traffic and Transport Data Report 2024, cycling activity in Hertfordshire has been essentially flat for the past 20 years (excepting the COVID blip).		47	Claimed substantial increase in cycling	Trip generation	This relates to TRICS D&P methodology and hasn't been adopted in our trip generation work
North Herts	In Report	18/02/2025	Given the relatively short distances involved, the bus frequency and cost is unlikely to be an attractive alternative to walking or cycling. This would be a '1' by my estimation.		51	Table 7-13: Theme ratings applied - public transport - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	A '3' would be more realistic because of entrenched car-dependent lifestyles.		51	Table 7-13: Theme ratings applied - Traffic and parking management - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	A '2' would be more realistic given that the provision on-site will be limited (some provision on BA10 is being included, even though travel to BA10 is only 'internal' if walking or cycling). There is some double-counting of active travel provision.		51	Table 7-13: Theme ratings applied - Placemaking and landuse - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions

Authority	Format	Date Received	Comment	Suggested Resolution from Comments	TSR Page	TSR Reference	Topic	ITP Response
North Herts	In Report	18/02/2025	A 10-minute frequency would be costly and unprecedented in North Herts (and rare anywhere outside a major metropolitan area or Park & Ride). Need therefore to be clear (a) whether "public transport" includes and rail journeys; (b) what destinations it is assumed the bus service will reach; (c) whether the fare revenue could plausibly cover the operating cost; (d) what the subsidy requirement would be during the early years and, potentially, long-term; (e) what the financial risk and mitigation are if patronage does reach the forecast level.		52	Table 7-13: Theme ratings applied - Public transport - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	When considering bus services, I think a '2' would be more appropriate.		52	Table 7-13: Theme ratings applied - Public transport - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	It is confusing to consider longer distance rail trips here and not the "residual trips" section. Here I would consider only rail trips to Letchworth (of which there will be a few, but bus or car will generally be more convenient).		52	Table 7-13: Theme ratings applied - Public transport - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	A '3' would be more realistic because weaknesses will remain in cycling routes within Baldock and Letchworth (i.e. there will be on-road sections that are not suitable for all ages and abilities).		52	Table 7-13: Theme ratings applied - Active travel - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	At best, this would be a '2' because road access will be good, parking will be minimally reduced with ample free and relatively cheap parking in Baldock and Letchworth remaining.		52	Table 7-13: Theme ratings applied - Traffic and parking management - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	I think this is an 'N/A' as there is no place-making being applied in Baldock or Letchworth. Off-site transport improvements are already accounted for under 'Public transport' and 'Active Travel'.		53	Table 7-13: Theme ratings applied - Placemaking and landuse - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	This is confusing! It would be easier to understand this as relating to destinations beyond Baldock and Letchworth, for which rail will play an important role.		53	Table 7-13: Theme ratings applied - Public transport - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	Because of the proximity to Baldock (and Letchworth) stations, I think this should be a 3 or 4.		53	Table 7-13: Theme ratings applied - Public transport - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	I think this is 'N/A'.		53	Table 7-13: Theme ratings applied - Traffic and parking management - BA1	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	See comments above in reviewing these.		53	Table 7-13: Theme ratings applied - BA3	Trip generation	We have undertaken a separate sensitivity test of these assumptions
North Herts	In Report	18/02/2025	I'm unclear if this is committing to creating a new baseline? That would probably be unrealistic because I don't see how you can recalibrate a strategic model based on only a partially updated set of traffic counts (and I assume there is no intention to gather a more widespread set of traffic counts).		66	Table 8-1 Indicative modelling scenario overview - opening year	COMET	HCC have confirmed COMET model can be rebased as required
North Herts	In Report	18/02/2025	HCC need to set some parameters on what is unacceptable.		67	Creating unacceptable impact on development	COMET	Agree, this should be discussed at future working groups
North Herts	In Report	18/02/2025	Below? Isn't this meant to read "Option 2"?		67	Development option 2	Errors and typos	Correct
North Herts	In Report	18/02/2025	Superseded by the Place & Movement Planning and Design Guidance: https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx#designguide		69	Roads in Hertfordshire guidance superseded	Errors and typos	Noted
North Herts	In Report	18/02/2025	This position has changed now?		Annex A, page 1	BA2 inclusion in outline app	Errors and typos	It has, BA2 now forms part of the OPA
North Herts	By Email	18/02/2025	General confusion in the TA about what “public transport” means. If the “public transport” mode share forecasts are just bus, then the numbers are difficult to believe. In our discussion, Geoff said he thought that, for train trips, it was the first/last mile leg that is counted as the operative mode for modelling and forecasting purposes.	To provide more clarity on this, I suggest setting out the assumed number of rail trips and the modal split for the first/last mile legs (walk, cycle, bus, car). I think splitting active travel into walking and cycling is important here because we need to know how much cycle parking will be needed at the station. Analysis of rail trips should also make reasonable assumptions about which station people will travel from – London commuters will tend to prefer Letchworth because of the much faster direct trains to London and slightly cheaper season tickets.	N/A	Definition of public transport	Public transport	Clarification to be provided. Run through of MSM to be provided at TWG
North Herts	By Email	18/02/2025	Bus as the main trip mode is simpler to deal with because the first leg is almost always an internal walking trip. However, the ”proposed bus service” is not described, and therefore it is unclear what destinations it will serve directly. The proposed 10-minute frequency of service is unprecedented in the UK outside of metropolitan areas and Park & Rides, and therefore would likely to require a high level of long-term subsidy. The added complication of the bus service having to use North/Station Road to serve BA1 in the early years will not make it an attractive service for early occupiers.	For these reasons, I think we need to temper expectations of the mode share attributable to bus.	N/A	Proposed bus routes	Public transport	Clarification to be provided. Run through of MSM to be provided at TWG
HCC	By Email	19/02/2025	There needs to be an in-principle agreement that active and sustainable travel connections to key destinations would need to be made prior to the occupation of that phase.		N/A	Phasing of development and critical infrastructure	Interventions	Agreed, this will form part of the TA / TP / MMF
HCC	By Email	19/02/2025	Parking Strategy section requires more nuance. North Herts are reviewing their approach to parking in the context of strategic sites. The level of parking provision also needs to be considered alongside how that provision is allocated to properties and how it is designed, the design of properties and the use of things like parking barns can all influence the use of the private car without necessarily impacting on the number of parking spaces.	We need some more specific references to the design and allocation of parking.	N/A	Parking strategy	Parking strategy	To note in TA
HCC	By Email	19/02/2025	Operating a 10 min frequency bus service from first occupation is unrealistic but some level of provision would need to be agreed. Ultimately all these factors (this comment and previous) come together to inform an interim mode share assumption for the interim test. These will ultimately be monitored.		N/A	Public transport, proposed bus service frequencies	Public transport	PT assumptions have been further refined regards routing and phasing and this feeds into the COMET proforma. Additional refinement will come through the public transport strategy in the TA
HCC	By Email	19/02/2025	Roads in Herts Design Guide has been superseded by the Place Movement and Planning Design Guide (PMPDG)	Ensure that you are referencing and working to the most up to date guidance			Errors and typos	To note in TA
HCC	By Email	19/02/2025	An interim test is needed, what I am not currently clear on is how we arrived at a 2033 interim test, my initial view is arriving at an appropriate interim year test needs to be a much more iterative process informed initially by the phasing of the development and the initial view on timing of critical infrastructure.		N/A	Why was 2033 chosen as interim test year?	COMET	We have undertaken an exercise to establish the trigger point for needing to introduce the multi-modal bridge, based on the development phasing. This was based on our Vissim model of the Station Road corridor and focussed primarily on when the A507 / B656 crossroads exceeds capacity. This identified an interim year of 2033, when 650 homes would be delivered on BA1 and 200 homes on BA2, alongside some initial education and community uses on BA1. Around half of the BA10 floorspace would be delivered by this point.
HCC	By Email	19/02/2025	I am slightly confused about the outputs of the internalisation work and cannot quite get my head around where the methodology needs to be tweaked, my fear is that the approach might be overly simplistic for the specific geography we have in Baldock whereby this is in effect a collection of sites rather than a single site which is often the case. For example in reality BA2 is relatively small and wont be able to internalise a huge amount, it might still be reasonable to assume many of the external trips can still be made sustainably, but internalisation might be being over egged if it has been arrived at as if this was a single site of 3200 homes etc.		N/A	Simplicity of internalisation methodology	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
HCC	By Email	19/02/2025	In the Monitor and Manage section I think we need to be setting out the principle of monitoring against a set of mode share targets both interim and permanent, potentially broken down to phases.		N/A	Monitor and Manage		Agreed, this will form part of the TA / TP / MMF
HCC	Word doc	07/03/2025	There is no mention of how the impacts of construction traffic and traffic management will be assessed.		64	8.2 Capacity Assessment Methodology	Construction	A high level summary will be set out in the TA, regarding construction logistics, traffic management and phasing. We envisage the detail will be reserved by condition
HCC	Word doc	07/03/2025	Within the BAU scenario, the TRICS Decide and Provide methodology will be employed to derive trip rates that reflect current trends regarding working from home, but without affecting overall mode share.	Please clarify whether the BAU trip rates in Table 7-4 (Residential) and Table 7-5 (Employment) take into account do actually reflect current trends in working from home.	38	Section 7.1	Trip generation	Table 7-4 and Table 7-5 do not include working from home trends. Clarification will be added.
HCC	Word doc	07/03/2025	The initial estimation of trip generation of trip generation assumes 30% of residential trips and 20% employment trips would be internal to the site.	This seems reasonable, noting that ITP’s research into trip internalisation methodologies from a number of large application sites shows substantial variation between developments, with no consistent agreed methodology for their calculation.	39	Section 7.2	Trip internalisation	We have developed site specific internalisation factors, based on the site context, land use mix and case study research. These are fed into the MSMs for each scenario
HCC	Word doc	07/03/2025	Table 7-4 residential BAU residential trip rate and trip calculations assumes that 70% of BA1 trips and 90% of BA3 (rather than 70%) residential trips are external. This seems reasonable, given the location and size of site BA3. Similarly, Table 7-5 and 7-6 employment trip rates and trips assume that 80% of BA10 trips are external.	As the above comment to 7.1, it is not clear whether the trip rates and trips in these tables take into account TRICS extrapolation trends to reflect working from home. More generally I found the Decide and Provide methodology in Appendix G difficult to follow and the appendix would benefit from	41	Section 7.3	Trip generation	Noted, the appendix will be updated in the TA.

Authority	Format	Date Received	Comment	Suggested Resolution from Comments	TSR Page	TSR Reference	Topic	ITP Response
HCC	Word doc	07/03/2025	The school staff mode share of 19% walk in Table 7-8 seems high given the comment that anecdotal information suggests that most staff drive and come from a reasonable distance away. The total education trip generations are robust, given non 100% pupil attendance on any given day, in reality.		46	Section 7.3.1	Trip generation	The majority of staff - 76% - are still shown to drive in the mode shares presented (taken from the Census). There will be very local staff who, if not teachers, could be in supporting roles such as dinner duties, administration, business management. They may walk because they don't have the burden of books and marking teachers sometimes cite. In the absence of any other relevant data to represent commuting trips in Baldock, this feels like the right approach, as opposed to manipulating the data based on judgement.
HCC	Word doc	07/03/2025	Table 7-10 and 7-11 show residential and non-residential Decide and Provide extrapolated residential and commercial trip rates and trips. Both tables show a 7% decrease in total trips, compared with Tables 7-4 and 7-6, reflecting a 7% reduction in trip rates, although it is unclear what time period this is over.		48	Section 7.3.1	Trip generation	More detail will be provided. The method, as set out in TRICS, draws on data from 1990s.
HCC	Word doc	07/03/2025	Table 7-12 shows a set of suggested mode share changes, presumably compared with car, representing a range of proposed scenarios of 0%. 9%, 18% and 28%. The rational for the percentage is unclear and it would be helpful to have an explanation and justification.	Is there any local/ regional case study evidence of this level of mode shift from elsewhere, for example?	50	Section 7.3.2	Trip generation	The figures cited in Table 7-12 are indicative, the actual mode shift is dependent on case studies used - the mode shift is shown in Section 7.4. We will run through the operation of the MSM at a future Transport Working Group meeting. The model does not rely on local or regional examples, given the relative paucity of best practice case studies in the UK. However, we will included case studies in the final TA.
HCC	Word doc	07/03/2025	Table 7-13 shows how it is intended to apply the theme ratings by mode, according to broad trip length category. The methodology appears sound but the rationale for the assumptions should be more broadly agreed. For example, it appears optimistic to assume that a 10 minute bus frequency at peak times is deliverable. The traffic and parking management proposals are ambitious.		51	Table 7-13	Trip generation	We are reviewing the bus strategy on the basis of comments received and will update the MSM as needed. Agreed that the traffic and parking management proposal on-site are ambitious.
HCC	Word doc	07/03/2025	The trip generation comparisons by mode between BAU, Decide and Provide and Vision-led trip generations in table 7-18 (residential) and table 7-19 (commercial) seem reasonable. The mode split BAU and Vision-led comparisons in table 7-20 (residential) and 7-21 (commercial) seem intuitive. The assumptions around changes in mode share for school pupils, compared to existing are set out in table 7-22. These seem reasonable. I agree with the decision not to apply any material shift in mode share for		61	7.4 Total Trip Generation and Mode Split Comparison	Trip generation	Noted
HCC	Word doc	07/03/2025	More detail should be provided on how trip distribution and assignment for localised modelling will be informed by relevant outputs from the COMET model.		63	7.5 Trips Distribution and Assignment for Development Trips	Trip generation	More detail will be provided in the TA, and the methodology will continue to be refined and discussed collaboratively with the councils, once there is greater clarity on the form of outputs from the new COMET model
HCC	Word doc	07/03/2025	It is envisaged that the COMET model will provide a basis for the assignment of highway and public transport trips.	As stated, further discussions with HCC should take place, if not already done so, as part of the pre-application process, to determine the model's suitability for use and to clarify model assumptions, including the scenarios to be modelled. Considerations include the level of detail of the model in the geographical area of interest and whether the model will adequately forecast congestion and any reassignment impacts arising from the development.	64	8.2 Capacity Assessment Methodology	COMET	Extensive discussions have been had with HCC on the use of the COMET model. We have discussed with HCC (DT, GB) the network coverage of the model. We will provide survey data for validation.
HCC	Word doc	07/03/2025	A VISSIM model has been built and will be used to test the implications of the development on the Station Road corridor. Anecdotally it appears from google street view that the whole of B656 Royston Road/ White Horse Street/ Hitchin Street corridor, together with the North Road/ Station Road/ Clothall Road corridor is subject to congestion.		64	8.2 Capacity Assessment Methodology	Local modelling	Noted
HCC	Word doc	07/03/2025	How will the potential impact of the development on rail and bus capacity and infrastructure provision be assessed?		64	8.2 Capacity Assessment Methodology	COMET	The TA will review the impact of the development on bus and rail, making use of our trip generation work and outputs from COMET. This will inform S106 negotiations to ensure appropriate service and improvements are provided.
HCC	Word doc	07/03/2025	Indicative modelling scenarios are set out in Table 8-1. As stated, the modelling scenarios will need to be agreed with HCC.		64	8.2 Capacity Assessment Methodology	COMET	Agreed, this is being refined based on the comments received. Further refinement can be undertaken once the COMET pro-forma is submitted
HCC	Word doc	07/03/2025	The modelling methodology is generally unclear to me, including what strategic and local model runs are proposed to be carried out and how the strategic model will be used to interact/ inform the local modelling. It is not clear whether it is intended to carry out COMET model runs for the BAU scenarios, to demonstrate the impacts of this or whether there are any up-to date existing COMET model runs available to represent these. BAU model runs would assist in demonstrating the importance of active mode interventions set out in the Vision led scenarios.		64	8.2 Capacity Assessment Methodology	COMET	We are not proposing running a set of alternative BAU scenarios through COMET. Rather we have set out the range of factors that a scenario could be built up from (Table 8-1 in TSR) and are proposing one scenario at each future year that takes into account a mix of factors. For clarity in the interim and full development future year scenarios, a with and without 'mitigation' scenario are included in the COMET pro-forma. In the without mitigation scenario, BAU trip rates will be used for development trips.
HCC	Word doc	07/03/2025	It is proposed that no COMET model run will be carried out for development option 3 (five form entry Secondary school plus residential), the justification being that the impacts will be lower than for either Options 1 or 2. However, this may only be true if Option 2 (expansion of existing Knights Templar School to 8-12 form entry) plus residential is to be modelled. I suggest that the trip generation assumptions are set out for all three of the school scenarios for HCC to gain agreement that this is the correct way forward.		64	8.2 Capacity Assessment Methodology	COMET	Overall trip generation is likely to be similar across all options. However, the impacts will be far more spatially focused in Options 1 and 2. The modelling will test the impacts of this. For completeness we will included trip generation figures for all options within the TA.

Appendix D – Road Safety Assessments and Designers Response

REPORT

Growing Baldock

Stage 1 Road Safety Audit

Client: Urban & Civic

Reference: PC7029-RHD-ZZ-XX-RP-SA-0001
Status: Final/00
Date: 28 April 2025

a company of Royal HaskoningDHV

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Appendix A – Documents forming the Audit Brief

a company of Royal HaskoningDHV

1 Introduction

ITP, a company of Royal HaskoningDHV, has been appointed by Urban & Civic to undertake a Stage 1 Road Safety Audit. The Audit relates to highway works associated with a proposed development in Baldock, North Hertfordshire. The location of the highway works subject to this Stage 1 Road Safety Audit are shown in **Figure 1** of this report.

The Audit Team for this Stage 1 Road Safety Audit was:

Audit Team Leader
Jimoh Ibrahim Jr, BEng (Hons), MSc (Hons), MSoRSA, MCIHT, Certificate of Competency
ITP

Audit Team Member
Keelan Peak, BSc, MSoRSA, MCIHT, Certificate of Competency
ITP

Audit Team Observer
Aditya Addanki, BSc, MCIHT
ITP

The Road Safety Audit took place on Tuesday 22 April 2025, in accordance with information provided by Mark Lever-Green of ITP's independent Planning Team as Designers of the scheme. The Road Safety Audit comprised an examination of the documents listed in **Appendix A** of this report, and a site visit.

The Audit Team has not been provided with an Audit Brief nor advised on the Overseeing Organisation associated with this Stage 1 Road Safety Audit.

The terms of reference for the Road Safety Audit are described in GG 119[1]. The Road Safety Audit has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the design to any other criteria.

The Audit relates to highway works associated with a proposed development in Baldock. The highway works detailed in the drawings provided include:

- A507 North Road
  - The provision of new priority junctions onto the A507 North Road for future development.
  - The provision of a shared path mostly 3.0 metre (m) wide.
  - The provision of a cycle track mostly 3.0m wide and a footway mostly 2.0m wide.
  - The provision of a new junction for bus only movements to link into the future development.
  - The provision of continuous footway crossings along the extents of the scheme.
  - Improvements to the existing bus stops along the scheme.
  - Widening of the existing footway.
  - Alterations to the junction with Whitehorse Street and the B656 Royston Road.
  - Improvements to existing residential driveway accesses.
  - The provision of a traffic signal control system under the railway bridge.
  - The realignment of the junction with Mallard Crescent, Football Close and Incneild Way.
- A507 Clothall Road

[1] *GG 119 Road Safety Audit (Formerly HD 19/15), Revision 2, published by National Highways (as Highways England) in January 2020*

    - The provision of a new priority access junction on Clothall Road.
    - The provision of a new controlled crossing.
    - The relocation of the speed limit transition.
- B656 Royston Road
    - Alterations to the junction with Whitehorse Street and the A507 North Road.
    - The reduction of the carriageway width to 6.0m.
    - The provision of footways, cycle tracks and shared use facilities along the extents of the scheme.
    - The provision of a signal-controlled junction with an active travel link to Yeomanry Drive.
    - The provision of a new public transport link onto Yeomanry Drive.
    - The provision of new parallel crossings.
    - The provision of a mini roundabout at the business centre junction.
    - Improvements to landscaping.
    - Improvements to the existing emergency access.
    - The provision of a 'Pegasus' crossing at the Public Right of Way (PROW) access within proximity of the A505 interchange.
    - Improvements to the roundabout including the realignment of the eastern arm of Royston Road at the A505 interchange roundabout.
- Wallington Road
    - The provision of a new priority access junction.
    - The localised realignment of Wallington Road within the scheme extents to include a dedicated right turn lane.
    - The provision of a new zebra crossing.
    - Improvements to the existing PROW access.
- Yeomanry Drive
    - The change in priority at the junction with Sale Drive.
    - The provision of a new parallel crossing.
- Ashwell Road
    - The conversion of Ashwell Road to an active travel greenway within the scheme extents.
    - The provision of a junction to connect Ashwell Road with the new development roads.
- Development corridor
    - The provision of a priority access off the new development road to include a bridge over the railway.
    - The provision of a footway, cycleway and shared facility along the new development road.
- Scheme extents
    - The provision of associated tactile paving at the crossing locations.
    - The provision of soft landscaping
    - The provision of traffic calming measures.

No details have been provided to the Audit Team in relation to the following and as such, it has not been possible to identify some safety problems which could arise from these aspects of the design.

- Drainage (including gully covers or any amendments to existing carriageway drainage).
- Kerbing (including dropped kerb provision, kerb heights, transition kerbs).
- Lighting provision (including sign illumination or amendments to existing carriageway lighting).
- Signage.

It is recommended that details relating to the above are provided as part of a detailed design and subject to a Stage 2 Road Safety Audit.

Due to the size of the scheme, the site visit was carried out using video footage recorded on Thursday 17 April 2025 from 13:25 from a moving vehicle as well as a walkover at some locations. Weather conditions during this site visit were clear, and the surface conditions were dry. Given the location, function of the highway and the time of day, observed traffic flows and non-motorised user activity were considered to be 'typical'.

The locations of any problems identified by the Audit Team are shown in **Figure 2** of this report.

Personal Injury Collision (PIC) data has not been provided to the Audit Team for the local highway network relevant to this scheme. The Audit Team, however, has undertaken a review of collision data on the CrashMap Pro website[2]. The review, which focussed on the most recently available five-year period (2019 to 2023) identified five collisions within the extents of the scheme.

Notably, the CrashMap database only contains collisions up to December 2023. As such, further details relating to any collisions in the vicinity of the scheme would require independent verification by the client, should the local highway authority have any concerns relating to the collision history at this location.

Any recommendations included within this report should not be regarded as being prescriptive design solutions to the problems identified. They are only to indicate a proportionate and viable means of eliminating or mitigating the identified problem in accordance with GG 119, and in no way imply that a formal design process has been undertaken.

There may be alternative means of addressing a problem which would be equally as acceptable or superior in achieving the desired degree of mitigation, and these should be considered when responding to this report.

[2] *www.crashmap.co.uk*

1 Matters Arising from this Stage 1 Road Safety Audit

A1 Local Alignment

A1.1 Visibility

A1.1.1 Problem 1

Location: Scheme extents, proposed new access junctions on:

- A507 North Road;
- B656 Royston Road;
- Yeomanry Drive;
- Wallington Road; and
- Clothall Road.

Summary: Insufficient visibility at the junction could result in vehicles turning into the path of oncoming vehicles, resulting in loss of control, side swipe or rear end shunt type collisions.

Description: Drawings provided to the Audit Team detail the general arrangement of the proposals at the abovenamed roads, including the provision of new access junctions. Drawings detailing the achievable visibility at the proposed access junctions have not been provided to the Audit Team. As such, the Audit Team cannot confirm whether sufficient visibility can be provided and maintained at the proposed access junctions.

The Audit Team is concerned that insufficient visibility at the proposed access junctions could result in vehicles turning into the path of oncoming vehicles, resulting in loss of control, side swipe or rear end shunt type collisions.

Recommendation – A1.1.1

It is recommended that drawings demonstrating that sufficient visibility can be provided and maintained at the proposed access junctions should be prepared prior to the Stage 2 Road Safety Audit. Should sufficient visibility not be achievable at the proposed access junctions, it is recommended that the proposed access junctions be relocated or amended as applicable.

A1.1.2 Problem 2

Location: Scheme extents, proposed junction revisions on:

- A507 North Road;
- B656 Royston Road; and
- Yeomanry Drive.

Summary: Insufficient visibility at the junction could result in vehicles turning into the path of oncoming vehicles, resulting in loss of control, side swipe or rear end shunt type collisions.

Description: Drawings provided to the Audit Team detail the general arrangement of the proposals at the abovenamed roads, including the revision of the geometry and/ or type of some of the existing junctions. The Audit Team consider the proposed revisions would be a material change to the highway layout.

Drawings detailing the achievable visibility corresponding to the proposed junction revisions have not been provided to the Audit Team. As such, the Audit Team cannot confirm whether sufficient visibility can be provided and maintained at the proposed revised junctions.

The Audit Team is concerned that insufficient visibility at the proposed revised junctions could result in vehicles turning into the path of oncoming vehicles, resulting in loss of control, side swipe or rear end shunt type collisions.

Recommendation – A1.1.2

It is recommended that drawings demonstrating that sufficient visibility can be provided and maintained at the proposed revised junctions should be prepared prior to the Stage 2 Road Safety Audit. Should sufficient visibility not be achievable at the proposed revised junctions, it is recommended that the proposed revisions be amended as applicable.

A1.1.3 Problem 3

Location: Scheme Extents, proposed junctions within development corridor.

Summary: Insufficient visibility at the junctions could result in vehicles turning into the path of oncoming vehicles, resulting in loss of control, side swipe or rear end shunt type collisions.

Description: Drawings provided to the Audit Team detail the general arrangement of the proposals, including the provision of new access junctions within the development corridor. Drawings detailing the achievable visibility at the proposed junctions have not been provided to the Audit Team. As such, the Audit Team cannot confirm whether sufficient visibility can be provided and maintained at the proposed junctions.

The Audit Team is concerned that insufficient visibility at the proposed junctions could result in vehicles turning into the path of oncoming vehicles, resulting in loss of control, side swipe or rear end shunt type collisions.

Recommendation – A1.1.3

It is recommended that drawings demonstrating that sufficient visibility can be provided and maintained at the proposed junctions should be prepared prior to the Stage 2 Road Safety Audit. Should sufficient visibility not be achievable at the proposed junctions, it is recommended that the proposed junctions be relocated or amended as applicable.

A1.2 New/ Existing Interface

A1.2.1 Problem 4

Location: Scheme extents, proposed pedestrian crossings on:

- A507 North Road; and
- B656 Royston Road.

Summary: Inappropriate pedestrian crossing arrangement could result in road user confusion and subsequently collisions between road users.

Description: Drawings provided to the Audit Team detail the general arrangement of the proposals at the abovenamed roads, including the provision of pedestrian crossings. From the drawings provided, the Audit Team cannot confirm the types of crossings to be provided at some of the locations.

The drawings provided suggest that red blister tactile paving and road marking pertinent to a signalised crossing would be provided at the crossing locations. However, the Audit Team cannot confirm whether the crossing facilities would be controlled or not. As such, the Audit Team is concerned that the provision of inappropriate tactile paving in accordance with the type of crossing could result in road user confusion, which could subsequently result in collisions between road users.

Image 1: Extracts from PC7029-RHD-CE-GB-DR-D-0114 S3 I02, showing a red blister tactile paving layout at the crossing face (suggesting a controlled crossing) on Royston Road.

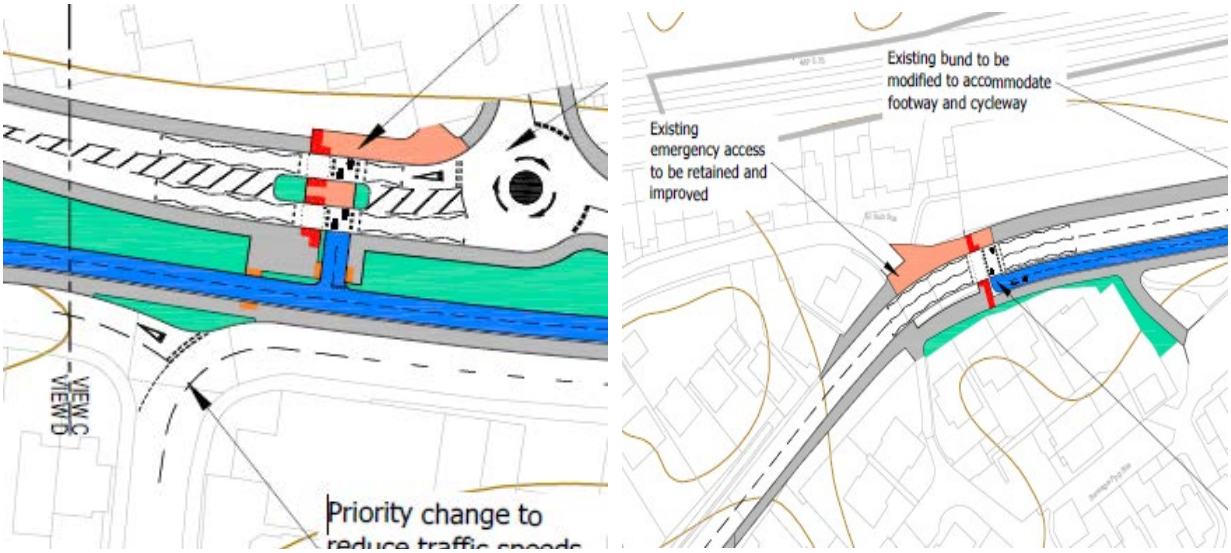


Image 2: Extract from PC7029-RHD-CE-GB-DR-D-0113 S3 I02, showing a red blister tactile paving layout at the crossing face (suggesting a controlled crossing) on Royston Road.

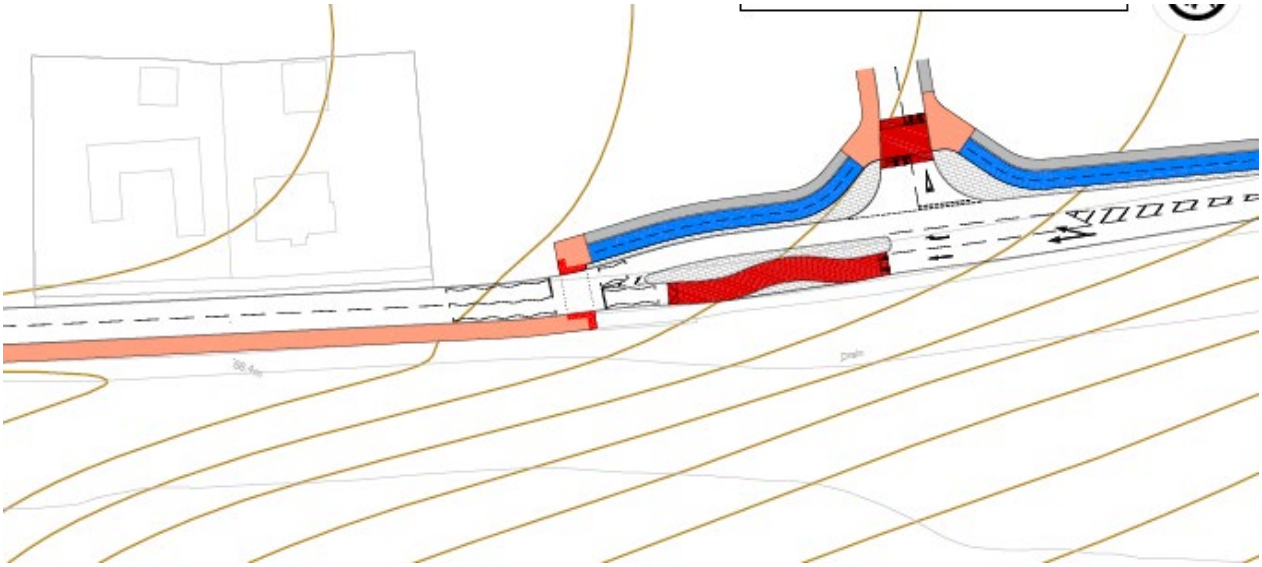


Image 3:Extract from PC7029-RHD-CE-GB-DR-D-0113 S3 I02, showing a red blister tactile paving layout at the crossing face (suggesting a controlled crossing) on Royston Road.

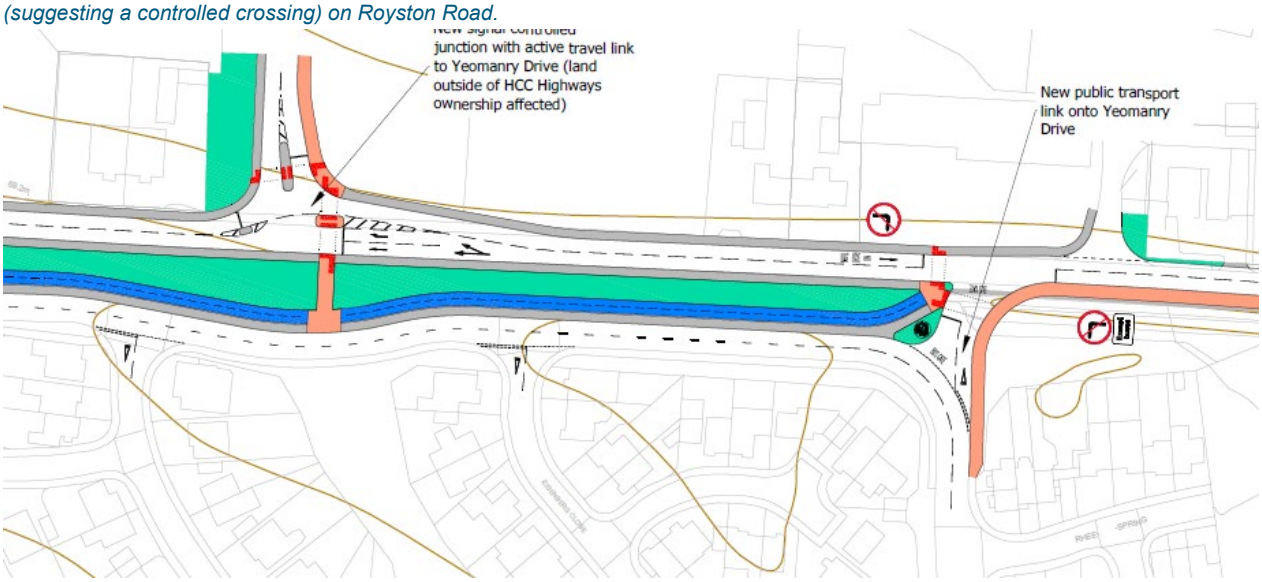


Image 4: Extract from PC7029-RHD-CE-GB-DR-D-0111 S3 I02, showing a red blister tactile paving layout at the crossing face (suggesting a controlled crossing) on North Road.

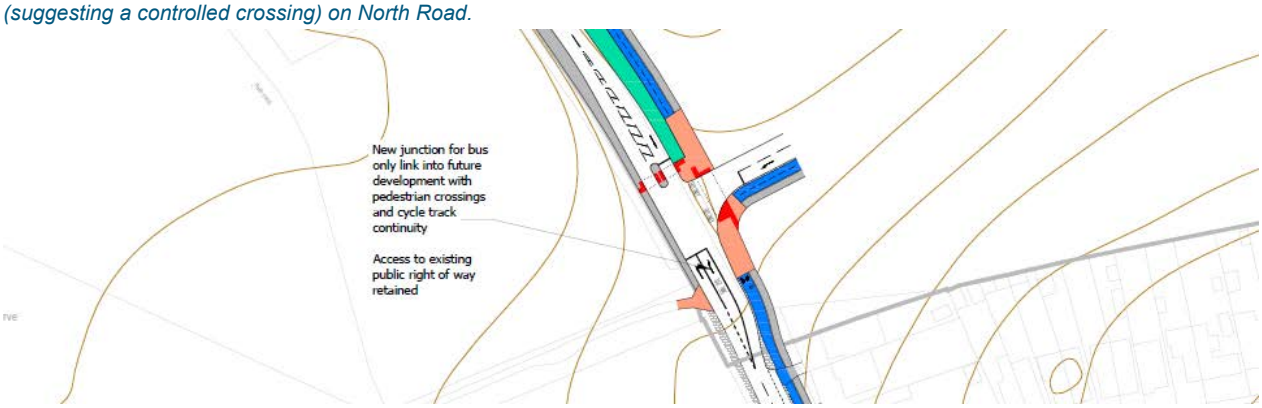
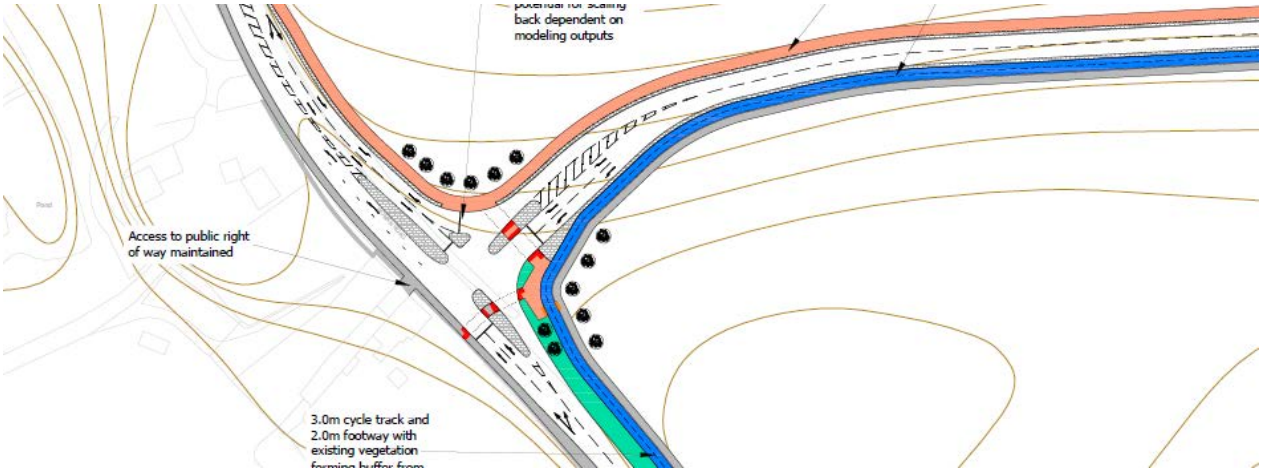


Image 5: Extract from PC7029-RHD-CE-GB-DR-D-0110 S3 I02, showing a red blister tactile paving layout at the crossing face (suggesting a controlled crossing) on North Road.



Recommendation – A1.2.1

It is recommended the proposed pedestrian crossing type should be established at these locations. Should the proposed pedestrian crossing types at these locations not be signalised, it is recommended that the proposed layout (including tactile paving and road markings) should be revised.

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A1.2.2 Problem 5

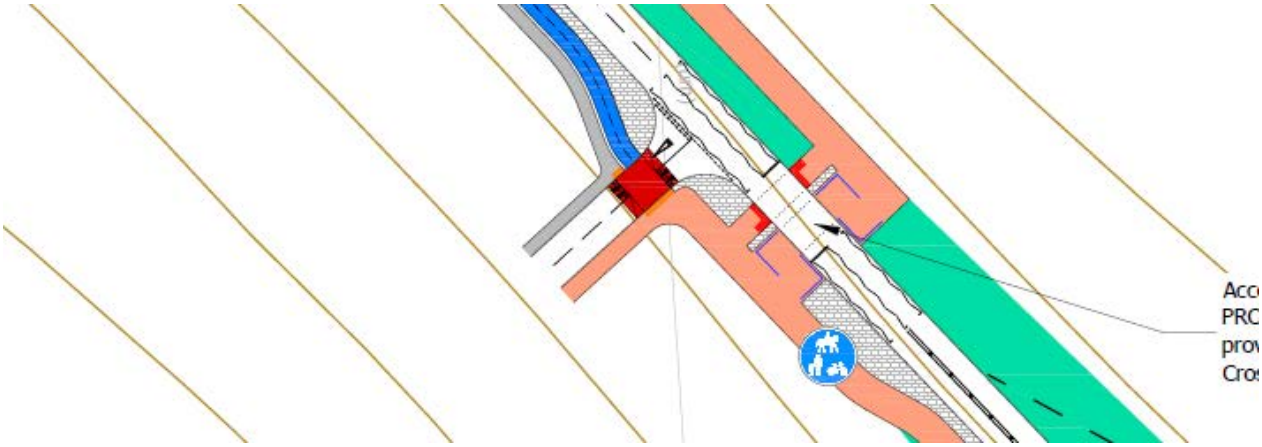
Location: New railway bridge on development corridor, proposed pedestrian crossing.

Summary: Inappropriate transition between the shared use facility and the footway and cycleway could result in collisions between road users.

Description: Drawing PC7029-RHD-CE-GB-DR-D-0117 S3 I02 provided to the Audit Team details the general arrangement of the proposals at the location, including the provision of a pedestrian crossing between a shared use facility and a segregated footway and cycleway.

The Audit Team observed that the extent of the corduroy tactile paving proposed at the crossing face of the shared use facility is not consistent with the extent of the footway and could result in visually impaired users walking onto the cycleway. As such, the Audit Team is concerned that this could result in collisions between road users.

Image 6: Extract from PC7029-RHD-CE-GB-DR-D-0117 S3 I02, showing the inconsistency between the tactile paving at the crossing face of the shared use facility and the footway.



Recommendation – A1.2.2

It is recommended an appropriate transition between the shared use facility and the footway and cycleway is provided at the location, ensuring that the extent of the corduroy tactile paving is consistent with the footway, reducing the risk of collisions between road users.

A1.2.3 Problem 6

Location: A507 Clothall Road/ B656 Royston Road/ Whitehorse Street junction.

Summary: A damaged carriageway surface could result in loss of control collisions between road users.

Description: Drawing PC7029-RHD-CE-GB-DR-D-0115 S3 I02 provided to the Audit Team details the general arrangement of the proposals at this location, including the proposed revision of the junction.

During the site visit, the Audit Team observed a damaged/ uneven carriageway surface at the junction, creating a depression within which surface water and debris could collect. The Audit Team cannot confirm whether that the area of damage would be repaired as part of the proposed scheme.

The Audit team is concerned that the damaged surface could result in loss of control or destabilisation collisions, particularly for powered two-wheeled users.

Image 7: Photograph of the junction, showing damaged and uneven carriageway.



Recommendation – A1.2.3

It is recommended that the proposed junction revision includes resurfacing works, eliminating the damaged surface and reducing the risk of collisions.

A1.2.4 Problem 7

Location: Scheme extents, proposed new access junctions on:

- A507 North Road;
- B656 Royston Road;
- Yeomanry Drive;
- Wallington Road; and
- Clothall Road.

Summary: Inappropriate gradient on approach to the main road from the proposed access junctions could lead to roll back or excessive acceleration, resulting in collisions.

Description: There is a difference in levels between the main carriageways and the sites where the proposed access junctions are to be located. No information has been provided to the Audit Team regarding the proposed gradients on approach to or exit from the main roads.

The Audit Team is concerned that a steep gradient on approach to the main roads from the proposed access junctions could lead to vehicle roll back, resulting in collisions with vehicles behind or excessive acceleration. Excessive acceleration could lead to the potential for vehicles to shoot forward into the carriageway, resulting in side impact or nose-to-nose collisions with road users on the main road.

Recommendation – A1.2.4

It is recommended that the gradient on approach to/ on exit from the main roads should be such that roll back, and excessive acceleration are minimised.

A2 General

The Audit Team did not identify any ‘general’ safety problems as part of this Stage 1 Road Safety Audit.

A3 Junctions

A3.1 Layout

A3.1.1 Problem 8

Location: Scheme extents, proposed new access junctions on:

- A507 North Road;
- B656 Royston Road;
- Yeomarnry Drive;
- Wallington Road; and
- Clothall Road.

Summary: Insufficient geometry at the junction for vehicles navigating the access could result in collisions with oncoming traffic or overrunning of the footway/ cycleway, leading to collisions with pedestrians/ cyclists.

Description: Drawings provided to the Audit Team detail the general arrangement of the proposals at the abovenamed roads, including the provision of new access junctions. Swept path drawings have not been provided to demonstrate that all likely vehicle types are able to negotiate the proposed geometry of the access junctions without overrunning the adjacent footway/ cycleway or verge or colliding with oncoming vehicles.

The Audit Team is concerned that insufficient geometry at the proposed access junctions could result in collisions with oncoming traffic or overrunning of the footway/ cycleway, leading to collisions with pedestrians or cyclists.

Recommendation – A3.1.1

Swept path drawings should be prepared, demonstrating that all likely vehicle types are able to negotiate the proposed geometry of the access junctions without overrunning the footway/ cycleway or colliding with oncoming traffic. If this is not achievable, it is recommended that the geometry of the proposed access junctions should be amended to reduce the potential for collisions.

A3.1.2 Problem 9

Location: Scheme extents, proposed junction revisions on:

- A507 North Road;
- B656 Royston Road; and
- Yeomanry Drive.

Summary: Insufficient geometry at the junction for vehicles navigating the access could result in collisions with oncoming traffic or overrunning of the footway/ cycleway, leading to collisions with pedestrians/ cyclists.

Description: Drawings provided to the Audit Team detail the general arrangement of the proposals at the abovenamed roads, including the revision of the geometry and/ or type of some of the existing junctions. The Audit Team consider the proposed revisions to be a material change in the highway layout.

Swept path drawings have not been provided to demonstrate that all likely vehicle types are able to negotiate the proposed geometry of the amended junctions without overrunning the adjacent footway/ cycleway or verge or colliding with oncoming vehicles.

The Audit Team is concerned that insufficient geometry at the proposed amended junctions could result in collisions with oncoming traffic or overrunning of the footway/ cycleway, leading to collisions with pedestrians or cyclists.

Recommendation – A3.1.2

Swept path drawings should be prepared, demonstrating that all likely vehicle types are able to negotiate the proposed geometry of the amended junctions without overrunning the footway/ cycleway or colliding with oncoming traffic. If this is not achievable, it is recommended that the geometry of the proposed amended junctions should be revised to reduce the potential for collisions.

A4 Pedestrians, Cyclists and Equestrians

A4.1 Pedestrians & Cyclists

A4.1.1 Problem 10

Location: Scheme extents, proposed pedestrian crossings on:

- A507 North Road;
- B656 Royston Road;
- Yeomanry Drive; and
- Wallington Road.

Summary: Insufficient tactile arrangement could lead to confusion for visually impaired users, leading to collisions between road users.

Description: Drawings provided to the Audit Team associated with the abovenamed locations detail the proposed general arrangement of the scheme, including the provision of blister tactile paving at the proposed crossing faces. From the drawings provided, the Audit Team consider the proposed tactile arrangement to be insufficient as blister tactile paving are not proposed at some of the crossing faces.

The Audit Team is concerned that the insufficient tactile arrangement could result in confusion for visually impaired users navigating the facilities, leading to the increased likelihood of collisions between road users.

Image 8: Extract from PC7029-RHD-CE-GB-DR-D-0113 S3 I02, showing the lack of blister tactile paving at the crossing face on Royston Road (in red)

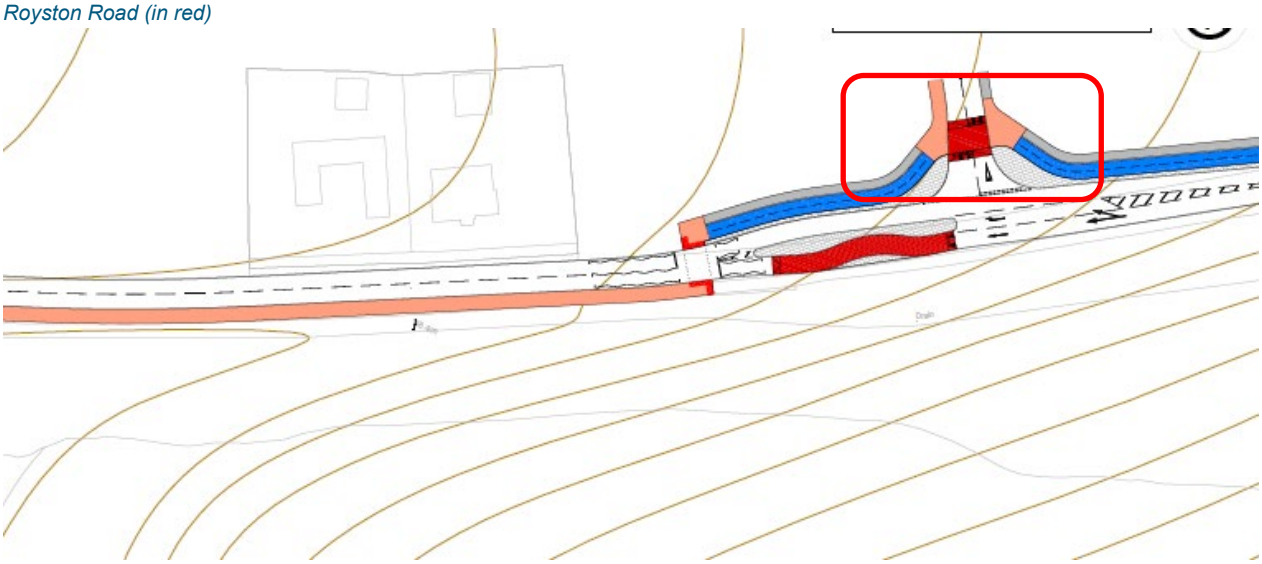


Image 9: Extract from PC7029-RHD-CE-GB-DR-D-0113 S3 I02, showing the lack of blister tactile paving at the crossing face on Royston Road and Yeomanry Drive (in red)

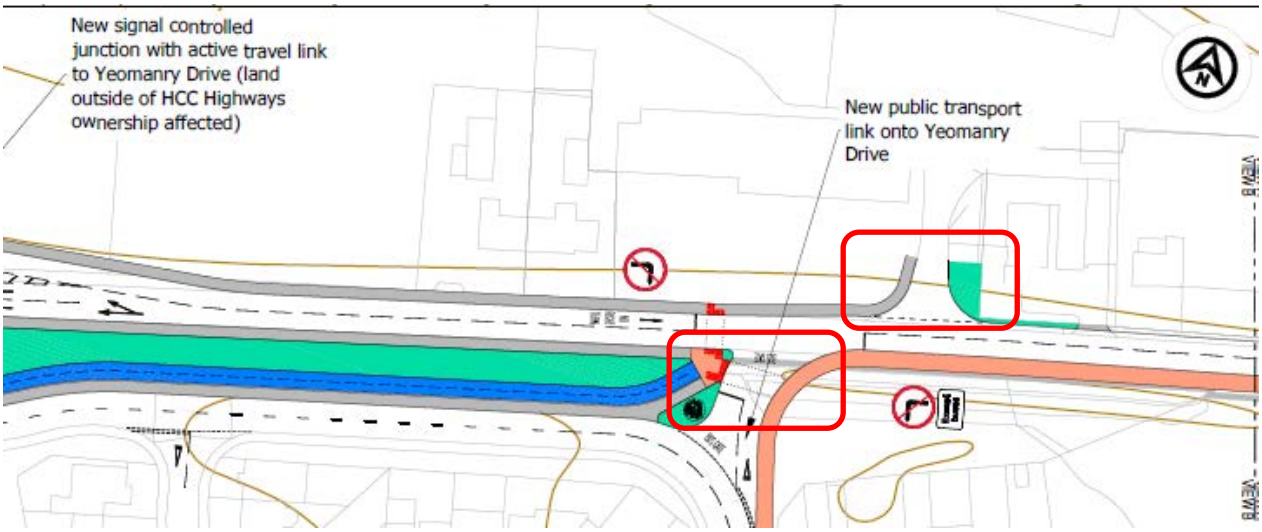


Image 10: Extract from PC7029-RHD-CE-GB-DR-D-0119 S3 I01, showing the lack of blister tactile paving at the crossing face on Wallington Road (in red)

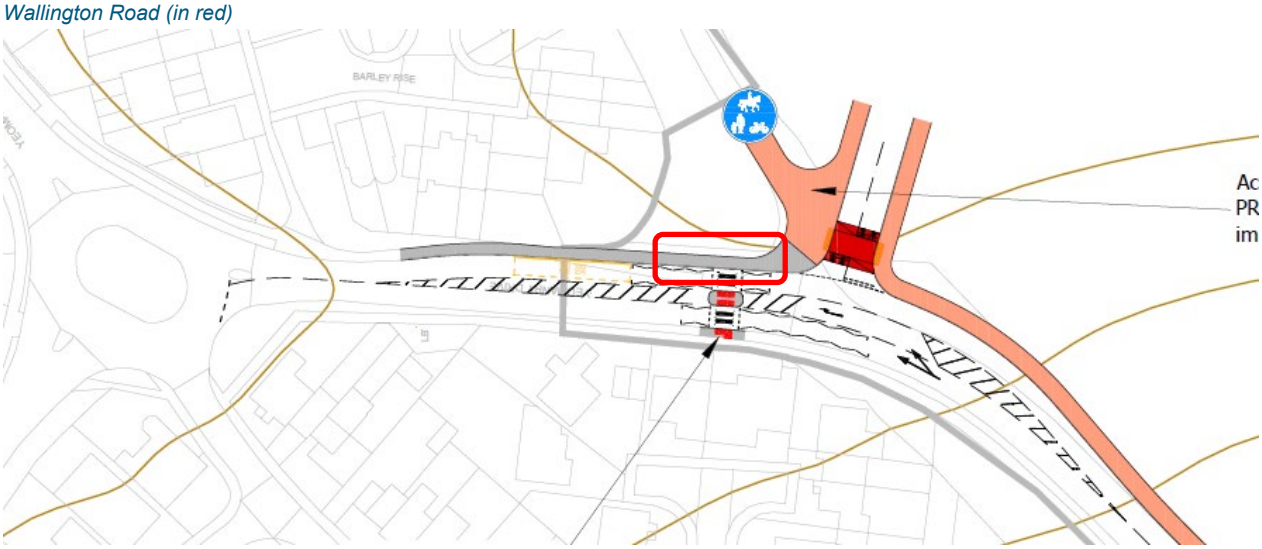


Image 11: Extract from PC7029-RHD-CE-GB-DR-D-0111 S3 I02, showing the lack of blister tactile paving at the crossing face on North Road (in red)

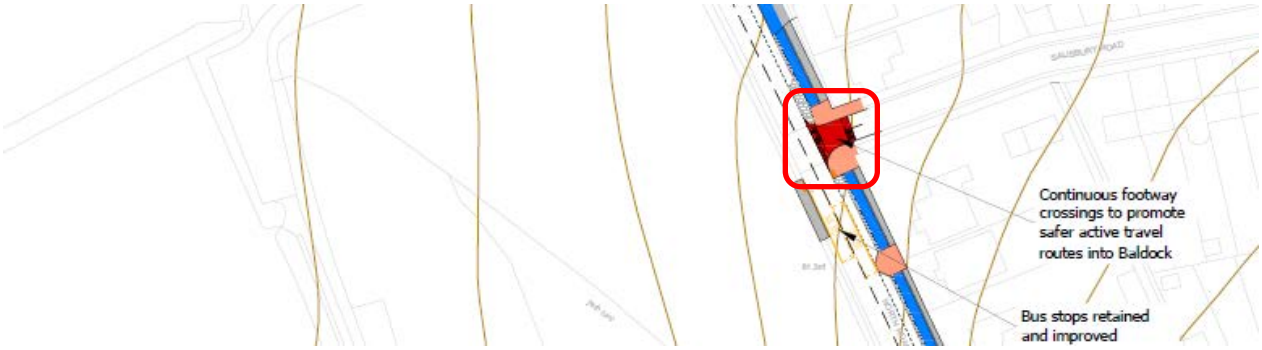
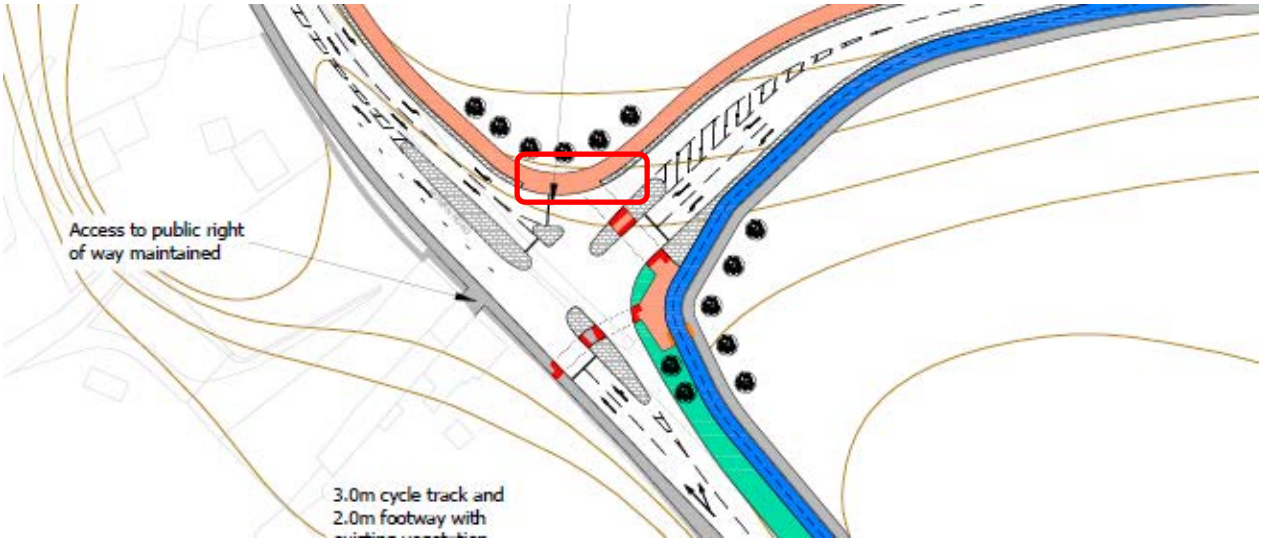


Image 12: Extract from PC7029-RHD-CE-GB-DR-D-0110 S3 I03, showing the lack of blister tactile paving at the crossing face on North Road (in red)



Recommendation - A4.1.1

It is recommended that a sufficient blister tactile paving arrangement is provided at the locations to help safely guide visually impaired users through the proposed scheme, reducing the risk of collisions.

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A4.1.2 Problem 11

Location: Scheme extents, proposed pedestrian crossings on:

- A507 North Road;
- B656 Royston Road;
- Aswell Road connector (development corridor)
- New railway bridge (development corridor); and
- Wallington Road.

Summary: Inadequate transition facilities between the proposed shared use facility and proposed footway/ cycleway layout could lead to confusion and collisions between users.

Description: Drawings provided to the Audit Team associated with the abovenamed locations detail the proposed general arrangement of the scheme, including the provision of shared use facilities across the proposed scheme. From the drawings provided, no transition facilities (such as corduroy tactile paving) have been provided to alert pedestrians navigating between the proposed shared use facilities that they are entering or exiting a shared-use facility.

The Audit Team is concerned that a lack of awareness of the shared use facilities could result in collisions between road users, particularly considering visually impaired users.

Image 13: Extract from PC7029-RHD-CE-GB-DR-D-0116 S3 I02, showing the lack of corduroy tactile paving at the extents of the shared-use facility on the Aswell Road connector (in red)

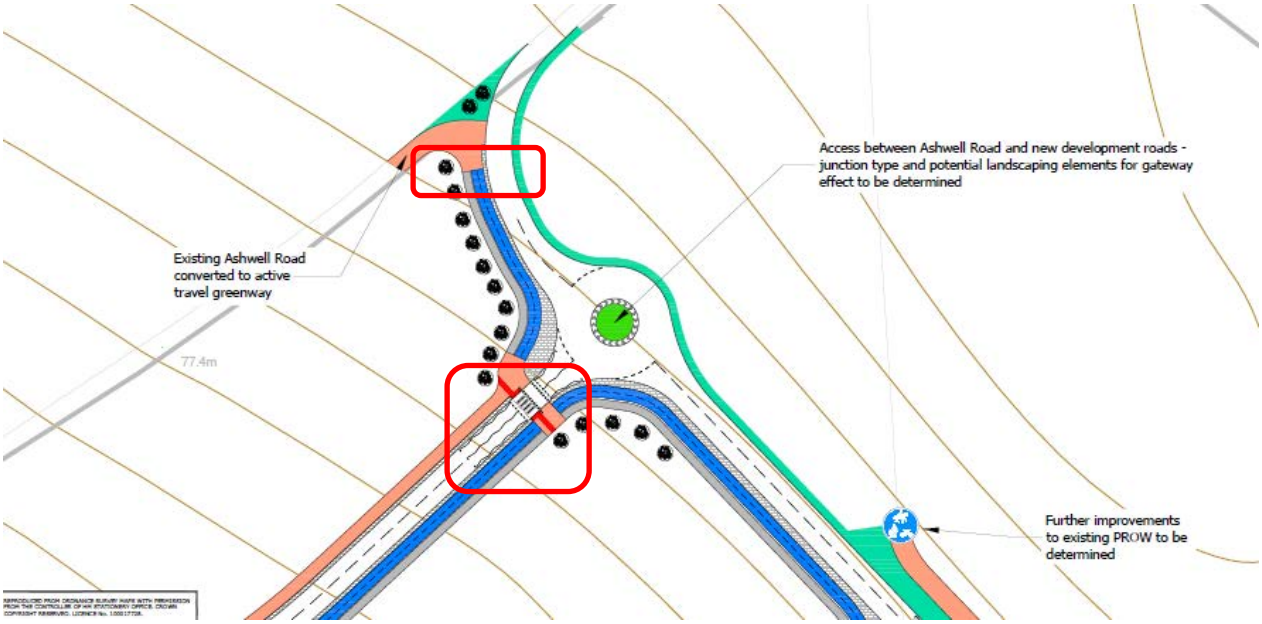


Image 14: Extract from PC7029-RHD-CE-GB-DR-D-0119 S3 I01, showing the lack of corduroy tactile paving at the extents of the shared-use facility on the Wallington Road (in red)

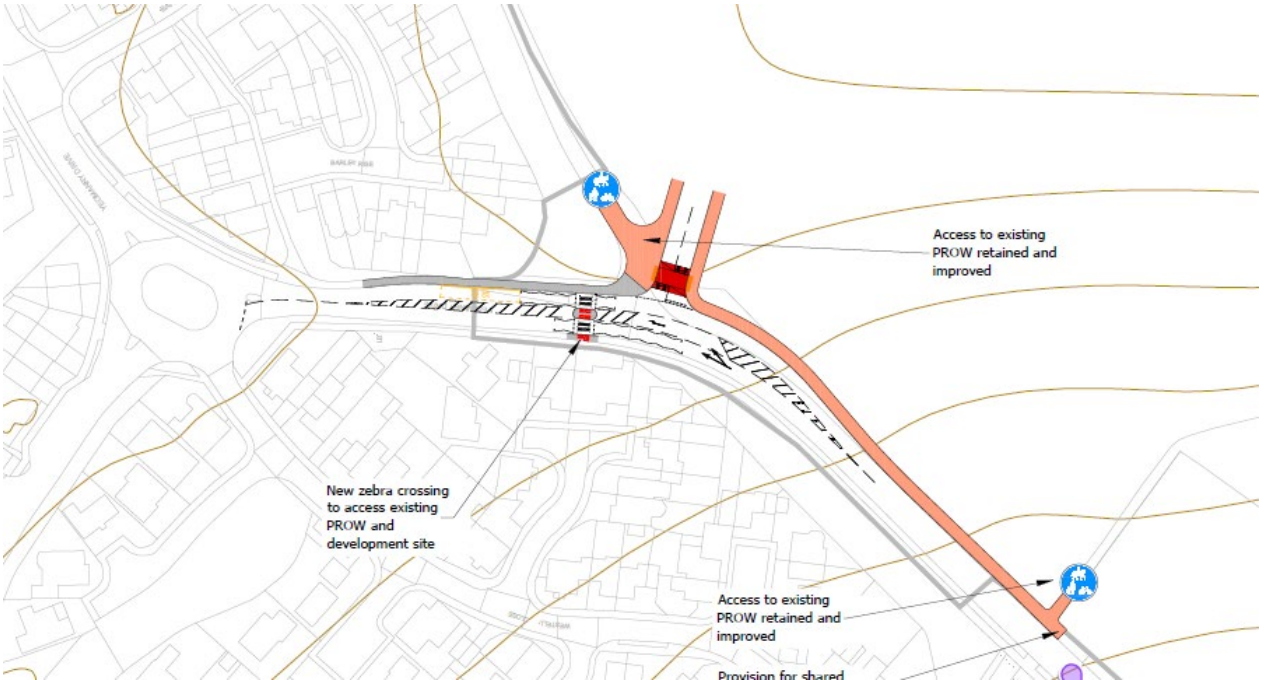


Image 15: Extract from PC7029-RHD-CE-GB-DR-D-0112 S3 I02, showing the lack of corduroy tactile paving at the extents of the shared-use facility on the Royston Road (in red)

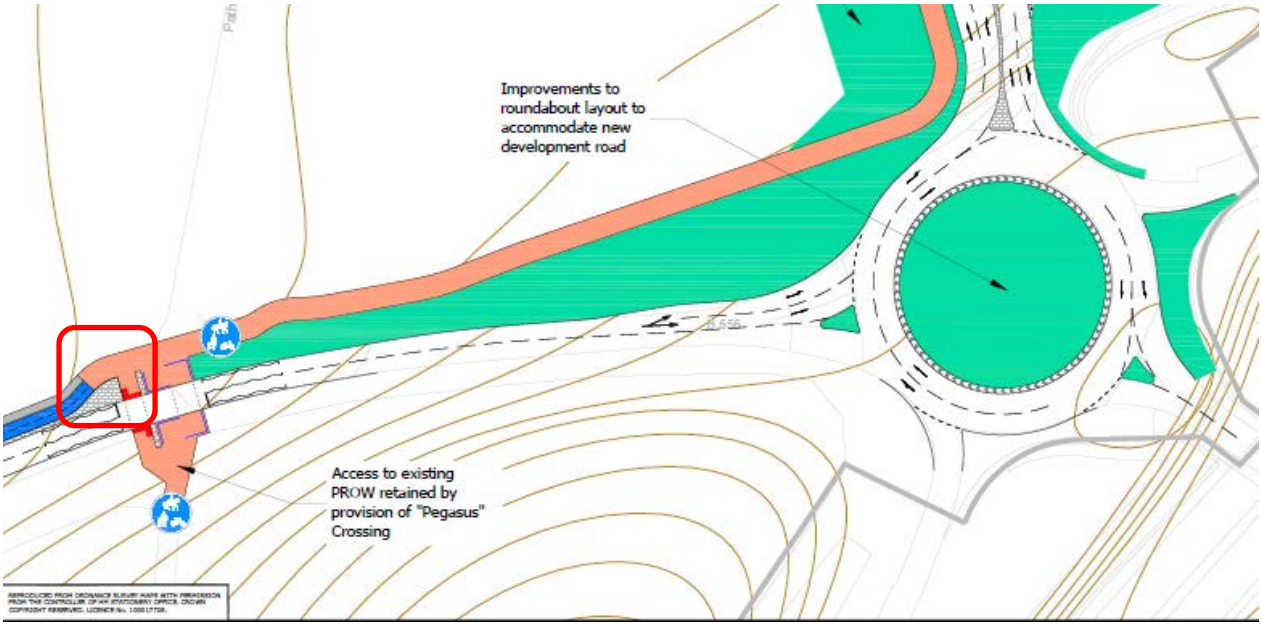


Image 16: Extract from PC7029-RHD-CE-GB-DR-D-0111 S3 I02, showing the lack of corduroy tactile paving at the extents of the shared-use facility on the North Road (in red)

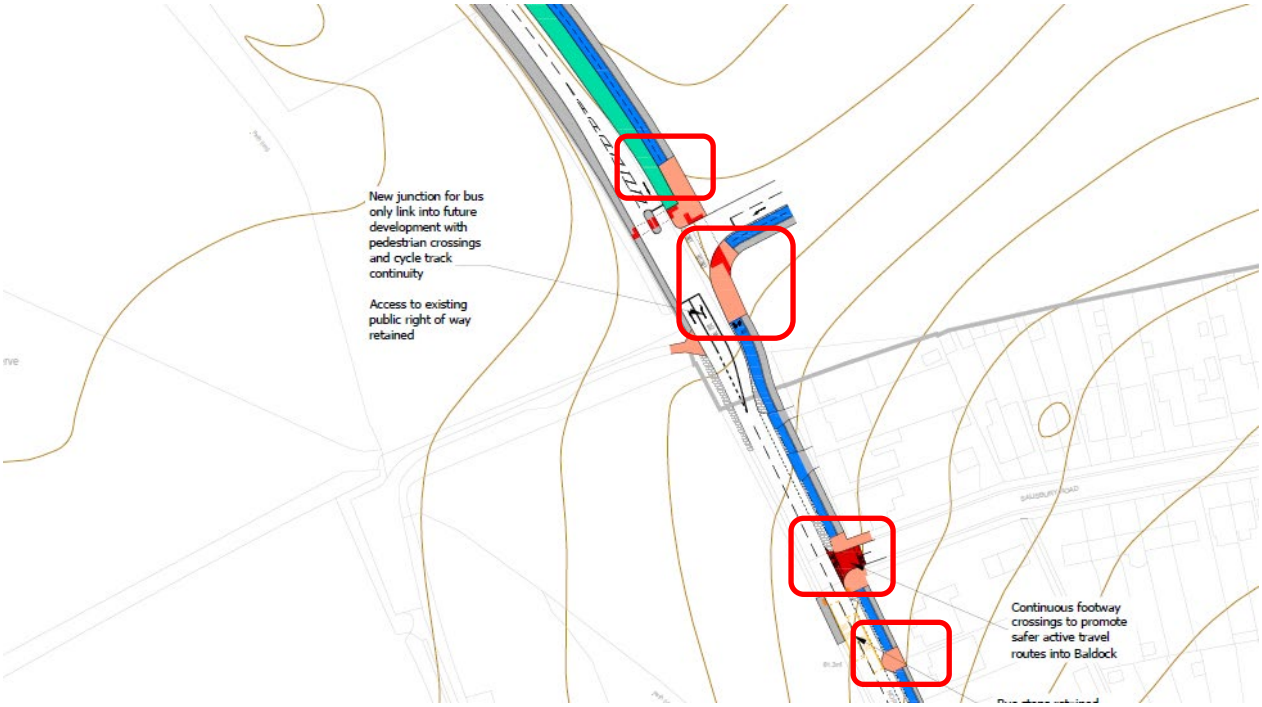


Image 17: Extract from PC7029-RHD-CE-GB-DR-D-0110 S3 I02, showing the lack of corduroy tactile paving at the extents of the shared-use facility on the North Road (in red)

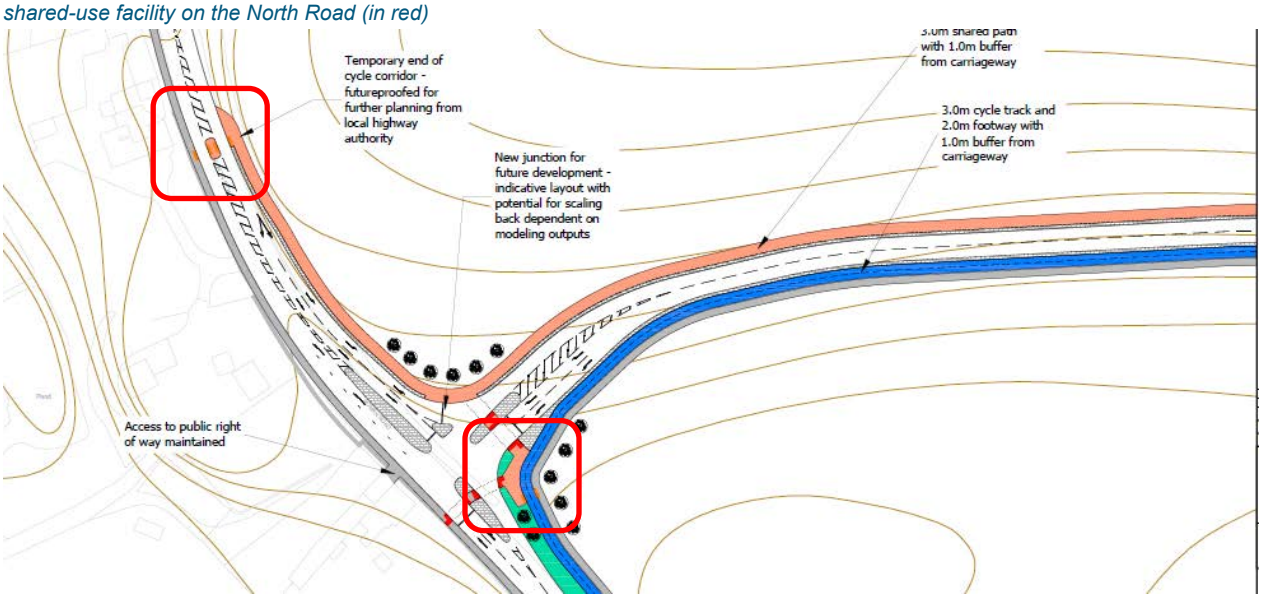


Image 18: Extract from PC7029-RHD-CE-GB-DR-D-0115 S3 I02, showing the lack of corduroy tactile paving at the extents of the shared-use facility on the Royston Road (in red)

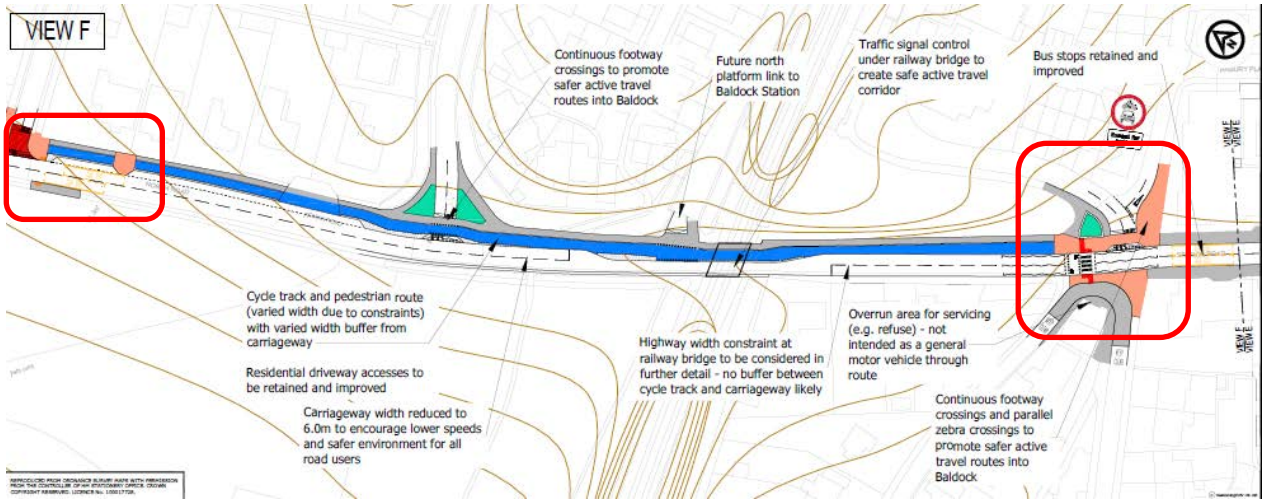


Image 19: Extract from PC7029-RHD-CE-GB-DR-D-0117 S3 I02, showing the lack of corduroy tactile paving at the extents of the shared-use facility at the new railway bridge development corridor (in red)

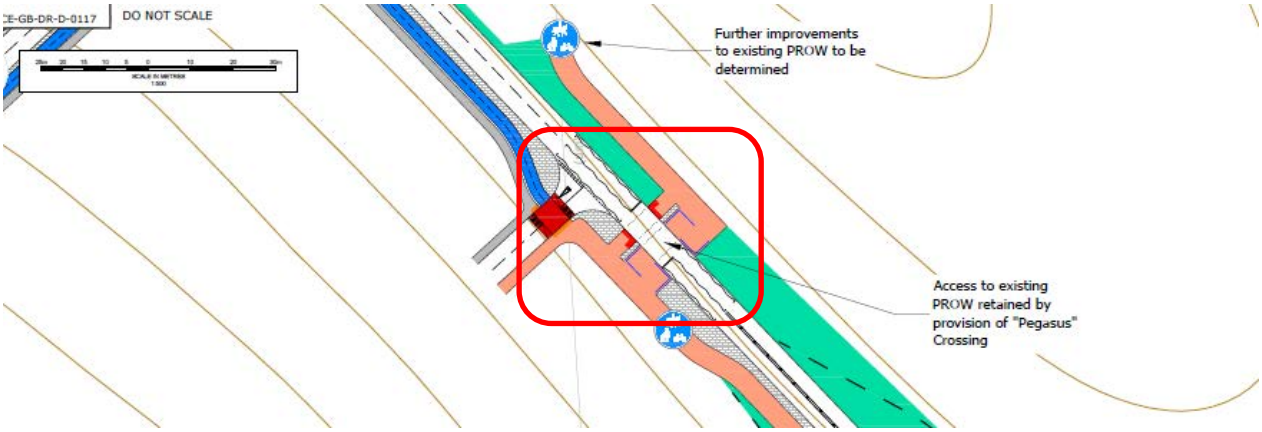


Image 20: Extract from PC7029-RHD-CE-GB-DR-D-0113 S3 I02, showing the lack of corduroy tactile paving at the extents of the shared-use facility on Royston Road (in red)

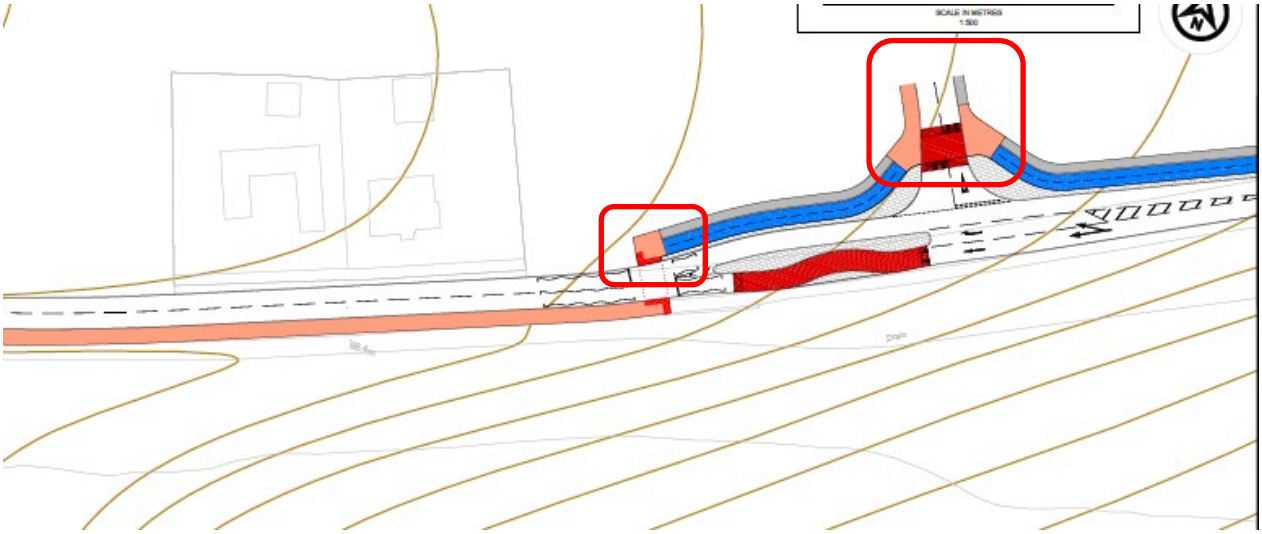


Image 21: Extract from PC7029-RHD-CE-GB-DR-D-0113 S3 I02, showing the lack of corduroy tactile paving at the extents of the shared-use facility on Royston Road (in red)

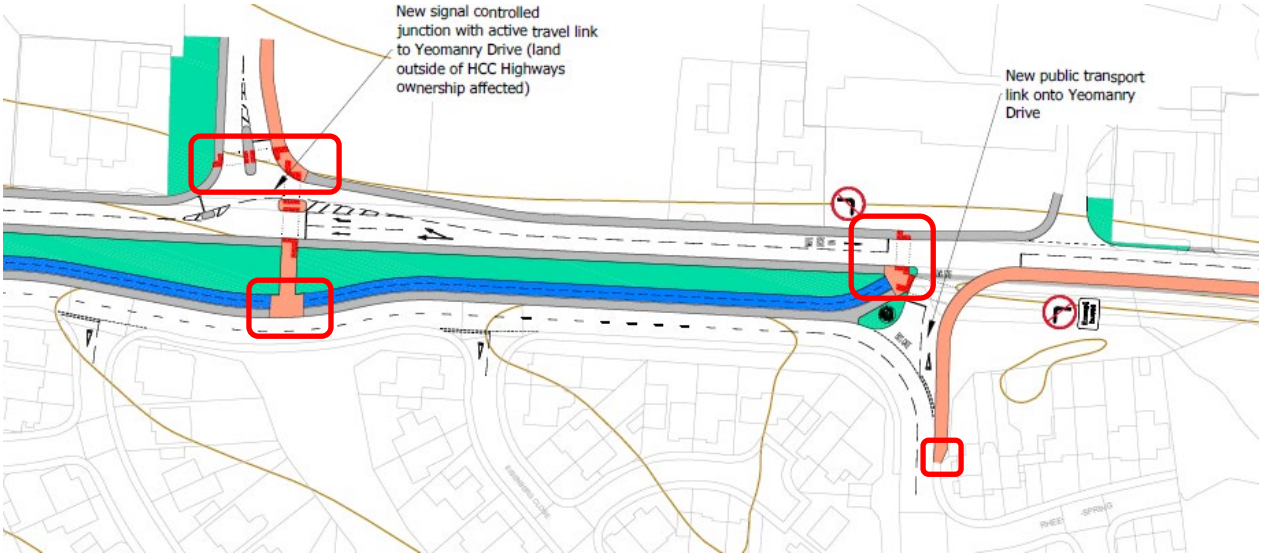


Image 22: Extract from PC7029-RHD-CE-GB-DR-D-0114 S3 I02, showing the lack of corduroy tactile paving at the extents of the shared-use facility on Royston Road (in red)

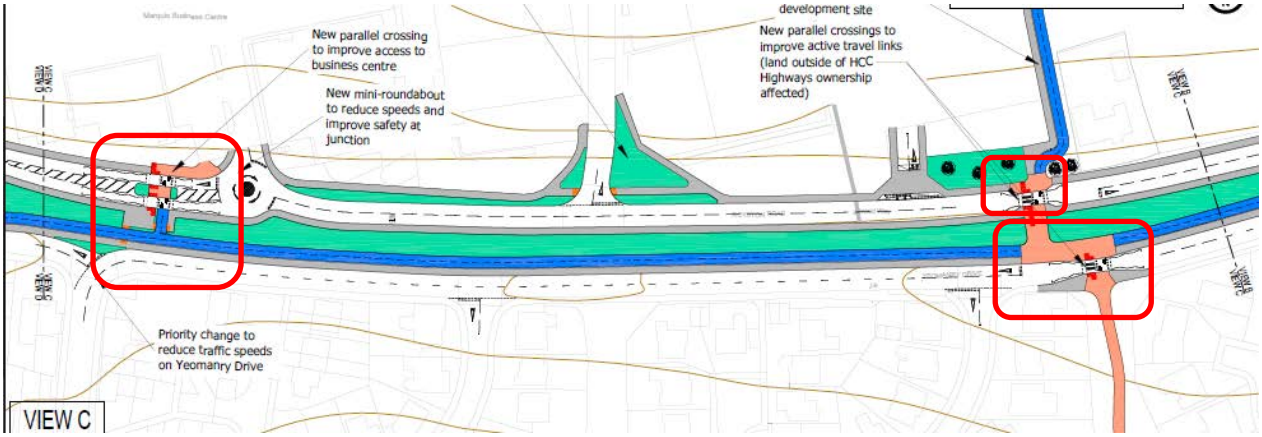
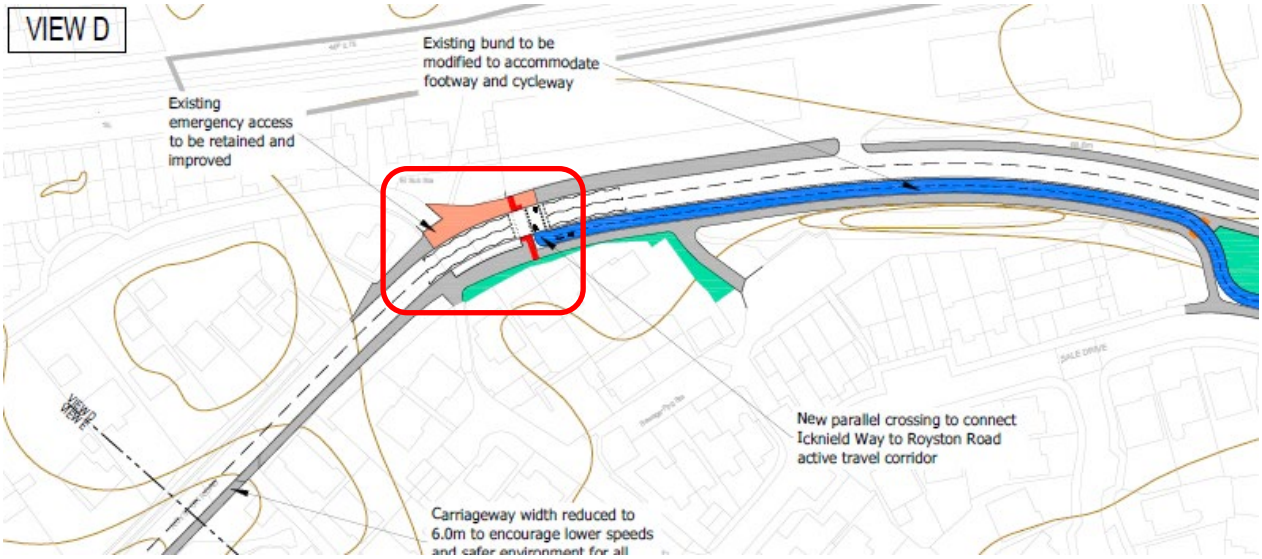


Image 23: Extract from PC7029-RHD-CE-GB-DR-D-0114 S3 I02, showing the lack of corduroy tactile paving at the extents of the shared-use facility on Royston Road (in red)



Recommendation – A4.1.2

It is recommended that appropriate transition facilities such as corduroy tactile paving and signage be provided at the extents of the shared use facility to alert pedestrians accordingly, reducing the risk of collisions between road users.

A4.1.3 Problem 12

Location: Mallard Court, existing controlled crossing.

Summary: Insufficient pedestrian facilities at the controlled crossing could result in road user confusion and subsequently collisions between road users.

Description: Drawing PC7029-RHD-CE-GB-DR-D-0115 S3 I02 details the general arrangement of the proposals at Mallard Court. During the site visit, the Audit Team observed that there is what seems to be an a zebra crossing at the location which leads pedestrians directly onto a staircase.

The Audit Team consider the existing provision at the zebra crossing to be insufficient, given that there is a lack of appropriate tactile paving or belisha beacon. The Audit Team also consider the presence of the staircase to be a hazard, especially for visually impaired users.

From the drawing provided the Audit Team cannot confirm if the zebra crossing would remain at this location or whether sufficient pedestrian facilities would be provided. As such, the Audit Team is concerned that the insufficient pedestrian facilities at the location could result in confusion for visually impaired users navigating the facilities, leading to the increased likelihood of collisions between road users.

Image 24: Photograph of Mallard Court, showing the lack of sufficient pedestrian facilities at the zebra crossing and the presence of a staircase.



Recommendation – A4.1.3

It is recommended that the requirement for a zebra crossing at this location be established. If required, it is recommended that sufficient pedestrian facilities are provided to take into account the staircase and the type of crossing, reducing the risk of collisions.

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A4.1.4 Problem 13

Location: Scheme extents, proposed Pegasus crossings on:

- B656 Royston Road; and
- New railway bridge (development corridor).

Summary: Insufficient tactile arrangement at the crossing face could result in visually impaired user confusion and collisions between road users.

Description: Drawings provided to the Audit Team detail the general arrangement of the proposals at the abovenamed roads, including the provision of Pegasus crossings. From the drawings provided, the Audit Team observed that the stem of the proposed blister tactile paving at the crossing faces do not extend to the back of the shared facility. As such, the Audit Team consider the tactile paving arrangement at these locations to be insufficient.

The Audit Team is concerned that the insufficient tactile arrangement could result in confusion for visually impaired users navigating the facilities, leading to the increased likelihood of collisions between road users.

Image 25: Extract from PC7029-RHD-CE-GB-DR-D-0117 S3 I02, showing the lack of sufficient blister tactile paving at the extents of the Pegasus crossing on the new development corridor railway bridge (in red)

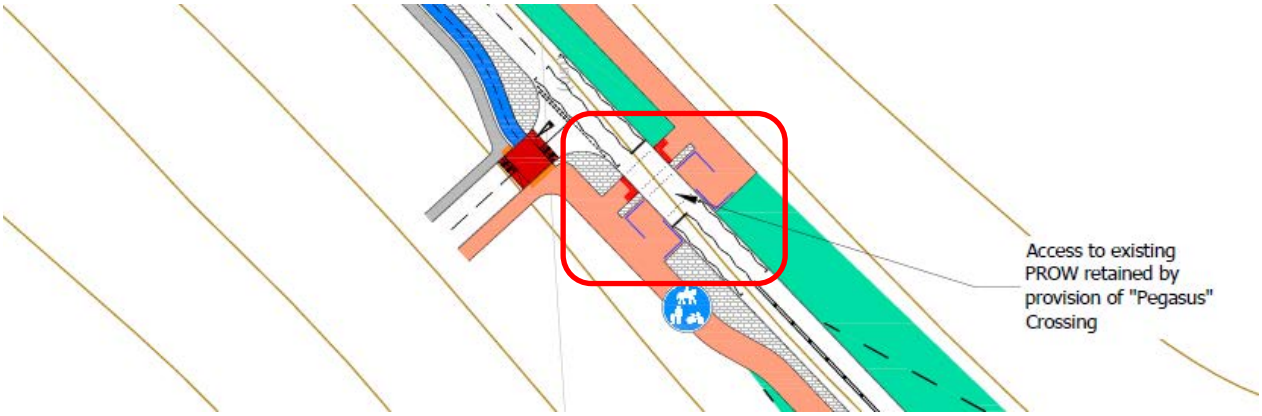
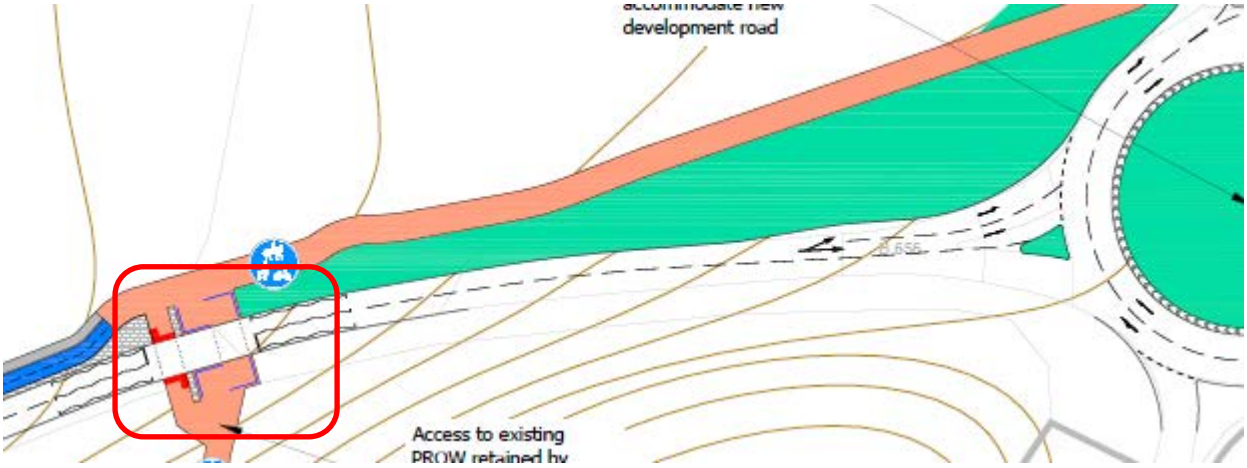


Image 26: Extract from PC7029-RHD-CE-GB-DR-D-0112 S3 I02, showing the lack of sufficient blister tactile paving at the extents of the Pegasus crossing on the new development corridor railway bridge (in red)



Recommendation – A4.1.4
It is recommended that a sufficient blister tactile paving arrangement is provided at the locations to help safely guide visually impaired users through the proposed scheme, reducing the risk of collisions.

A5 Traffic Signs, Carriageway Markings and Lighting

The Audit Team did not identify any traffic signs, carriageway markings or lighting related safety problems as part of this Stage 1 Road Safety Audit.

2 Audit Team Statement

We certify that this Road Safety Audit has been carried out in accordance with GG 119.

Audit Team Leader

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Signed: J. Ibrahim

Dated: 25.04.2025

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Signed: K. Peak

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United Kingdom

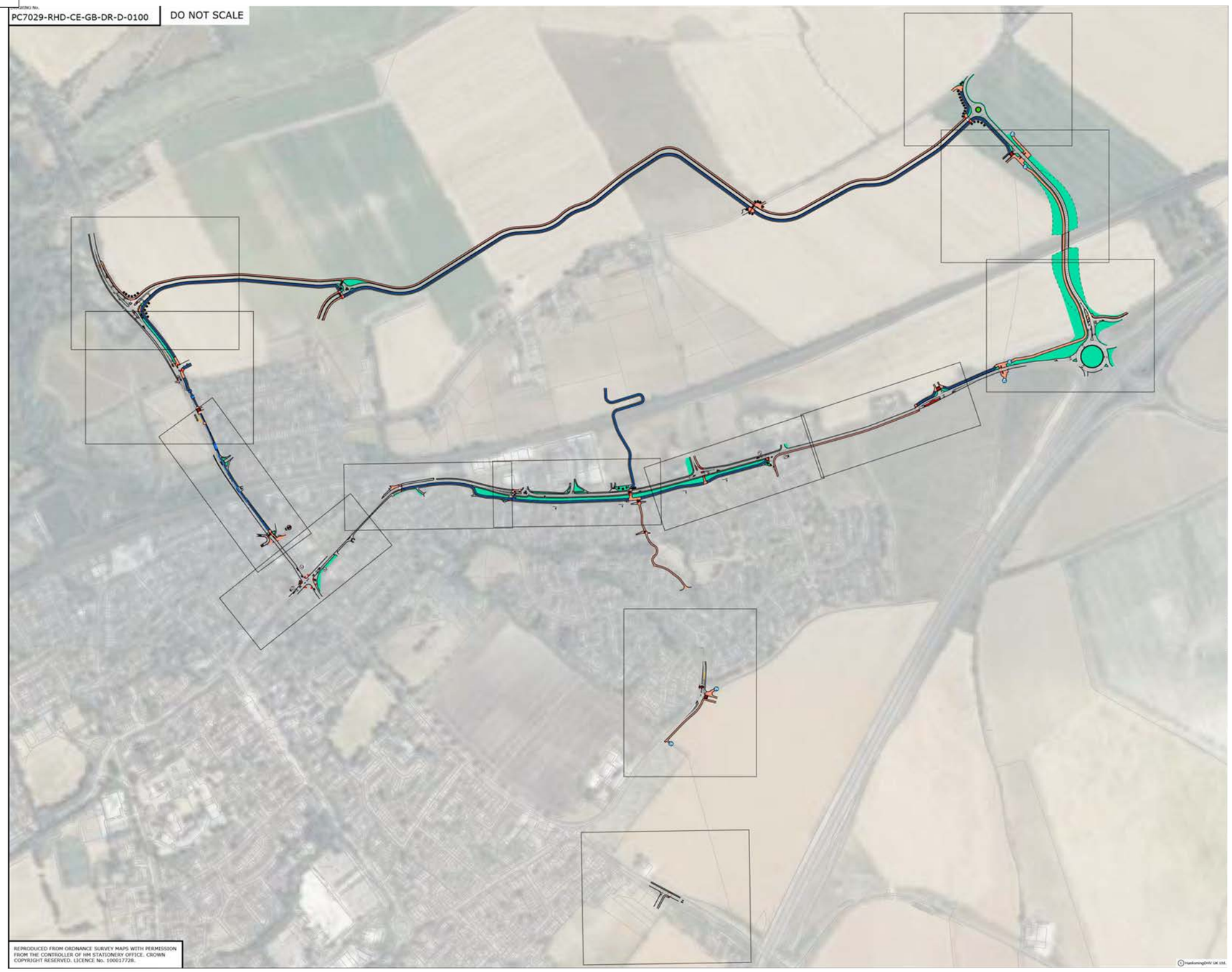
Figures

Figure 1 – Site Location Plan
Figure 2 – Problem Location Plan

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DO NOT SCALE

PC7029-RHD-CE-GB-DR-D-0100 | DO NOT SCALE



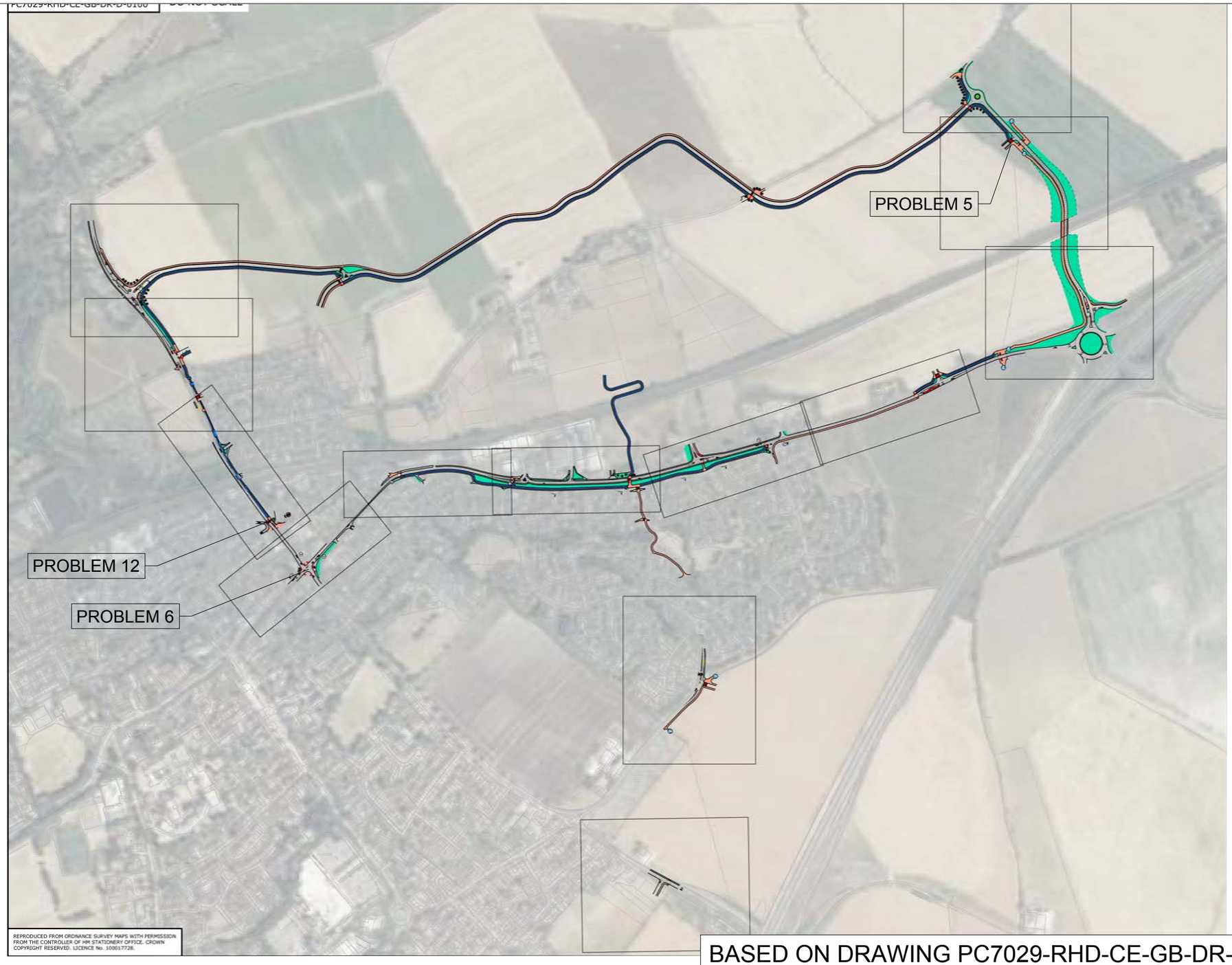
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TITLE: SITE LOCATION PLAN	PROJECT: GROWING BALDOCK STAGE 1 ROAD SAFETY AUDIT	Royal HaskoningDHV Enhancing Society Together	DRAWN: JI	CHECKED: KP	APPROVED: JI
			DATE: 24.04.2025	SCALE AT A1: NTS	REF.: -
			DRAWING No.: FIGURE 1		REVISION:

PROBLEMS 1, 2, 3, 4, 7, 8, 9, 10, 11 & 13 REFER TO THE SCHEME EXTENTS AS DETAILED IN THE REPORT



BASED ON DRAWING PC7029-RHD-CE-GB-DR-D-0100 S3 I01

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TITLE: PROBLEM LOCATION PLAN	PROJECT: GROWING BALDOCK STAGE 1 ROAD SAFETY AUDIT	Royal HaskoningDHV Enhancing Society Together	
		DRAWN: JI	CHECKED: KP
		DATE: 24.04.2025	SCALE AT A1: NTS
		APPROVED: JI	REF.: -
		DRAWING No.: FIGURE 2	REVISION:

Appendix A

Documents Forming the Audit Brief

Royal HaskoningDHV

APPENDIX A

Documents Forming the Audit Brief

DRAWING NUMBER	DRAWING TITLE
PC7029-RHD-CE-GB-DR-D-0117 S3 I02	Development Corridor – New Railway Bridge Concept Design
PC7029-RHD-CE-GB-DR-D-0113 S3 I02	Royston Road – Development Site Access Concept Design
PC7029-RHD-CE-GB-DR-D-0114 S3 I02	Royston Road – Town Approach Access Concept Design
PC7029-RHD-CE-GB-DR-D-0116 S3 I02	Development Corridor – Ashwell Road Connector Concept Design
PC7029-RHD-CE-GB-DR-D-0100 S3 I01	Growing Baldock Location Plan
PC7029-RHD-CE-GB-DR-D-0119 S3 I01	Growing Baldock Wallington Road Access Concept Design
PC7029-RHD-CE-GB-DR-D-0112 S3 I02	Royston Road – All Modes Access Concept Design
PC7029-RHD-CE-GB-DR-D-0118 S3 I02	Growing Baldock Development Corridor General Overview
PC7029-RHD-CE-GB-DR-D-0111 S3 I02	North Road – Public Transport Access Concept Design
PC7029-RHD-CE-GB-DR-D-0120 S3 I01	Clothall Road Development Access Concept Design
PC7029-RHD-CE-GB-DR-D-0115 S3 I02	Royston Road/ North Road – Town Approach Access Concept Design
PC7029-RHD-CE-GB-DR-D-0110 S3 I02	North Road – All Modes Site Access Concept Design

DOCUMENTS	DETAILS (where appropriate)
☐ Safety Audit Brief	
☐ Site Location Plan	
☐ Traffic signal details	
☐ Departures from standard	
☐ Previous Road Safety Audits	
☐ Previous Designer Responses	
☐ Collision data	
☐ Collision plot	
☐ Traffic flow / modelling data	
☐ Pedestrian flow / modelling data	
☐ Speed survey data	
☐ Other documents	

ROAD SAFETY AUDIT – DESIGNER'S RESPONSE

Project Details

Project Title	Growing Baldock – Road Safety Audit Stage 1
Date of Audit	28 April 2025
Document Reference and revision	Final/00
Prepared by	Bryn Buck
On behalf of	ITP

Road Safety Audit Decision Log

Problem No.	Problem Accepted (Yes / No)	Recommended Measure Accepted (Yes / No)	Alternative Measure (describe)
A1.1.1 (1)	Yes	Yes	To be provided at detailed design stage.
A1.1.2 (2)	Yes	Yes	To be provided at detailed design stage.
A1.1.3 (3)	Yes	Yes	To be provided at detailed design stage.
A1.2.1 (4)	Yes	Yes	Drawings for Stage 2 RSA will show full tactile paving detail including method of control for pedestrian crossings. It is intended any signal junction will have push button control for pedestrian crossings. Zebra crossing stripes will be corrected on Royston Road.
A1.2.2 (5)	Yes	Yes	A short length of additional cycle track segregation will be provided to provide clarity over the raised crossing point.
A1.2.3 (6)	Yes	Yes	Resurfacing of carriageways will be included in detailed design where appropriate
A1.2.4 (7)	Yes	Yes	3D modelling will be used at detailed design stage to ensure that gradients at junctions are appropriate for the class of road.
A3.1.1 (8)	Yes	Yes	To be provided at detailed design stage.
A3.1.2 (9)	Yes	Yes	To be provided at detailed design stage.
A4.1.1 (10)	Yes	Yes	Tactile paving arrangement for uncontrolled crossings and transitions between cycle and shared routes will be included at detailed design stage. Missing tactiles to be shown.
A4.1.2 (11)	Yes	Yes	Tactile paving for transitions between shared and cycle routes will be included at detailed design stage.
A4.1.3 (12)	No	No	This crossing is not part of the proposed scope of works.
A4.1.4 (13)	Yes	Yes	The tactile paving will be extended at detailed design stage. Appropriate transition tactile paving between shared and cycle routes will be provided where appropriate.

ROAD SAFETY AUDIT – DESIGNER'S RESPONSE

Design Organisation and Overseeing Organisation statements

On behalf of the design organisation I certify that: The RSA actions identified in response to the road safety audit problems in the road safety audit have been discussed and agreed with the Overseeing Organisation	
Name	**Bryn Buck**
Signed	**Bryn Buck**
Position	**Senior Consultant**
Organisation	**ITP**
Date	**28th July 2025**

Please submit this completed Designer's Response to the Local Highway Authority, in conjunction with the associated Road Safety Audit.

Appendix E – Proposed Junction Layouts

DRAWING No.
PC7029-ITP-CE-GB-DR-D-0110

DO NOT SCALE

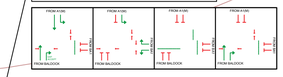
25m 20 15 10 5 0 10 20 30m
SCALE IN METRES
1:500

INDICATIVE LAYOUT

Proposed shared active travel route to link to proposed Baldock Greenway/PROW network

Proposed highway land to maintain junction intervisibility zone

Proposed junction into development - indicative signal staging:



Proposed signal controlled pedestrian crossing

Existing vegetation forming buffer for proposed active travel route from carriageway

Proposed shared active travel route to link to proposed Baldock Greenway/PROW network

Proposed highway land to maintain junction intervisibility zone

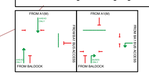
Proposed signal controlled pedestrian crossing

Proposed highway land to maintain junction intervisibility zone

Access to existing public right of way maintained

Proposed junction for bus only link into future development with pedestrian crossings and cycle track continuity

Indicative signal staging:



Proposed bus lane to provide public transport priority between Baldock town centre and new development sites

Access to existing public right of way maintained

Proposed temporary tie-in to offsite works to be determined

3.0m
4.0m
7.3m
3.0m

BUS ONLY

ROMAN ROAD

Ed & Ward Bdy

Pond

FB

Path (um)

FF

FW

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LEGEND:

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- PROPOSED TACTILE PAVING FOR CONTROLLED PEDESTRIAN CROSSINGS
- PROPOSED SHARED FOOT & CYCLEWAY
- PROPOSED FOOTWAY
- PROPOSED CYCLEWAY
- PROPOSED AREA FOR SOFT LANDSCAPING
- PROPOSED AREA FOR HARD LANDSCAPING
- GROWING BALDOCK DEVELOPMENT SITE PLANNING BOUNDARY

REV	DATE	DESCRIPTION	BY	CHK	APP
P03	11.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P02	05.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P01	19.08.25	ISSUED FOR COMMENT	BKB	MLG	GB

REVISIONS

DRAWING STATUS: PLANNING

CLIENT: Urban&Civic

PROJECT: GROWING BALDOCK

TITLE: DEVELOPMENT SITE ACCESSES: NORTH ROAD

itp by Haskoning
Portland Street,
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Email info.manchester@uk.rhdhv.com
Website www.royalhaskoning.com

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BKB	MLG	GB
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DRAWING No.	SUITABILITY	REVISION
PC7029-ITP-CE-GB-DR-D-0110	S3	P03

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DRAWING No.
PC7029-ITP-CE-GB-DR-D-0111

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1:500

INDICATIVE LAYOUT

Private accesses to be retained and improved

Private accesses to be retained and improved

Proposed resident parking lay-bys to prevent obstruction to bus route along North Road

Proposed continuous footway crossings to provide safer active travel routes into Baldock from development sites

Proposed improvements to existing bus stops

Proposed narrow (2.0m) cycle route due to land ownership constraints

Proposed resident parking lay-bys to prevent obstruction to bus route along North Road

Private accesses to be retained and improved

Proposed continuous footway crossings to provide safer active travel routes into Baldock from development sites

Proposed reduction in carriageway width to encourage lower speeds and safer environment for all road users

Proposed continuous footway crossings to provide safer active travel routes into Baldock from development sites

Proposed width constraint due to requirement for traffic signal equipment and to reduce cycle speeds approaching railway bridge

Proposed single lane signal controlled shuttle-working under railway bridge to provide width for active travel corridor - carriageway width designed to accommodate relevant agricultural traffic

SALISBURY ROAD
NORTH ROAD
LARKINS CLOSE
Track
Path (um)
61.3m
66.4m
FW
FF
El Sub Sta
MP 0.5

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- PROPOSED TACTILE PAVING FOR CONTROLLED PEDESTRIAN CROSSINGS
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- PROPOSED FOOTWAY
- PROPOSED CYCLEWAY
- PROPOSED AREA FOR SOFT LANDSCAPING
- PROPOSED AREA FOR HARD LANDSCAPING
- GROWING BALDOCK DEVELOPMENT SITE PLANNING BOUNDARY

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P02	05.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P01	19.08.25	ISSUED FOR COMMENT	BKB	MLG	GB

REVISIONS

DRAWING STATUS: PLANNING

CLIENT: Urban&Civic

PROJECT: GROWING BALDOCK

TITLE: OFFSITE INTERVENTIONS - NORTH ROAD (UPPER SECTION)

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Website www.royalhaskoning.com

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DRAWING No.	SUITABILITY	REVISION
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INDICATIVE LAYOUT

Proposed narrowing of carriageway to reduce conflicts between road users whilst retaining access for Rail Replacement Bus services when required

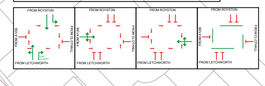
Proposed overrun area for residential servicing of Football Close (e.g. refuse collection and emergency use) - not intended as a general motor vehicle through route. Access from Station Road to be prevented by use of planters or similar vehicle restraint system

Proposed continuous footway crossings and parallel zebra crossings to promote safer active travel routes into Baldock from new development

Proposed improvements to existing bus stops

Proposed widened footways to improve Station Road environment

Proposed junction changes to create additional sense of place and to reflect revised traffic flow movements from future development. Indicative signal staging:



Proposed improvements to Royston Road footways to improve active travel route to town centre

Proposed signal controlled pedestrian crossing

Car Park
BRAMLEY CLOSE
ICKNIELD WAY EAST
ARBURY PLACE
JACKSON STREET
FOOTBALL CLOSE
ORCHARD ROAD
BUTLERS YARD
TRANTERS MEWS
Tranters Yard
WOMBACK YARD
El Sub Sta
WHITEHORSE STREET
ROYSTON ROAD
NORTH ROAD
62.6m

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- PROPOSED CYCLEWAY
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P02	05.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P01	19.08.25	ISSUED FOR COMMENT	BKB	MLG	GB

REVISIONS

DRAWING STATUS: PLANNING

CLIENT: Urban&Civic

PROJECT: GROWING BALDOCK

TITLE: OFFSITE INTERVENTIONS: NORTH ROAD (LOWER SECTION) & STATION ROAD

itp by Haskoning
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Proposed parallel zebra crossing to provide access from Icknield Way East and link to North Road active travel corridor

Proposed improvements to existing gated emergency access

Proposed modifications to existing bund to accommodate proposed active travel route

INDICATIVE LAYOUT

VIEW A

VIEW B

VIEW B
VIEW A

VIEW B
VIEW A

Proposed parallel zebra crossing to provide access from active travel route and residential areas to Marquis Business Centre

Proposed reduction in carriageway width to encourage lower speeds and safer environment for all road users

Proposed mini-roundabout to reinforce reduction in traffic speeds on Royston Road approaching residential area

Indicative development access

Existing landscaping retained - proposed minor alignment changes to access road for safety purposes

Proposed parallel zebra crossing to provide access from active travel route and residential areas to new development

Proposed reconfiguration of existing junction to reduce traffic speeds whilst reinforcing public transport priority and reliability

Proposed active travel corridor along Yeomanry Drive

Proposed parallel zebra crossing to provide access from active travel route and residential areas to new development

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- PROPOSED AREA FOR SOFT LANDSCAPING
- PROPOSED AREA FOR HARD LANDSCAPING
- GROWING BALDOCK DEVELOPMENT SITE PLANNING BOUNDARY

REV	DATE	DESCRIPTION	BY	CHK	APP
P03	11.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P02	05.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P01	19.08.25	ISSUED FOR COMMENT	BKB	MLG	GB

REVISIONS

DRAWING STATUS: PLANNING

CLIENT: Urban&Civic

PROJECT: GROWING BALDOCK

TITLE: OFFSITE INTERVENTIONS: ROYSTON ROAD - WESTERN SECTION

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Tel +44(0)161 2361018
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Website www.royalhaskoning.com

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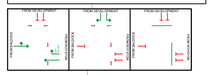
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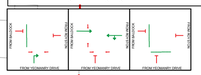
25m 20 15 10 5 0 10 20 30m
SCALE IN METRES
1:500

Indicative signal controlled junction subject to reserved matters application - indicative signal staging:



Proposed signal controlled pedestrian crossing

Indicative signal controlled bus gate to provide public transport priority onto Yeomanry Drive - indicative signal staging:



69.2m

RIVETT CLOSE

EISENBERG CLOSE

IREDALE VIEW

BUS GATE

Proposed informal crossing to provide access across Yeomanry Drive from residential areas

Proposed signal controlled pedestrian crossing

Proposed active travel route as part of BA4 development (designed by others)

Proposed location for electricity substation as part of BA4 development (designed by others)

INDICATIVE LAYOUT

VIEW A

VIEW B

VIEW B
VIEW A

VIEW B

VIEW B
VIEW A

Proposed changes to Royston Road to allow provision of shared active travel route

Proposed signal controlled crossing to provide continuity of active travel route from development sites to Baldock town centre

Indicative priority junction subject to reserved matters application

ROYSTON ROAD

ED & Ward Bdy

Def

Ward Bdy

Ward Bdy

68.4m

Drain

ED & Ward Bdy

Path (um)

Indicative traffic calming feature to discourage through traffic and provide gateway location for 7.5t weight limit

Proposed active travel route as part of BA4 development (designed by others)

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- PROPOSED SHARED FOOT & CYCLEWAY
- PROPOSED FOOTWAY
- PROPOSED CYCLEWAY
- PROPOSED AREA FOR SOFT LANDSCAPING
- PROPOSED AREA FOR HARD LANDSCAPING
- GROWING BALDOCK DEVELOPMENT SITE PLANNING BOUNDARY

REV	DATE	DESCRIPTION	BY	CHK	APP
P03	11.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P02	05.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P01	19.08.25	ISSUED FOR COMMENT	BKB	MLG	GB

REVISIONS

DRAWING STATUS: FOR DISCUSSION

CLIENT: Urban&Civic

PROJECT: GROWING BALDOCK

TITLE: OFFSITE INTERVENTIONS: ROYSTON ROAD - EASTERN SECTION

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Email info.manchester@uk.rhdhv.com
Website www.royalhaskoning.com

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DRAWING No.	SUITABILITY	REVISION
PC7029-ITP-CE-GB-DR-D-0114	S3	P03

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DRAWING No.
PC7029-ITP-CE-GB-DR-D-0115

DO NOT SCALE

25m 20 15 10 5 0 10 20 30m
SCALE IN METRES
1:500

INDICATIVE LAYOUT

Proposed railway bridge and approaches to be designed by others

Existing road improved to provide link to development sites - earthwork requirements on north side TBC

Proposed priority junction with passive design provision for future conversion to signal control if traffic or safety requirements arise

Earthwork requirements on west side to be confirmed by others

Proposed improvements to existing roundabout layout to accommodate new development road

Proposed shared use bridleway to connect redirected PROW

NOTE: Existing third party land unaffected by Growing Baldock proposals

Proposed access to existing PROW via "Pegasus" Crossing with equestrian corral fencing type and buffer between pedestrian and bridleway elements to be determined at detailed design

3.0m
7.3m
7.4m
6.6m
5.0m
7.3m
B 656
B 656
B 656
71.9m
Path (um)

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P02	05.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P01	19.08.25	ISSUED FOR COMMENT	BKB	MLG	GB

REVISIONS

DRAWING STATUS: PLANNING

CLIENT: Urban&Civic

PROJECT: GROWING BALDOCK

TITLE: DEVELOPMENT SITE ACCESS - ROYSTON ROAD/A505

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Email info.manchester@uk.rhdhv.com
Website www.royalhaskoning.com

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DATE	SCALE AT A1	PROJECT NUMBER
AUG 25	1:500	PC7029

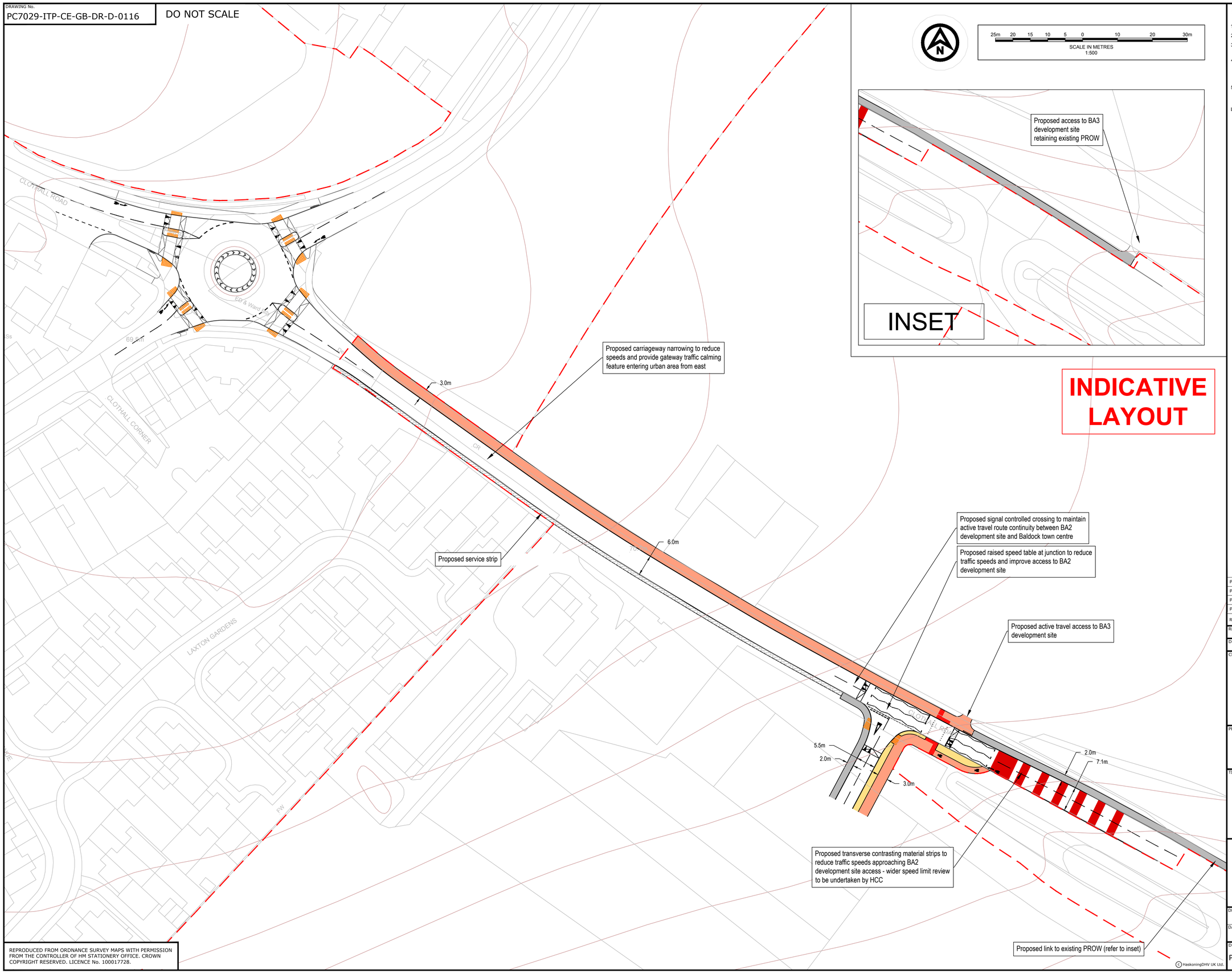
DRAWING No.	SUITABILITY	REVISION
PC7029-ITP-CE-GB-DR-D-0115	S3	P04

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DRAWING No.
PC7029-ITP-CE-GB-DR-D-0116

DO NOT SCALE



25m 20 15 10 5 0 10 20 30m
SCALE IN METRES
1:500

INDICATIVE LAYOUT

GENERAL NOTES

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
3. ALL LEVELS AND CO-ORDINATES ARE IN METRES RELATIVE TO ORDNANCE DATUM NEWLYN UNLESS NOTED OTHERWISE.
4. THIS DRAWING HAS BEEN BASED UPON ORDNANCE SURVEY / TOPOGRAPHICAL INFORMATION SUPPLIED BY OTHERS, ITP SHALL NOT BE LIABLE FOR ANY INACCURACY OR DEFICIENCIES ARISING FROM IT.
5. THIS DRAWING IS FOR PLANNING PURPOSES ONLY AND DOES NOT REPRESENT A CONSTRUCTION STAGE DRAWING.

LEGEND:

- PROPOSED KERB LINE
- PROPOSED TACTILE PAVING FOR UNCONTROLLED PEDESTRIAN CROSSINGS
- PROPOSED TACTILE PAVING FOR CONTROLLED PEDESTRIAN CROSSINGS
- PROPOSED SHARED FOOT & CYCLEWAY
- PROPOSED FOOTWAY
- PROPOSED CYCLEWAY
- PROPOSED AREA FOR SOFT LANDSCAPING
- PROPOSED AREA FOR HARD LANDSCAPING
- GROWING BALDOCK DEVELOPMENT SITE PLANNING BOUNDARY

REV	DATE	DESCRIPTION	BY	CHK	APP
P04	26.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P03	11.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P02	05.09.25	ISSUED FOR COMMENT	BKB	MLG	GB
P01	19.08.25	ISSUED FOR COMMENT	BKB	MLG	GB

REVISIONS

DRAWING STATUS: PLANNING

CLIENT: Urban&Civic

PROJECT: GROWING BALDOCK

TITLE: DEVELOPMENT SITE ACCESS - BA2 SITE

itp by Haskoning
Portland Street,
Manchester One, 9th Floor
Manchester, M1 3LF
Tel +44(0)161 2361018
Email info.manchester@uk.rhdhv.com
Website www.royalhaskoning.com

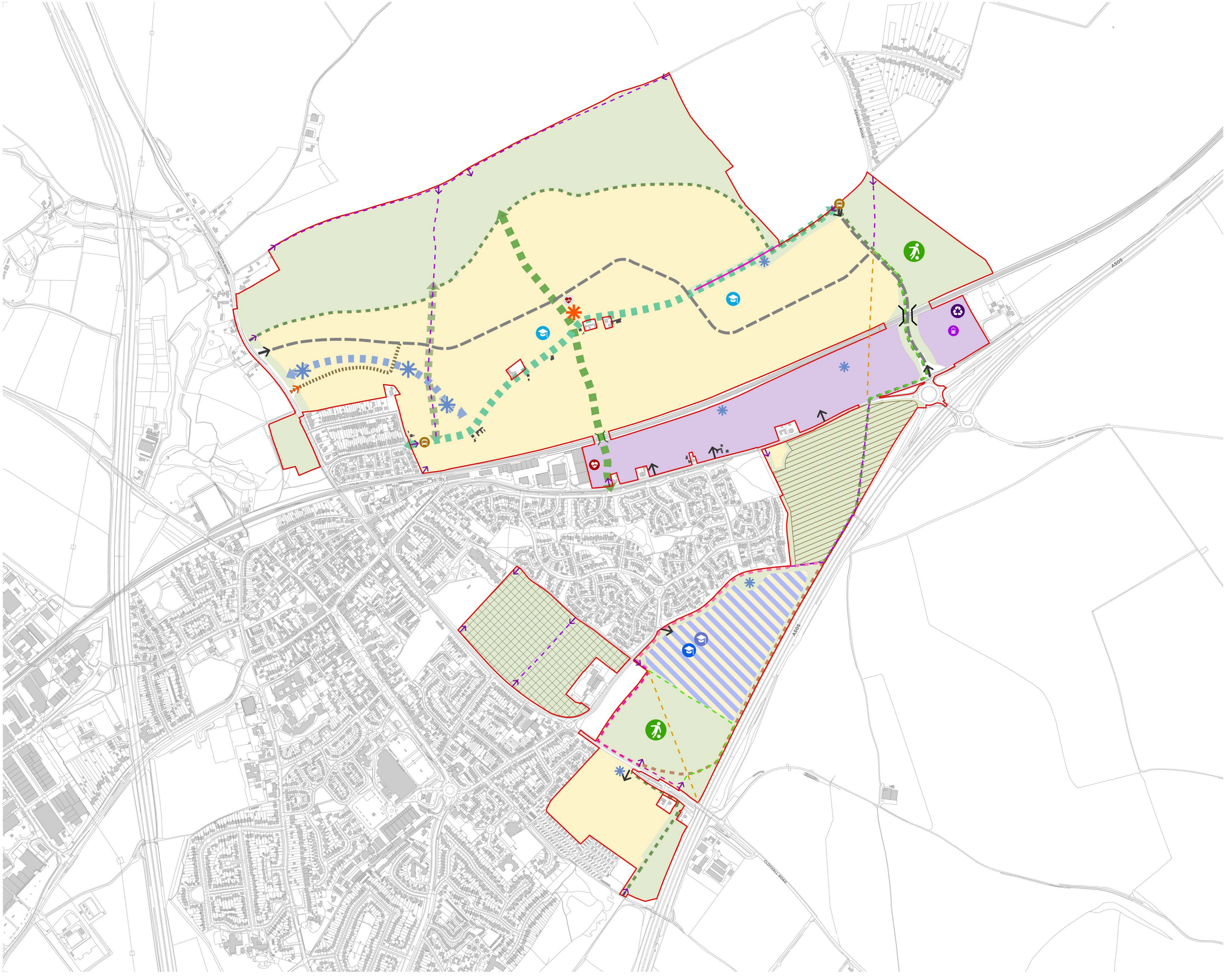
DRAWN	CHECKED	APPROVED
BKB	MLG	GB
DATE	SCALE AT A1	PROJECT NUMBER
AUG 25	1:500	PC7029

DRAWING No.	SUITABILITY	REVISION
PC7029-ITP-CE-GB-DR-D-0116	S3	P04

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Appendix F – Illustrative Masterplan



Outline Application Site Boundary

Existing Features

- Bygrave Road Local Wildlife Site (Onsite)
- Walls Field Scheduled Monument
- Existing Agricultural and Residential Buildings
- Retained Habitat

Land Use

- Development Area (Residential)
- Development Area (Employment)
- Development Area (Flexible Land Use - Residential/Education

Approximate Location of Key Facilities

- Local Centre
- Health Hub
- Health Hub - Potential Alternative Location
- Primary School
- Secondary School Option
- SEND School
- Renewable Energy Infrastructure
- Waste Facilities (Including Waste Transfer Station with a stack up to 15m)

Access and Movement

- Primary Site Accesses - All Modes
- Public Transport Only Site Accesses
- Key Pedestrian and Cycle Accesses
- Modal Filter
- Primary Street Indicative Alignment
- Public Transport Only Route (Connecting to Primary Street)
- All Modes Bridge
- Active Travel Crossing
- Retained Public Rights of Way
- Existing PROW Proposed to be Diverted
- Proposed PROW Diversion Alignment
- Proposed PROW Diversion Alignment (if secondary school is delivered on the flexible land use parcel)
- Active Travel Spine
- Bygrave Road
- Green Link

Landscape/Green/Blue Infrastructure

- Strategic Green Infrastructure
- Formal Outdoor Sport
- Baldock Greenway
- Baldock Greenway - if a secondary school is delivered on the flexible land use parcel
- Baldock Greenway - if no secondary school delivered on the flexible land use parcel
- Sustainable Drainage Corridor
- Primary SUDS Features

Rev	Description	Date

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Notes:
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Client:

Urban&Civic

Growing Baldock - Outline Planning Application

Parameter Plan

Scale@A1:	Drawn:	Designed:	Approved:
1:5,000	NMW	SJP/AC	HA

0 250 Meters

Drawing Number:	Revision:	Date:
UAC092-002	Q	10/09/2025

50 North Thirteenth Street, Central Milton Keynes, MK9 3BP
01908 666276 mail@davidlock.com **davidlock.com**

DAVID LOCK ASSOCIATES

Appendix G – TRICS Output Reports

Calculation Reference: AUDIT-703101-250303-0352

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	6 days
	EX	ESSEX	1 days
	HC	HAMPSHIRE	6 days
	HF	HERTFORDSHIRE	2 days
	KC	KENT	7 days
	SC	SURREY	3 days
	SP	SOUTHAMPTON	1 days
	WB	WEST BERKSHIRE	1 days
	WS	WEST SUSSEX	8 days
03	SOUTH WEST		
	DC	DORSET	1 days
04	EAST ANGLIA		
	NF	NORFOLK	13 days
05	EAST MIDLANDS		
	DY	DERBY	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
09	NORTH		
	DH	DURHAM	1 days
	IM	ISLE OF MAN	2 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 105 to 1817 (units:)
Range Selected by User: 100 to 1817 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 28/06/24

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

Selected survey days:

Monday	8 days
Tuesday	22 days
Wednesday	11 days
Thursday	11 days
Friday	2 days

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

Selected survey types:

Manual count	54 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	41
Neighbourhood Centre (PPS6 Local Centre)	11

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

Selected Location Sub Categories:

Residential Zone	40
Village	10
Out of Town	2
No Sub Category	2

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 Vehicles Counts:

Servicing vehicles Included	15 days - Selected
Servicing vehicles Excluded	52 days - Selected

Secondary Filtering selection:

Use Class:

C3	54 days

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:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	10 days
5,001 to 10,000	13 days
10,001 to 15,000	14 days
15,001 to 20,000	10 days
20,001 to 25,000	6 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	10 days
50,001 to 75,000	5 days
75,001 to 100,000	7 days
100,001 to 125,000	4 days
125,001 to 250,000	16 days
250,001 to 500,000	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	12 days
1.1 to 1.5	36 days
1.6 to 2.0	6 days

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

Travel Plan:

Yes	42 days
No	12 days

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

PTAL Rating:

No PTAL Present	54 days

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

LIST OF SITES relevant to selection parameters

1 DC-03-A-11 MIXED HOUSES DORSET
A350
SHAFTESBURY

Edge of Town
No Sub Category
Total No of Dwellings: 141
Survey date: TUESDAY *31/10/23* *Survey Type: MANUAL*

2 DH-03-A-02 MIXED HOUSES DURHAM
LEAZES LANE
BISHOP AUCKLAND
ST HELEN AUCKLAND
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 125
Survey date: MONDAY *27/03/17* *Survey Type: MANUAL*

3 DY-03-A-01 MIXED HOUSES DERBY
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

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

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

5 ES-03-A-08 MIXED HOUSES & FLATS EAST SUSSEX
WRESTWOOD ROAD
BEXHILL

Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: WEDNESDAY *12/10/22* *Survey Type: MANUAL*

6 ES-03-A-10 MIXED HOUSES & FLATS EAST SUSSEX
WATERGATE
BEXHILL-ON-SEA

Edge of Town
Residential Zone
Total No of Dwellings: 139
Survey date: THURSDAY *28/09/23* *Survey Type: MANUAL*

7 ES-03-A-11 MIXED HOUSES EAST SUSSEX
BISHOPS LANE
RINGMER

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 105
Survey date: THURSDAY *28/09/23* *Survey Type: MANUAL*

8 ES-03-A-12 MIXED HOUSES & FLATS EAST SUSSEX
HOREBEECH LANE
HORAM

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 123
Survey date: TUESDAY *03/10/23* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 ES-03-A-14 MIXED HOUSES & FLATS EAST SUSSEX
RATTLE ROAD
NEAR EASTBOURNE
STONE CROSS
Edge of Town
Residential Zone
Total No of Dwellings: 120
Survey date: TUESDAY *30/04/24* *Survey Type: MANUAL*

10 EX-03-A-03 MIXED HOUSES ESSEX
KESTREL GROVE
RAYLEIGH

Edge of Town
Residential Zone
Total No of Dwellings: 123
Survey date: MONDAY *27/09/21* *Survey Type: MANUAL*

11 HC-03-A-28 MIXED HOUSES & FLATS HAMPSHIRE
EAGLE AVENUE
WATERLOOVILLE
LOVEDEAN
Edge of Town
Residential Zone
Total No of Dwellings: 125
Survey date: MONDAY *08/11/21* *Survey Type: MANUAL*

12 HC-03-A-32 MIXED HOUSES & FLATS HAMPSHIRE
GREEN LANE
FARNHAM
WEYBOURNE
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 105
Survey date: THURSDAY *29/06/23* *Survey Type: MANUAL*

13 HC-03-A-34 MIXED HOUSES & FLATS HAMPSHIRE
STONEHAM LANE
EASTLEIGH

Edge of Town
Residential Zone
Total No of Dwellings: 243
Survey date: TUESDAY *14/11/23* *Survey Type: MANUAL*

14 HC-03-A-35 MIXED HOUSES & FLATS HAMPSHIRE
EAGLE AVENUE
WATERLOOVILLE
LOVEDEAN
Edge of Town
Residential Zone
Total No of Dwellings: 289
Survey date: TUESDAY *31/10/23* *Survey Type: MANUAL*

15 HC-03-A-36 MIXED HOUSES & FLATS HAMPSHIRE
HAVANT ROAD
EMSWORTH

Edge of Town
Residential Zone
Total No of Dwellings: 145
Survey date: TUESDAY *12/09/23* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

16 HC-03-A-38 MIXED HOUSES & FLATS HAMPSHIRE
CROW LANE
RINGWOOD
CROW
Edge of Town
Residential Zone
Total No of Dwellings: 195
Survey date: WEDNESDAY *26/06/24* *Survey Type: MANUAL*

17 HF-03-A-03 MIXED HOUSES HERTFORDSHIRE
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total No of Dwellings: 160
Survey date: MONDAY *08/07/19* *Survey Type: MANUAL*

18 HF-03-A-06 MIXED HOUSES & FLATS HERTFORDSHIRE
A505
ROYSTON

Edge of Town
Residential Zone
Total No of Dwellings: 180
Survey date: TUESDAY *28/11/23* *Survey Type: MANUAL*

19 IM-03-A-03 MIXED HOUSES ISLE OF MAN
MAIN ROAD
COLBY

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 111
Survey date: TUESDAY *21/05/24* *Survey Type: MANUAL*

20 IM-03-A-06 MIXED HOUSES ISLE OF MAN
MOORAGH PROMENADE
RAMSEY

Edge of Town
Residential Zone
Total No of Dwellings: 129
Survey date: THURSDAY *23/05/24* *Survey Type: MANUAL*

21 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

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

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

LIST OF SITES relevant to selection parameters (Cont.)

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

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

24 KC-03-A-08 MIXED HOUSES KENT
MAIDSTONE ROAD
CHARING

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 159
Survey date: TUESDAY *22/05/18* *Survey Type: MANUAL*

25 KC-03-A-10 MIXED HOUSES KENT
HEADCORN ROAD
STAPLEHURST

Edge of Town
Residential Zone
Total No of Dwellings: 106
Survey date: TUESDAY *09/05/23* *Survey Type: MANUAL*

26 KC-03-A-11 MIXED HOUSES & FLATS KENT
COLDHARBOUR ROAD
GRAVESEND

Edge of Town
No Sub Category
Total No of Dwellings: 375
Survey date: MONDAY *20/03/23* *Survey Type: MANUAL*

27 KC-03-A-12 MIXED HOUSES & FLATS KENT
WESTERN LINK
FAVERSHAM
DAVINGTON
Edge of Town
Residential Zone
Total No of Dwellings: 186
Survey date: TUESDAY *19/09/23* *Survey Type: MANUAL*

28 NF-03-A-06 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 275
Survey date: MONDAY *23/09/19* *Survey Type: MANUAL*

29 NF-03-A-08 MIXED HOUSES & FLATS NORFOLK
SIR ALFRED MUNNINGS RD
NEAR NORWICH
COSTESSEY
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 1817
Survey date: THURSDAY *19/09/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

30 NF-03-A-09 MIXED HOUSES & FLATS NORFOLK
ROUND HOUSE WAY
NORWICH
CRINGLEFORD
Edge of Town
Residential Zone
Total No of Dwellings: 984
Survey date: TUESDAY 24/09/19 Survey Type: MANUAL

31 NF-03-A-23 MIXED HOUSES & FLATS NORFOLK
SILFIELD ROAD
WYMONDHAM

Edge of Town
Out of Town
Total No of Dwellings: 514
Survey date: WEDNESDAY 22/09/21 Survey Type: MANUAL

32 NF-03-A-28 MIXED HOUSES & FLATS NORFOLK
ATLANTIC AVENUE
NORWICH
SPROWSTON
Edge of Town
Residential Zone
Total No of Dwellings: 1146
Survey date: THURSDAY 22/09/22 Survey Type: MANUAL

33 NF-03-A-30 MIXED HOUSES NORFOLK
BRANDON ROAD
SWAFFHAM

Edge of Town
Residential Zone
Total No of Dwellings: 266
Survey date: THURSDAY 23/09/21 Survey Type: MANUAL

34 NF-03-A-33 MIXED HOUSES NORFOLK
LONDON ROAD
ATTLEBOROUGH

Edge of Town
Residential Zone
Total No of Dwellings: 143
Survey date: THURSDAY 29/09/22 Survey Type: MANUAL

35 NF-03-A-35 MIXED HOUSES & FLATS NORFOLK
REPTON AVENUE
NORWICH

Edge of Town
Residential Zone
Total No of Dwellings: 116
Survey date: WEDNESDAY 28/09/22 Survey Type: MANUAL

36 NF-03-A-38 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 537
Survey date: TUESDAY 20/09/22 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

37 NF-03-A-39 MIXED HOUSES NORFOLK
HEATH DRIVE
HOLT

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: TUESDAY *27/09/22* *Survey Type: MANUAL*

38 NF-03-A-43 MIXED HOUSES NORFOLK
MILL LANE
NEAR NORWICH
HORSFORD
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 125
Survey date: WEDNESDAY *15/09/21* *Survey Type: MANUAL*

39 NF-03-A-46 MIXED HOUSES & FLATS NORFOLK
BURGH ROAD
AYLSHAM

Edge of Town
Residential Zone
Total No of Dwellings: 300
Survey date: TUESDAY *14/09/21* *Survey Type: MANUAL*

40 NF-03-A-52 MIXED HOUSES NORFOLK
LYNNSPORT WAY
KING'S LYNN

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 130
Survey date: TUESDAY *07/11/23* *Survey Type: MANUAL*

41 SC-03-A-08 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total No of Dwellings: 790
Survey date: WEDNESDAY *04/05/22* *Survey Type: MANUAL*

42 SC-03-A-09 MIXED HOUSES & FLATS SURREY
AMLETS LANE
CRANLEIGH

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 136
Survey date: TUESDAY *24/05/22* *Survey Type: MANUAL*

43 SC-03-A-12 MIXED HOUSES & FLATS SURREY
AARONS HILL
GODALMING

Edge of Town
Residential Zone
Total No of Dwellings: 252
Survey date: WEDNESDAY *12/06/24* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

44 SP-03-A-02 MIXED HOUSES & FLATS SOUTHAMPTON
BARNFIELD WAY
NEAR SOUTHAMPTON
HEDGE END
Edge of Town
Out of Town
Total No of Dwellings: 250
Survey date: TUESDAY *12/10/21* *Survey Type: MANUAL*

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

46 WB-03-A-03 MIXED HOUSES WEST BERKSHIRE
DORKING WAY
READING
CALCOT
Edge of Town
Residential Zone
Total No of Dwellings: 108
Survey date: FRIDAY *09/09/22* *Survey Type: MANUAL*

47 WS-03-A-08 MIXED HOUSES WEST SUSSEX
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total No of Dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

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

49 WS-03-A-14 MIXED HOUSES WEST SUSSEX
TODDINGTON LANE
LITTLEHAMPTON
WICK
Edge of Town
Residential Zone
Total No of Dwellings: 117
Survey date: WEDNESDAY *20/10/21* *Survey Type: MANUAL*

50 WS-03-A-18 MIXED HOUSES & FLATS WEST SUSSEX
LONDON ROAD
HASSOCKS

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 156
Survey date: MONDAY *15/05/23* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

51 WS-03-A-21 MIXED HOUSES WEST SUSSEX
HILLAND ROAD
BILLINGSHURST

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 480
Survey date: THURSDAY *09/11/23* *Survey Type: MANUAL*

52 WS-03-A-22 MIXED HOUSES & FLATS WEST SUSSEX
SHOPWHYKE ROAD
CHICHESTER

Edge of Town
Residential Zone
Total No of Dwellings: 129
Survey date: TUESDAY *19/03/24* *Survey Type: MANUAL*

53 WS-03-A-23 MIXED HOUSES & FLATS WEST SUSSEX
TURNERS HILL ROAD
EAST GRINSTEAD

Edge of Town
Residential Zone
Total No of Dwellings: 197
Survey date: TUESDAY *14/05/24* *Survey Type: MANUAL*

54 WS-03-A-24 MIXED HOUSES WEST SUSSEX
MADGWICK LANE
CHICHESTER
WESTHAMPNETT
Edge of Town
Village
Total No of Dwellings: 300
Survey date: THURSDAY *23/05/24* *Survey Type: MANUAL*

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
HC-03-A-26	Covid-19
SF-03-A-09	Covid-19
SF-03-A-10	Covid-19
WS-03-A-13	Covid-19

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.72

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.069	54	290	0.293	54	290	0.362
08:00 - 09:00	54	290	0.138	54	290	0.362	54	290	0.500
09:00 - 10:00	54	290	0.127	54	290	0.154	54	290	0.281
10:00 - 11:00	54	290	0.107	54	290	0.128	54	290	0.235
11:00 - 12:00	54	290	0.114	54	290	0.121	54	290	0.235
12:00 - 13:00	54	290	0.134	54	290	0.129	54	290	0.263
13:00 - 14:00	54	290	0.137	54	290	0.126	54	290	0.263
14:00 - 15:00	54	290	0.140	54	290	0.154	54	290	0.294
15:00 - 16:00	54	290	0.231	54	290	0.154	54	290	0.385
16:00 - 17:00	54	290	0.252	54	290	0.149	54	290	0.401
17:00 - 18:00	54	290	0.327	54	290	0.150	54	290	0.477
18:00 - 19:00	54	290	0.278	54	290	0.139	54	290	0.417
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.054			2.059			4.113

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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Parameter summary

Trip rate parameter range selected:	105 - 1817 (units:)
Survey date date range:	01/01/16 - 28/06/24
Number of weekdays (Monday-Friday):	54
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	9
Surveys manually removed from selection:	4

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.002	54	290	0.002	54	290	0.004
08:00 - 09:00	54	290	0.006	54	290	0.006	54	290	0.012
09:00 - 10:00	54	290	0.002	54	290	0.002	54	290	0.004
10:00 - 11:00	54	290	0.001	54	290	0.002	54	290	0.003
11:00 - 12:00	54	290	0.001	54	290	0.001	54	290	0.002
12:00 - 13:00	54	290	0.002	54	290	0.002	54	290	0.004
13:00 - 14:00	54	290	0.002	54	290	0.001	54	290	0.003
14:00 - 15:00	54	290	0.002	54	290	0.002	54	290	0.004
15:00 - 16:00	54	290	0.004	54	290	0.004	54	290	0.008
16:00 - 17:00	54	290	0.003	54	290	0.003	54	290	0.006
17:00 - 18:00	54	290	0.003	54	290	0.003	54	290	0.006
18:00 - 19:00	54	290	0.002	54	290	0.002	54	290	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.030			0.030			0.060

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.001	54	290	0.001	54	290	0.002
08:00 - 09:00	54	290	0.002	54	290	0.001	54	290	0.003
09:00 - 10:00	54	290	0.002	54	290	0.002	54	290	0.004
10:00 - 11:00	54	290	0.002	54	290	0.002	54	290	0.004
11:00 - 12:00	54	290	0.002	54	290	0.002	54	290	0.004
12:00 - 13:00	54	290	0.002	54	290	0.002	54	290	0.004
13:00 - 14:00	54	290	0.001	54	290	0.002	54	290	0.003
14:00 - 15:00	54	290	0.002	54	290	0.001	54	290	0.003
15:00 - 16:00	54	290	0.001	54	290	0.002	54	290	0.003
16:00 - 17:00	54	290	0.001	54	290	0.001	54	290	0.002
17:00 - 18:00	54	290	0.001	54	290	0.001	54	290	0.002
18:00 - 19:00	54	290	0.000	54	290	0.000	54	290	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.017			0.017			0.034

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.001	54	290	0.001	54	290	0.002
08:00 - 09:00	54	290	0.001	54	290	0.001	54	290	0.002
09:00 - 10:00	54	290	0.001	54	290	0.001	54	290	0.002
10:00 - 11:00	54	290	0.000	54	290	0.000	54	290	0.000
11:00 - 12:00	54	290	0.001	54	290	0.001	54	290	0.002
12:00 - 13:00	54	290	0.000	54	290	0.000	54	290	0.000
13:00 - 14:00	54	290	0.001	54	290	0.001	54	290	0.002
14:00 - 15:00	54	290	0.001	54	290	0.001	54	290	0.002
15:00 - 16:00	54	290	0.001	54	290	0.001	54	290	0.002
16:00 - 17:00	54	290	0.001	54	290	0.001	54	290	0.002
17:00 - 18:00	54	290	0.001	54	290	0.001	54	290	0.002
18:00 - 19:00	54	290	0.000	54	290	0.000	54	290	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.009			0.009			0.018

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.002	54	290	0.007	54	290	0.009
08:00 - 09:00	54	290	0.004	54	290	0.015	54	290	0.019
09:00 - 10:00	54	290	0.002	54	290	0.003	54	290	0.005
10:00 - 11:00	54	290	0.002	54	290	0.002	54	290	0.004
11:00 - 12:00	54	290	0.001	54	290	0.002	54	290	0.003
12:00 - 13:00	54	290	0.002	54	290	0.002	54	290	0.004
13:00 - 14:00	54	290	0.003	54	290	0.001	54	290	0.004
14:00 - 15:00	54	290	0.003	54	290	0.003	54	290	0.006
15:00 - 16:00	54	290	0.009	54	290	0.004	54	290	0.013
16:00 - 17:00	54	290	0.010	54	290	0.006	54	290	0.016
17:00 - 18:00	54	290	0.009	54	290	0.005	54	290	0.014
18:00 - 19:00	54	290	0.006	54	290	0.004	54	290	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.053			0.054			0.107

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.082	54	290	0.432	54	290	0.514
08:00 - 09:00	54	290	0.170	54	290	0.615	54	290	0.785
09:00 - 10:00	54	290	0.164	54	290	0.221	54	290	0.385
10:00 - 11:00	54	290	0.145	54	290	0.182	54	290	0.327
11:00 - 12:00	54	290	0.157	54	290	0.169	54	290	0.326
12:00 - 13:00	54	290	0.184	54	290	0.175	54	290	0.359
13:00 - 14:00	54	290	0.189	54	290	0.169	54	290	0.358
14:00 - 15:00	54	290	0.203	54	290	0.205	54	290	0.408
15:00 - 16:00	54	290	0.405	54	290	0.216	54	290	0.621
16:00 - 17:00	54	290	0.410	54	290	0.213	54	290	0.623
17:00 - 18:00	54	290	0.495	54	290	0.217	54	290	0.712
18:00 - 19:00	54	290	0.406	54	290	0.211	54	290	0.617
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.010			3.025			6.035

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.013	54	290	0.036	54	290	0.049
08:00 - 09:00	54	290	0.028	54	290	0.085	54	290	0.113
09:00 - 10:00	54	290	0.026	54	290	0.025	54	290	0.051
10:00 - 11:00	54	290	0.017	54	290	0.019	54	290	0.036
11:00 - 12:00	54	290	0.020	54	290	0.020	54	290	0.040
12:00 - 13:00	54	290	0.023	54	290	0.021	54	290	0.044
13:00 - 14:00	54	290	0.022	54	290	0.021	54	290	0.043
14:00 - 15:00	54	290	0.025	54	290	0.028	54	290	0.053
15:00 - 16:00	54	290	0.073	54	290	0.033	54	290	0.106
16:00 - 17:00	54	290	0.044	54	290	0.025	54	290	0.069
17:00 - 18:00	54	290	0.036	54	290	0.029	54	290	0.065
18:00 - 19:00	54	290	0.032	54	290	0.025	54	290	0.057
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.359			0.367			0.726

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.001	54	290	0.019	54	290	0.020
08:00 - 09:00	54	290	0.003	54	290	0.026	54	290	0.029
09:00 - 10:00	54	290	0.003	54	290	0.009	54	290	0.012
10:00 - 11:00	54	290	0.003	54	290	0.006	54	290	0.009
11:00 - 12:00	54	290	0.005	54	290	0.006	54	290	0.011
12:00 - 13:00	54	290	0.004	54	290	0.004	54	290	0.008
13:00 - 14:00	54	290	0.005	54	290	0.004	54	290	0.009
14:00 - 15:00	54	290	0.007	54	290	0.005	54	290	0.012
15:00 - 16:00	54	290	0.021	54	290	0.005	54	290	0.026
16:00 - 17:00	54	290	0.018	54	290	0.003	54	290	0.021
17:00 - 18:00	54	290	0.013	54	290	0.003	54	290	0.016
18:00 - 19:00	54	290	0.009	54	290	0.003	54	290	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.092			0.093			0.185

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.000	54	290	0.007	54	290	0.007
08:00 - 09:00	54	290	0.000	54	290	0.007	54	290	0.007
09:00 - 10:00	54	290	0.000	54	290	0.002	54	290	0.002
10:00 - 11:00	54	290	0.001	54	290	0.001	54	290	0.002
11:00 - 12:00	54	290	0.001	54	290	0.001	54	290	0.002
12:00 - 13:00	54	290	0.001	54	290	0.001	54	290	0.002
13:00 - 14:00	54	290	0.001	54	290	0.001	54	290	0.002
14:00 - 15:00	54	290	0.001	54	290	0.001	54	290	0.002
15:00 - 16:00	54	290	0.002	54	290	0.000	54	290	0.002
16:00 - 17:00	54	290	0.003	54	290	0.000	54	290	0.003
17:00 - 18:00	54	290	0.006	54	290	0.000	54	290	0.006
18:00 - 19:00	54	290	0.006	54	290	0.000	54	290	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.022			0.021			0.043

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.000	54	290	0.000	54	290	0.000
08:00 - 09:00	54	290	0.000	54	290	0.001	54	290	0.001
09:00 - 10:00	54	290	0.000	54	290	0.000	54	290	0.000
10:00 - 11:00	54	290	0.000	54	290	0.000	54	290	0.000
11:00 - 12:00	54	290	0.000	54	290	0.000	54	290	0.000
12:00 - 13:00	54	290	0.000	54	290	0.000	54	290	0.000
13:00 - 14:00	54	290	0.000	54	290	0.000	54	290	0.000
14:00 - 15:00	54	290	0.000	54	290	0.000	54	290	0.000
15:00 - 16:00	54	290	0.001	54	290	0.000	54	290	0.001
16:00 - 17:00	54	290	0.000	54	290	0.000	54	290	0.000
17:00 - 18:00	54	290	0.000	54	290	0.000	54	290	0.000
18:00 - 19:00	54	290	0.000	54	290	0.000	54	290	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.001			0.002

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.001	54	290	0.026	54	290	0.027
08:00 - 09:00	54	290	0.003	54	290	0.033	54	290	0.036
09:00 - 10:00	54	290	0.003	54	290	0.011	54	290	0.014
10:00 - 11:00	54	290	0.004	54	290	0.007	54	290	0.011
11:00 - 12:00	54	290	0.005	54	290	0.007	54	290	0.012
12:00 - 13:00	54	290	0.005	54	290	0.005	54	290	0.010
13:00 - 14:00	54	290	0.006	54	290	0.005	54	290	0.011
14:00 - 15:00	54	290	0.007	54	290	0.005	54	290	0.012
15:00 - 16:00	54	290	0.024	54	290	0.005	54	290	0.029
16:00 - 17:00	54	290	0.021	54	290	0.003	54	290	0.024
17:00 - 18:00	54	290	0.019	54	290	0.003	54	290	0.022
18:00 - 19:00	54	290	0.015	54	290	0.003	54	290	0.018
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.113			0.113			0.226

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.72

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.098	54	290	0.501	54	290	0.599
08:00 - 09:00	54	290	0.205	54	290	0.747	54	290	0.952
09:00 - 10:00	54	290	0.195	54	290	0.261	54	290	0.456
10:00 - 11:00	54	290	0.167	54	290	0.210	54	290	0.377
11:00 - 12:00	54	290	0.184	54	290	0.199	54	290	0.383
12:00 - 13:00	54	290	0.214	54	290	0.204	54	290	0.418
13:00 - 14:00	54	290	0.220	54	290	0.196	54	290	0.416
14:00 - 15:00	54	290	0.238	54	290	0.241	54	290	0.479
15:00 - 16:00	54	290	0.512	54	290	0.259	54	290	0.771
16:00 - 17:00	54	290	0.486	54	290	0.247	54	290	0.733
17:00 - 18:00	54	290	0.559	54	290	0.253	54	290	0.812
18:00 - 19:00	54	290	0.458	54	290	0.243	54	290	0.701
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.536			3.561			7.097

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.055	54	290	0.258	54	290	0.313
08:00 - 09:00	54	290	0.114	54	290	0.328	54	290	0.442
09:00 - 10:00	54	290	0.107	54	290	0.134	54	290	0.241
10:00 - 11:00	54	290	0.087	54	290	0.107	54	290	0.194
11:00 - 12:00	54	290	0.094	54	290	0.100	54	290	0.194
12:00 - 13:00	54	290	0.112	54	290	0.108	54	290	0.220
13:00 - 14:00	54	290	0.115	54	290	0.103	54	290	0.218
14:00 - 15:00	54	290	0.120	54	290	0.135	54	290	0.255
15:00 - 16:00	54	290	0.207	54	290	0.130	54	290	0.337
16:00 - 17:00	54	290	0.223	54	290	0.130	54	290	0.353
17:00 - 18:00	54	290	0.294	54	290	0.134	54	290	0.428
18:00 - 19:00	54	290	0.255	54	290	0.126	54	290	0.381
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.783			1.793			3.576

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.010	54	290	0.029	54	290	0.039
08:00 - 09:00	54	290	0.015	54	290	0.023	54	290	0.038
09:00 - 10:00	54	290	0.016	54	290	0.015	54	290	0.031
10:00 - 11:00	54	290	0.015	54	290	0.016	54	290	0.031
11:00 - 12:00	54	290	0.016	54	290	0.017	54	290	0.033
12:00 - 13:00	54	290	0.017	54	290	0.016	54	290	0.033
13:00 - 14:00	54	290	0.017	54	290	0.018	54	290	0.035
14:00 - 15:00	54	290	0.014	54	290	0.014	54	290	0.028
15:00 - 16:00	54	290	0.016	54	290	0.015	54	290	0.031
16:00 - 17:00	54	290	0.023	54	290	0.014	54	290	0.037
17:00 - 18:00	54	290	0.027	54	290	0.011	54	290	0.038
18:00 - 19:00	54	290	0.017	54	290	0.010	54	290	0.027
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.203			0.198			0.401

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	54	290	0.001	54	290	0.002	54	290	0.003
08:00 - 09:00	54	290	0.000	54	290	0.003	54	290	0.003
09:00 - 10:00	54	290	0.001	54	290	0.001	54	290	0.002
10:00 - 11:00	54	290	0.001	54	290	0.001	54	290	0.002
11:00 - 12:00	54	290	0.001	54	290	0.001	54	290	0.002
12:00 - 13:00	54	290	0.001	54	290	0.001	54	290	0.002
13:00 - 14:00	54	290	0.001	54	290	0.001	54	290	0.002
14:00 - 15:00	54	290	0.001	54	290	0.001	54	290	0.002
15:00 - 16:00	54	290	0.002	54	290	0.002	54	290	0.004
16:00 - 17:00	54	290	0.002	54	290	0.001	54	290	0.003
17:00 - 18:00	54	290	0.003	54	290	0.001	54	290	0.004
18:00 - 19:00	54	290	0.003	54	290	0.001	54	290	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.017			0.016			0.033

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.

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Calculation Reference: AUDIT-703101-250130-0121

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : G - GP SURGERIES
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	IW	ISLE OF WIGHT	1 days
03	SOUTH WEST		
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
05	EAST MIDLANDS		
	DY	DERBY	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	DR	DONCASTER	1 days
09	NORTH		
	CU	CUMBERLAND	1 days
	TW	TYNE & WEAR	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	1046 to 2150 (units: sqm)
Range Selected by User:	750 to 2250 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 18/06/24

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

Selected survey days:

Tuesday	1 days
Wednesday	2 days
Thursday	4 days
Friday	1 days

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

Selected survey types:

Manual count	8 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Residential Zone	8

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 Vehicles Counts:

Servicing vehicles Included	8 days - Selected
Servicing vehicles Excluded	X days - Selected

Secondary Filtering selection:

Use Class:

E(e)	8 days

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:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

15,001 to 20,000	2 days
20,001 to 25,000	3 days
25,001 to 50,000	2 days
50,001 to 100,000	1 days

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

Population within 5 miles:

50,001 to 75,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	1 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	5 days

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

Travel Plan:

No	8 days

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

PTAL Rating:

No PTAL Present	8 days

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

LIST OF SITES relevant to selection parameters

1 CA-05-G-01 MEDICAL CENTRE CAMBRIDGESHIRE
NUFFIELD ROAD
CAMBRIDGE
CHESTERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1046 sqm
Survey date: FRIDAY *23/06/23* *Survey Type: MANUAL*

2 CU-05-G-03 GP SURGERY CUMBERLAND
FUSEHILL STREET
CARLISLE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1370 sqm
Survey date: TUESDAY *18/06/24* *Survey Type: MANUAL*

3 DR-05-G-01 GP SURGERY DONCASTER
GOODISON BOULEVARD
DONCASTER
CANTLEY
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 1050 sqm
Survey date: THURSDAY *23/09/21* *Survey Type: MANUAL*

4 DY-05-G-02 GP SURGERY DERBY
ST THOMAS ROAD
DERBY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 2000 sqm
Survey date: WEDNESDAY *11/10/23* *Survey Type: MANUAL*

5 ES-05-G-03 MEDICAL CENTRE EAST SUSSEX
VICTORIA DRIVE
EASTBOURNE

Edge of Town
Residential Zone
Total Gross floor area: 1976 sqm
Survey date: THURSDAY *28/03/24* *Survey Type: MANUAL*

6 IW-05-G-01 GP SURGERY ISLE OF WIGHT
NEWPORT ROAD
COWES

Edge of Town
Residential Zone
Total Gross floor area: 1400 sqm
Survey date: WEDNESDAY *26/06/19* *Survey Type: MANUAL*

7 TW-05-G-04 GP SURGERY TYNE & WEAR
MANOR WALK
NEWCASTLE UPON TYNE
BENTON
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 1400 sqm
Survey date: THURSDAY *18/10/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 WL-05-G-01 MEDICAL CENTRE WILTSHIRE
MIDDLEFIELD ROAD
CHIPPENHAM

Edge of Town
Residential Zone
Total Gross floor area: 2150 sqm
Survey date: THURSDAY *11/05/23* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.80

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.071	1	1400	0.000	1	1400	0.071
07:00 - 08:00	7	1607	1.156	7	1607	0.196	7	1607	1.352
08:00 - 09:00	8	1537	2.563	8	1537	1.359	8	1537	3.922
09:00 - 10:00	8	1537	2.831	8	1537	2.628	8	1537	5.459
10:00 - 11:00	8	1537	2.709	8	1537	2.376	8	1537	5.085
11:00 - 12:00	8	1537	2.432	8	1537	2.522	8	1537	4.954
12:00 - 13:00	8	1537	2.392	8	1537	2.546	8	1537	4.938
13:00 - 14:00	8	1537	2.156	8	1537	2.229	8	1537	4.385
14:00 - 15:00	8	1537	2.522	8	1537	2.465	8	1537	4.987
15:00 - 16:00	8	1537	2.164	8	1537	2.319	8	1537	4.483
16:00 - 17:00	8	1537	1.896	8	1537	2.546	8	1537	4.442
17:00 - 18:00	8	1537	1.058	8	1537	1.952	8	1537	3.010
18:00 - 19:00	8	1537	0.456	8	1537	0.944	8	1537	1.400
19:00 - 20:00	1	1400	0.143	1	1400	0.143	1	1400	0.286
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			24.549			24.225			48.774

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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Parameter summary

Trip rate parameter range selected:	1046 - 2150 (units: sqm)
Survey date date range:	01/01/16 - 18/06/24
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
07:00 - 08:00	7	1607	0.009	7	1607	0.000	7	1607	0.009
08:00 - 09:00	8	1537	0.049	8	1537	0.000	8	1537	0.049
09:00 - 10:00	8	1537	0.016	8	1537	0.024	8	1537	0.040
10:00 - 11:00	8	1537	0.016	8	1537	0.033	8	1537	0.049
11:00 - 12:00	8	1537	0.065	8	1537	0.041	8	1537	0.106
12:00 - 13:00	8	1537	0.008	8	1537	0.033	8	1537	0.041
13:00 - 14:00	8	1537	0.033	8	1537	0.041	8	1537	0.074
14:00 - 15:00	8	1537	0.041	8	1537	0.041	8	1537	0.082
15:00 - 16:00	8	1537	0.033	8	1537	0.041	8	1537	0.074
16:00 - 17:00	8	1537	0.049	8	1537	0.033	8	1537	0.082
17:00 - 18:00	8	1537	0.016	8	1537	0.041	8	1537	0.057
18:00 - 19:00	8	1537	0.024	8	1537	0.016	8	1537	0.040
19:00 - 20:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.359			0.344			0.703

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

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.071	1	1400	0.000	1	1400	0.071
07:00 - 08:00	7	1607	1.298	7	1607	0.213	7	1607	1.511
08:00 - 09:00	8	1537	3.189	8	1537	1.595	8	1537	4.784
09:00 - 10:00	8	1537	3.881	8	1537	3.449	8	1537	7.330
10:00 - 11:00	8	1537	3.441	8	1537	3.157	8	1537	6.598
11:00 - 12:00	8	1537	3.287	8	1537	3.222	8	1537	6.509
12:00 - 13:00	8	1537	3.124	8	1537	3.384	8	1537	6.508
13:00 - 14:00	8	1537	2.872	8	1537	2.872	8	1537	5.744
14:00 - 15:00	8	1537	3.490	8	1537	3.319	8	1537	6.809
15:00 - 16:00	8	1537	2.904	8	1537	3.181	8	1537	6.085
16:00 - 17:00	8	1537	2.644	8	1537	3.506	8	1537	6.150
17:00 - 18:00	8	1537	1.318	8	1537	2.498	8	1537	3.816
18:00 - 19:00	8	1537	0.586	8	1537	1.196	8	1537	1.782
19:00 - 20:00	1	1400	0.143	1	1400	0.143	1	1400	0.286
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			32.248			31.735			63.983

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

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
07:00 - 08:00	7	1607	0.507	7	1607	0.027	7	1607	0.534
08:00 - 09:00	8	1537	0.789	8	1537	0.610	8	1537	1.399
09:00 - 10:00	8	1537	1.106	8	1537	1.058	8	1537	2.164
10:00 - 11:00	8	1537	0.976	8	1537	1.131	8	1537	2.107
11:00 - 12:00	8	1537	0.960	8	1537	1.033	8	1537	1.993
12:00 - 13:00	8	1537	0.716	8	1537	0.781	8	1537	1.497
13:00 - 14:00	8	1537	0.830	8	1537	0.667	8	1537	1.497
14:00 - 15:00	8	1537	0.822	8	1537	0.879	8	1537	1.701
15:00 - 16:00	8	1537	0.748	8	1537	0.773	8	1537	1.521
16:00 - 17:00	8	1537	0.643	8	1537	0.757	8	1537	1.400
17:00 - 18:00	8	1537	0.504	8	1537	0.781	8	1537	1.285
18:00 - 19:00	8	1537	0.081	8	1537	0.187	8	1537	0.268
19:00 - 20:00	1	1400	0.143	1	1400	0.357	1	1400	0.500
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.825			9.041			17.866

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

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
07:00 - 08:00	7	1607	0.080	7	1607	0.000	7	1607	0.080
08:00 - 09:00	8	1537	0.301	8	1537	0.081	8	1537	0.382
09:00 - 10:00	8	1537	0.325	8	1537	0.366	8	1537	0.691
10:00 - 11:00	8	1537	0.309	8	1537	0.268	8	1537	0.577
11:00 - 12:00	8	1537	0.350	8	1537	0.382	8	1537	0.732
12:00 - 13:00	8	1537	0.203	8	1537	0.220	8	1537	0.423
13:00 - 14:00	8	1537	0.220	8	1537	0.228	8	1537	0.448
14:00 - 15:00	8	1537	0.236	8	1537	0.212	8	1537	0.448
15:00 - 16:00	8	1537	0.212	8	1537	0.236	8	1537	0.448
16:00 - 17:00	8	1537	0.236	8	1537	0.260	8	1537	0.496
17:00 - 18:00	8	1537	0.114	8	1537	0.195	8	1537	0.309
18:00 - 19:00	8	1537	0.008	8	1537	0.130	8	1537	0.138
19:00 - 20:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.594			2.578			5.172

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

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.80

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.071	1	1400	0.000	1	1400	0.071
07:00 - 08:00	7	1607	1.894	7	1607	0.240	7	1607	2.134
08:00 - 09:00	8	1537	4.328	8	1537	2.286	8	1537	6.614
09:00 - 10:00	8	1537	5.329	8	1537	4.897	8	1537	10.226
10:00 - 11:00	8	1537	4.743	8	1537	4.588	8	1537	9.331
11:00 - 12:00	8	1537	4.662	8	1537	4.678	8	1537	9.340
12:00 - 13:00	8	1537	4.051	8	1537	4.418	8	1537	8.469
13:00 - 14:00	8	1537	3.954	8	1537	3.807	8	1537	7.761
14:00 - 15:00	8	1537	4.588	8	1537	4.450	8	1537	9.038
15:00 - 16:00	8	1537	3.897	8	1537	4.230	8	1537	8.127
16:00 - 17:00	8	1537	3.571	8	1537	4.556	8	1537	8.127
17:00 - 18:00	8	1537	1.952	8	1537	3.514	8	1537	5.466
18:00 - 19:00	8	1537	0.700	8	1537	1.529	8	1537	2.229
19:00 - 20:00	1	1400	0.286	1	1400	0.500	1	1400	0.786
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			44.026			43.693			87.719

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

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
MULTI-MODAL Servicing Vehicles
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
07:00 - 08:00	7	1607	0.027	7	1607	0.018	7	1607	0.045
08:00 - 09:00	8	1537	0.057	8	1537	0.033	8	1537	0.090
09:00 - 10:00	8	1537	0.106	8	1537	0.138	8	1537	0.244
10:00 - 11:00	8	1537	0.122	8	1537	0.106	8	1537	0.228
11:00 - 12:00	8	1537	0.065	8	1537	0.073	8	1537	0.138
12:00 - 13:00	8	1537	0.065	8	1537	0.073	8	1537	0.138
13:00 - 14:00	8	1537	0.033	8	1537	0.016	8	1537	0.049
14:00 - 15:00	8	1537	0.089	8	1537	0.089	8	1537	0.178
15:00 - 16:00	8	1537	0.065	8	1537	0.065	8	1537	0.130
16:00 - 17:00	8	1537	0.033	8	1537	0.049	8	1537	0.082
17:00 - 18:00	8	1537	0.041	8	1537	0.033	8	1537	0.074
18:00 - 19:00	8	1537	0.016	8	1537	0.016	8	1537	0.032
19:00 - 20:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.719			0.709			1.428

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.*

HaskoningDHV UK Ltd Wick Road Surrey Licence No: 703101

Calculation Reference: AUDIT-703101-250130-0154

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
Category : Q - COMMUNITY CENTRE
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

06	WEST MIDLANDS		
	TE	TELFORD & WREKIN	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	EC	CHESHIRE EAST	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	100 to 1486 (units: sqm)
Range Selected by User:	100 to 1486 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 07/06/24

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

Selected survey days:

Tuesday	1 days
Wednesday	1 days
Thursday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Residential Zone	1
Village	1
No Sub Category	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	1 days - Selected
Servicing vehicles Excluded	2 days - Selected

Secondary Filtering selection:

Use Class:

F2(b)	3 days

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:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
5,001 to 10,000	1 days
15,001 to 20,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	1 days

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

Travel Plan:

No	3 days

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

PTAL Rating:

No PTAL Present	3 days

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

LIST OF SITES relevant to selection parameters

1 EC-07-Q-01 COMMUNITY CENTRE CHESHIRE EAST
WARRINGTON ROAD
MERE

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 100 sqm
Survey date: TUESDAY *07/11/17* *Survey Type: MANUAL*

2 NY-07-Q-01 COMMUNITY CENTRE NORTH YORKSHIRE
SHUTE ROAD
CATTERRICK GARRISON

Neighbourhood Centre (PPS6 Local Centre)
No Sub Category
Total Gross floor area: 316 sqm
Survey date: WEDNESDAY *10/05/17* *Survey Type: MANUAL*

3 TE-07-Q-01 COMMUNITY CENTRE TELFORD & WREKIN
SOUTHGATE
TELFORD
SUTTON HILL
Edge of Town
Residential Zone
Total Gross floor area: 1486 sqm
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.78

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.481	2	208	0.000	2	208	0.481
08:00 - 09:00	3	634	0.315	3	634	0.105	3	634	0.420
09:00 - 10:00	3	634	0.368	3	634	0.158	3	634	0.526
10:00 - 11:00	3	634	0.105	3	634	0.526	3	634	0.631
11:00 - 12:00	3	634	0.210	3	634	0.158	3	634	0.368
12:00 - 13:00	3	634	0.263	3	634	0.631	3	634	0.894
13:00 - 14:00	3	634	0.263	3	634	0.473	3	634	0.736
14:00 - 15:00	3	634	0.368	3	634	0.105	3	634	0.473
15:00 - 16:00	3	634	0.263	3	634	0.263	3	634	0.526
16:00 - 17:00	2	793	0.189	2	793	0.063	2	793	0.252
17:00 - 18:00	2	793	0.189	2	793	0.315	2	793	0.504
18:00 - 19:00	2	793	0.820	2	793	0.126	2	793	0.946
19:00 - 20:00	2	793	1.513	2	793	0.000	2	793	1.513
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	1.324	2	793	1.324
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.347			4.247			9.594

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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Parameter summary

Trip rate parameter range selected:	100 - 1486 (units: sqm)
Survey date date range:	01/01/13 - 07/06/24
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.000	3	634	0.000	3	634	0.000
09:00 - 10:00	3	634	0.000	3	634	0.000	3	634	0.000
10:00 - 11:00	3	634	0.000	3	634	0.000	3	634	0.000
11:00 - 12:00	3	634	0.000	3	634	0.000	3	634	0.000
12:00 - 13:00	3	634	0.000	3	634	0.000	3	634	0.000
13:00 - 14:00	3	634	0.053	3	634	0.000	3	634	0.053
14:00 - 15:00	3	634	0.000	3	634	0.053	3	634	0.053
15:00 - 16:00	3	634	0.000	3	634	0.000	3	634	0.000
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.053			0.053			0.106

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.000	3	634	0.000	3	634	0.000
09:00 - 10:00	3	634	0.000	3	634	0.000	3	634	0.000
10:00 - 11:00	3	634	0.053	3	634	0.053	3	634	0.106
11:00 - 12:00	3	634	0.000	3	634	0.000	3	634	0.000
12:00 - 13:00	3	634	0.000	3	634	0.000	3	634	0.000
13:00 - 14:00	3	634	0.000	3	634	0.000	3	634	0.000
14:00 - 15:00	3	634	0.000	3	634	0.000	3	634	0.000
15:00 - 16:00	3	634	0.000	3	634	0.000	3	634	0.000
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.053			0.053			0.106

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.481	2	208	0.000	2	208	0.481
08:00 - 09:00	3	634	0.368	3	634	0.158	3	634	0.526
09:00 - 10:00	3	634	0.473	3	634	0.210	3	634	0.683
10:00 - 11:00	3	634	0.053	3	634	0.578	3	634	0.631
11:00 - 12:00	3	634	0.263	3	634	0.158	3	634	0.421
12:00 - 13:00	3	634	0.315	3	634	0.736	3	634	1.051
13:00 - 14:00	3	634	0.210	3	634	0.578	3	634	0.788
14:00 - 15:00	3	634	0.421	3	634	0.105	3	634	0.526
15:00 - 16:00	3	634	0.315	3	634	0.210	3	634	0.525
16:00 - 17:00	2	793	0.252	2	793	0.063	2	793	0.315
17:00 - 18:00	2	793	0.189	2	793	0.441	2	793	0.630
18:00 - 19:00	2	793	0.883	2	793	0.189	2	793	1.072
19:00 - 20:00	2	793	1.955	2	793	0.000	2	793	1.955
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	1.765	2	793	1.765
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.178			5.191			11.369

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.210	3	634	0.000	3	634	0.210
09:00 - 10:00	3	634	0.210	3	634	0.473	3	634	0.683
10:00 - 11:00	3	634	0.105	3	634	0.263	3	634	0.368
11:00 - 12:00	3	634	0.210	3	634	0.053	3	634	0.263
12:00 - 13:00	3	634	0.263	3	634	0.368	3	634	0.631
13:00 - 14:00	3	634	0.158	3	634	0.368	3	634	0.526
14:00 - 15:00	3	634	0.210	3	634	0.105	3	634	0.315
15:00 - 16:00	3	634	0.315	3	634	0.210	3	634	0.525
16:00 - 17:00	2	793	0.567	2	793	0.883	2	793	1.450
17:00 - 18:00	2	793	1.135	2	793	0.441	2	793	1.576
18:00 - 19:00	2	793	2.081	2	793	0.757	2	793	2.838
19:00 - 20:00	2	793	0.000	2	793	1.576	2	793	1.576
20:00 - 21:00	2	793	0.000	2	793	0.126	2	793	0.126
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.464			5.623			11.087

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.000	3	634	0.000	3	634	0.000
09:00 - 10:00	3	634	0.105	3	634	0.000	3	634	0.105
10:00 - 11:00	3	634	1.209	3	634	0.105	3	634	1.314
11:00 - 12:00	3	634	0.368	3	634	0.210	3	634	0.578
12:00 - 13:00	3	634	0.053	3	634	0.210	3	634	0.263
13:00 - 14:00	3	634	0.105	3	634	0.421	3	634	0.526
14:00 - 15:00	3	634	0.000	3	634	0.053	3	634	0.053
15:00 - 16:00	3	634	0.000	3	634	0.841	3	634	0.841
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.840			1.840			3.680

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.000	3	634	0.000	3	634	0.000
09:00 - 10:00	3	634	0.105	3	634	0.000	3	634	0.105
10:00 - 11:00	3	634	1.209	3	634	0.105	3	634	1.314
11:00 - 12:00	3	634	0.368	3	634	0.210	3	634	0.578
12:00 - 13:00	3	634	0.053	3	634	0.210	3	634	0.263
13:00 - 14:00	3	634	0.105	3	634	0.421	3	634	0.526
14:00 - 15:00	3	634	0.000	3	634	0.053	3	634	0.053
15:00 - 16:00	3	634	0.000	3	634	0.841	3	634	0.841
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.840			1.840			3.680

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.78

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.481	2	208	0.000	2	208	0.481
08:00 - 09:00	3	634	0.578	3	634	0.158	3	634	0.736
09:00 - 10:00	3	634	0.789	3	634	0.683	3	634	1.472
10:00 - 11:00	3	634	1.367	3	634	0.946	3	634	2.313
11:00 - 12:00	3	634	0.841	3	634	0.421	3	634	1.262
12:00 - 13:00	3	634	0.631	3	634	1.314	3	634	1.945
13:00 - 14:00	3	634	0.473	3	634	1.367	3	634	1.840
14:00 - 15:00	3	634	0.631	3	634	0.263	3	634	0.894
15:00 - 16:00	3	634	0.631	3	634	1.262	3	634	1.893
16:00 - 17:00	2	793	0.820	2	793	0.946	2	793	1.766
17:00 - 18:00	2	793	1.324	2	793	0.883	2	793	2.207
18:00 - 19:00	2	793	2.963	2	793	0.946	2	793	3.909
19:00 - 20:00	2	793	1.955	2	793	1.576	2	793	3.531
20:00 - 21:00	2	793	0.000	2	793	0.126	2	793	0.126
21:00 - 22:00	2	793	0.000	2	793	1.765	2	793	1.765
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			13.484			12.656			26.140

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL CARS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.481	2	208	0.000	2	208	0.481
08:00 - 09:00	3	634	0.263	3	634	0.105	3	634	0.368
09:00 - 10:00	3	634	0.315	3	634	0.158	3	634	0.473
10:00 - 11:00	3	634	0.053	3	634	0.421	3	634	0.474
11:00 - 12:00	3	634	0.210	3	634	0.158	3	634	0.368
12:00 - 13:00	3	634	0.263	3	634	0.631	3	634	0.894
13:00 - 14:00	3	634	0.210	3	634	0.473	3	634	0.683
14:00 - 15:00	3	634	0.315	3	634	0.053	3	634	0.368
15:00 - 16:00	3	634	0.263	3	634	0.210	3	634	0.473
16:00 - 17:00	2	793	0.189	2	793	0.063	2	793	0.252
17:00 - 18:00	2	793	0.189	2	793	0.315	2	793	0.504
18:00 - 19:00	2	793	0.820	2	793	0.126	2	793	0.946
19:00 - 20:00	2	793	1.513	2	793	0.000	2	793	1.513
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	1.324	2	793	1.324
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.084			4.037			9.121

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.000	3	634	0.000	3	634	0.000
09:00 - 10:00	3	634	0.053	3	634	0.000	3	634	0.053
10:00 - 11:00	3	634	0.000	3	634	0.053	3	634	0.053
11:00 - 12:00	3	634	0.000	3	634	0.000	3	634	0.000
12:00 - 13:00	3	634	0.000	3	634	0.000	3	634	0.000
13:00 - 14:00	3	634	0.000	3	634	0.000	3	634	0.000
14:00 - 15:00	3	634	0.053	3	634	0.000	3	634	0.053
15:00 - 16:00	3	634	0.000	3	634	0.000	3	634	0.000
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.106			0.053			0.159

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

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

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
MULTI-MODAL MOTOR CYCLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	208	0.000	2	208	0.000	2	208	0.000
08:00 - 09:00	3	634	0.053	3	634	0.000	3	634	0.053
09:00 - 10:00	3	634	0.000	3	634	0.000	3	634	0.000
10:00 - 11:00	3	634	0.000	3	634	0.000	3	634	0.000
11:00 - 12:00	3	634	0.000	3	634	0.000	3	634	0.000
12:00 - 13:00	3	634	0.000	3	634	0.000	3	634	0.000
13:00 - 14:00	3	634	0.000	3	634	0.000	3	634	0.000
14:00 - 15:00	3	634	0.000	3	634	0.000	3	634	0.000
15:00 - 16:00	3	634	0.000	3	634	0.053	3	634	0.053
16:00 - 17:00	2	793	0.000	2	793	0.000	2	793	0.000
17:00 - 18:00	2	793	0.000	2	793	0.000	2	793	0.000
18:00 - 19:00	2	793	0.000	2	793	0.000	2	793	0.000
19:00 - 20:00	2	793	0.000	2	793	0.000	2	793	0.000
20:00 - 21:00	2	793	0.000	2	793	0.000	2	793	0.000
21:00 - 22:00	2	793	0.000	2	793	0.000	2	793	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.053			0.053			0.106

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.

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HaskoningDHV UK Ltd Wick Road Surrey Licence No: 703101

Calculation Reference: AUDIT-703101-250130-0153

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 12 - CIVIC AMENITY SITES
Category : A - CIVIC AMENITY SITE
TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	SG	SOUTH GLOUCESTERSHIRE	1 days
06	WEST MIDLANDS		
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	LS	LEEDS	1 days
08	NORTH WEST		
	AC	CHESHIRE WEST & CHESTER	1 days

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

Primary Filtering selection:

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

Parameter:	Site area
Actual Range:	0.21 to 0.90 (units: hect)
Range Selected by User:	0.10 to 1 (units: hect)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 24/03/24

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

Selected survey days:

Tuesday	1 days
Wednesday	2 days
Friday	1 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	3

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:

Industrial Zone	3
Residential Zone	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	X days - Selected
Servicing vehicles Excluded	4 days - Selected

Secondary Filtering selection:

Use Class:

B2	4 days

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:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

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

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

Population within 5 miles:

100,001 to 125,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	1 days

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

Travel Plan:

No	4 days

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

PTAL Rating:

No PTAL Present	4 days

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

LIST OF SITES relevant to selection parameters

1	AC-12-A-01 BUMPERS LANE CHESTER SEALAND IND. ESTATE Edge of Town Industrial Zone	RECYCLING CENTRE		CHESHIRE WEST & CHESTER
	Total Site area:		0.30 hect	
	Survey date: WEDNESDAY		*12/11/14*	*Survey Type: MANUAL*
2	LS-12-A-01 LIMEWOOD ROAD LEEDS Edge of Town Industrial Zone	CIVIC AMENITY SITE		LEEDS
	Total Site area:		0.73 hect	
	Survey date: TUESDAY		*08/06/10*	*Survey Type: MANUAL*
3	SG-12-A-01 CARSONS ROAD NEAR BRISTOL MANGOTSFIELD Edge of Town Industrial Zone	RECYCLING CENTRE		SOUTH GLOUCESTERSHIRE
	Total Site area:		0.90 hect	
	Survey date: FRIDAY		*19/05/23*	*Survey Type: MANUAL*
4	WO-12-A-02 HORSFORD ROAD WORCESTER Suburban Area (PPS6 Out of Centre) Residential Zone	CIVIC AMENITY		WORCESTERSHIRE
	Total Site area:		0.21 hect	
	Survey date: WEDNESDAY		*13/10/10*	*Survey Type: MANUAL*

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

TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE
TOTAL VEHICLES
Calculation factor: 1 hect
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	0.64	7.772	3	0.64	6.218	3	0.64	13.990
08:00 - 09:00	4	0.54	35.981	4	0.54	32.243	4	0.54	68.224
09:00 - 10:00	4	0.54	71.963	4	0.54	62.150	4	0.54	134.113
10:00 - 11:00	4	0.54	81.776	4	0.54	80.374	4	0.54	162.150
11:00 - 12:00	4	0.54	88.785	4	0.54	85.514	4	0.54	174.299
12:00 - 13:00	4	0.54	66.822	4	0.54	69.159	4	0.54	135.981
13:00 - 14:00	4	0.54	54.206	4	0.54	59.346	4	0.54	113.552
14:00 - 15:00	4	0.54	51.402	4	0.54	52.336	4	0.54	103.738
15:00 - 16:00	4	0.54	45.327	4	0.54	51.402	4	0.54	96.729
16:00 - 17:00	4	0.54	8.411	4	0.54	15.888	4	0.54	24.299
17:00 - 18:00	3	0.61	0.000	3	0.61	3.261	3	0.61	3.261
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			512.445			517.891			1030.336

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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Parameter summary

Trip rate parameter range selected:	0.21 to 0.90 (units: hect)
Survey date date range:	01/01/10 - 24/03/24
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE
OGVS
Calculation factor: 1 hect
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	0.64	1.554	3	0.64	1.554	3	0.64	3.108
08:00 - 09:00	4	0.54	0.467	4	0.54	0.935	4	0.54	1.402
09:00 - 10:00	4	0.54	2.804	4	0.54	1.402	4	0.54	4.206
10:00 - 11:00	4	0.54	2.804	4	0.54	2.804	4	0.54	5.608
11:00 - 12:00	4	0.54	3.271	4	0.54	4.206	4	0.54	7.477
12:00 - 13:00	4	0.54	2.336	4	0.54	1.402	4	0.54	3.738
13:00 - 14:00	4	0.54	2.336	4	0.54	2.804	4	0.54	5.140
14:00 - 15:00	4	0.54	1.402	4	0.54	1.869	4	0.54	3.271
15:00 - 16:00	4	0.54	1.402	4	0.54	2.336	4	0.54	3.738
16:00 - 17:00	4	0.54	0.935	4	0.54	0.935	4	0.54	1.870
17:00 - 18:00	3	0.61	0.000	3	0.61	0.000	3	0.61	0.000
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			19.311			20.247			39.558

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

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

TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE
PSVS
Calculation factor: 1 hect
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	0.64	0.000	3	0.64	0.000	3	0.64	0.000
08:00 - 09:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
09:00 - 10:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
10:00 - 11:00	4	0.54	0.467	4	0.54	0.467	4	0.54	0.934
11:00 - 12:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
12:00 - 13:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
13:00 - 14:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
14:00 - 15:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
15:00 - 16:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
16:00 - 17:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
17:00 - 18:00	3	0.61	0.000	3	0.61	0.000	3	0.61	0.000
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.467			0.467			0.934

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

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

TRIP RATE for Land Use 12 - CIVIC AMENITY SITES/A - CIVIC AMENITY SITE
CYCLISTS
Calculation factor: 1 hect
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	0.64	0.000	3	0.64	0.000	3	0.64	0.000
08:00 - 09:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
09:00 - 10:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
10:00 - 11:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
11:00 - 12:00	4	0.54	0.467	4	0.54	0.467	4	0.54	0.934
12:00 - 13:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
13:00 - 14:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
14:00 - 15:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
15:00 - 16:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
16:00 - 17:00	4	0.54	0.000	4	0.54	0.000	4	0.54	0.000
17:00 - 18:00	3	0.61	0.000	3	0.61	0.000	3	0.61	0.000
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.467			0.467			0.934

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.

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HaskoningDHV UK Ltd Wick Road Surrey Licence No: 703101

Calculation Reference: AUDIT-703101-250130-0146

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : B - BUSINESS PARK
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	SC	SURREY	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	15100 to 56520 (units: sqm)
Range Selected by User:	10000 to 60000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 20/06/24

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

Selected survey days:

Monday	1 days
Wednesday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	3

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:

Industrial Zone	1
Commercial Zone	2
Out of Town	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	1 days - Selected
Servicing vehicles Excluded	3 days - Selected

Secondary Filtering selection:

Use Class:
Not Known 4 days

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

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

50,001 to 75,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	2 days

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

Travel Plan:

Yes	2 days
No	2 days

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

PTAL Rating:

No PTAL Present	4 days

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

LIST OF SITES relevant to selection parameters

1 CA-02-B-01 BUSINESS PARK CAMBRIDGESHIRE
MILTON ROAD
CAMBRIDGE

Edge of Town
Commercial Zone
Total Gross floor area: 23354 sqm
Survey date: MONDAY 26/06/23 Survey Type: MANUAL

2 SC-02-B-04 BUSINESS PARK SURREY
SURREY WAY
GUILDFORD

Suburban Area (PPS6 Out of Centre)
Commercial Zone
Total Gross floor area: 15800 sqm
Survey date: THURSDAY 20/06/24 Survey Type: MANUAL

3 ST-02-B-04 BUSINESS PARK STAFFORDSHIRE
STONE ROAD
STAFFORD

Edge of Town
Industrial Zone
Total Gross floor area: 20760 sqm
Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL

4 WK-02-B-01 BUSINESS/TECH. PARK WARWICKSHIRE
GALLOWS HILL
WARWICK

Edge of Town
Out of Town
Total Gross floor area: 56520 sqm
Survey date: WEDNESDAY 25/09/19 Survey Type: MANUAL

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.39

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	1.259	4	27284	0.093	4	27284	1.352
08:00 - 09:00	4	27284	1.531	4	27284	0.153	4	27284	1.684
09:00 - 10:00	4	27284	0.877	4	27284	0.181	4	27284	1.058
10:00 - 11:00	4	27284	0.244	4	27284	0.119	4	27284	0.363
11:00 - 12:00	4	27284	0.153	4	27284	0.164	4	27284	0.317
12:00 - 13:00	4	27284	0.317	4	27284	0.360	4	27284	0.677
13:00 - 14:00	4	27284	0.326	4	27284	0.263	4	27284	0.589
14:00 - 15:00	4	27284	0.150	4	27284	0.274	4	27284	0.424
15:00 - 16:00	4	27284	0.107	4	27284	0.764	4	27284	0.871
16:00 - 17:00	4	27284	0.104	4	27284	1.271	4	27284	1.375
17:00 - 18:00	4	27284	0.096	4	27284	1.133	4	27284	1.229
18:00 - 19:00	4	27284	0.059	4	27284	0.569	4	27284	0.628
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.223			5.344			10.567

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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Parameter summary

Trip rate parameter range selected:	15100 - 56520 (units: sqm)
Survey date date range:	01/01/16 - 20/06/24
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	0.004	4	27284	0.003	4	27284	0.007
08:00 - 09:00	4	27284	0.002	4	27284	0.003	4	27284	0.005
09:00 - 10:00	4	27284	0.005	4	27284	0.002	4	27284	0.007
10:00 - 11:00	4	27284	0.005	4	27284	0.005	4	27284	0.010
11:00 - 12:00	4	27284	0.006	4	27284	0.005	4	27284	0.011
12:00 - 13:00	4	27284	0.006	4	27284	0.004	4	27284	0.010
13:00 - 14:00	4	27284	0.005	4	27284	0.008	4	27284	0.013
14:00 - 15:00	4	27284	0.005	4	27284	0.005	4	27284	0.010
15:00 - 16:00	4	27284	0.002	4	27284	0.003	4	27284	0.005
16:00 - 17:00	4	27284	0.000	4	27284	0.002	4	27284	0.002
17:00 - 18:00	4	27284	0.002	4	27284	0.002	4	27284	0.004
18:00 - 19:00	4	27284	0.000	4	27284	0.001	4	27284	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.042			0.043			0.085

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	0.058	4	27284	0.002	4	27284	0.060
08:00 - 09:00	4	27284	0.090	4	27284	0.001	4	27284	0.091
09:00 - 10:00	4	27284	0.061	4	27284	0.005	4	27284	0.066
10:00 - 11:00	4	27284	0.017	4	27284	0.009	4	27284	0.026
11:00 - 12:00	4	27284	0.006	4	27284	0.005	4	27284	0.011
12:00 - 13:00	4	27284	0.005	4	27284	0.012	4	27284	0.017
13:00 - 14:00	4	27284	0.010	4	27284	0.012	4	27284	0.022
14:00 - 15:00	4	27284	0.005	4	27284	0.010	4	27284	0.015
15:00 - 16:00	4	27284	0.007	4	27284	0.020	4	27284	0.027
16:00 - 17:00	4	27284	0.001	4	27284	0.057	4	27284	0.058
17:00 - 18:00	4	27284	0.004	4	27284	0.084	4	27284	0.088
18:00 - 19:00	4	27284	0.004	4	27284	0.030	4	27284	0.034
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.268			0.247			0.515

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	1.432	4	27284	0.111	4	27284	1.543
08:00 - 09:00	4	27284	1.758	4	27284	0.193	4	27284	1.951
09:00 - 10:00	4	27284	0.980	4	27284	0.214	4	27284	1.194
10:00 - 11:00	4	27284	0.293	4	27284	0.134	4	27284	0.427
11:00 - 12:00	4	27284	0.193	4	27284	0.199	4	27284	0.392
12:00 - 13:00	4	27284	0.380	4	27284	0.421	4	27284	0.801
13:00 - 14:00	4	27284	0.377	4	27284	0.301	4	27284	0.678
14:00 - 15:00	4	27284	0.196	4	27284	0.324	4	27284	0.520
15:00 - 16:00	4	27284	0.155	4	27284	0.861	4	27284	1.016
16:00 - 17:00	4	27284	0.156	4	27284	1.451	4	27284	1.607
17:00 - 18:00	4	27284	0.128	4	27284	1.275	4	27284	1.403
18:00 - 19:00	4	27284	0.073	4	27284	0.675	4	27284	0.748
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.121			6.159			12.280

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	0.071	4	27284	0.013	4	27284	0.084
08:00 - 09:00	4	27284	0.096	4	27284	0.008	4	27284	0.104
09:00 - 10:00	4	27284	0.068	4	27284	0.006	4	27284	0.074
10:00 - 11:00	4	27284	0.032	4	27284	0.022	4	27284	0.054
11:00 - 12:00	4	27284	0.025	4	27284	0.019	4	27284	0.044
12:00 - 13:00	4	27284	0.183	4	27284	0.208	4	27284	0.391
13:00 - 14:00	4	27284	0.137	4	27284	0.137	4	27284	0.274
14:00 - 15:00	4	27284	0.043	4	27284	0.038	4	27284	0.081
15:00 - 16:00	4	27284	0.019	4	27284	0.046	4	27284	0.065
16:00 - 17:00	4	27284	0.013	4	27284	0.086	4	27284	0.099
17:00 - 18:00	4	27284	0.004	4	27284	0.093	4	27284	0.097
18:00 - 19:00	4	27284	0.006	4	27284	0.031	4	27284	0.037
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.697			0.707			1.404

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	0.029	4	27284	0.001	4	27284	0.030
08:00 - 09:00	4	27284	0.089	4	27284	0.004	4	27284	0.093
09:00 - 10:00	4	27284	0.033	4	27284	0.004	4	27284	0.037
10:00 - 11:00	4	27284	0.008	4	27284	0.009	4	27284	0.017
11:00 - 12:00	4	27284	0.012	4	27284	0.007	4	27284	0.019
12:00 - 13:00	4	27284	0.025	4	27284	0.016	4	27284	0.041
13:00 - 14:00	4	27284	0.019	4	27284	0.010	4	27284	0.029
14:00 - 15:00	4	27284	0.008	4	27284	0.010	4	27284	0.018
15:00 - 16:00	4	27284	0.008	4	27284	0.016	4	27284	0.024
16:00 - 17:00	4	27284	0.002	4	27284	0.053	4	27284	0.055
17:00 - 18:00	4	27284	0.005	4	27284	0.064	4	27284	0.069
18:00 - 19:00	4	27284	0.003	4	27284	0.028	4	27284	0.031
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.241			0.222			0.463

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.39

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	1.590	4	27284	0.126	4	27284	1.716
08:00 - 09:00	4	27284	2.033	4	27284	0.206	4	27284	2.239
09:00 - 10:00	4	27284	1.142	4	27284	0.229	4	27284	1.371
10:00 - 11:00	4	27284	0.351	4	27284	0.174	4	27284	0.525
11:00 - 12:00	4	27284	0.236	4	27284	0.230	4	27284	0.466
12:00 - 13:00	4	27284	0.594	4	27284	0.656	4	27284	1.250
13:00 - 14:00	4	27284	0.543	4	27284	0.460	4	27284	1.003
14:00 - 15:00	4	27284	0.252	4	27284	0.383	4	27284	0.635
15:00 - 16:00	4	27284	0.190	4	27284	0.944	4	27284	1.134
16:00 - 17:00	4	27284	0.171	4	27284	1.647	4	27284	1.818
17:00 - 18:00	4	27284	0.141	4	27284	1.516	4	27284	1.657
18:00 - 19:00	4	27284	0.086	4	27284	0.765	4	27284	0.851
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			7.329			7.336			14.665

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.

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TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	27284	0.016	4	27284	0.010	4	27284	0.026
08:00 - 09:00	4	27284	0.028	4	27284	0.010	4	27284	0.038
09:00 - 10:00	4	27284	0.019	4	27284	0.016	4	27284	0.035
10:00 - 11:00	4	27284	0.029	4	27284	0.022	4	27284	0.051
11:00 - 12:00	4	27284	0.021	4	27284	0.028	4	27284	0.049
12:00 - 13:00	4	27284	0.023	4	27284	0.022	4	27284	0.045
13:00 - 14:00	4	27284	0.017	4	27284	0.016	4	27284	0.033
14:00 - 15:00	4	27284	0.016	4	27284	0.022	4	27284	0.038
15:00 - 16:00	4	27284	0.009	4	27284	0.022	4	27284	0.031
16:00 - 17:00	4	27284	0.009	4	27284	0.013	4	27284	0.022
17:00 - 18:00	4	27284	0.003	4	27284	0.009	4	27284	0.012
18:00 - 19:00	4	27284	0.002	4	27284	0.008	4	27284	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.192			0.198			0.390

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.*

HaskoningDHV UK Ltd Wick Road Surrey Licence No: 703101

Calculation Reference: AUDIT-703101-250130-0132

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
05	EAST MIDLANDS		
	NT	NOTTINGHAMSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	DR	DONCASTER	1 days
	NY	NORTH YORKSHIRE	1 days
09	NORTH		
	CU	CUMBERLAND	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	1750 to 105335 (units: sqm)
Range Selected by User:	1750 to 105335 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 19/06/24

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

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	2 days
Friday	1 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	4

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:

Industrial Zone	4
Development Zone	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	3 days - Selected
Servicing vehicles Excluded	2 days - Selected

Secondary Filtering selection:

Use Class:

n/a	1 days
B8	4 days

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®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	1 days
5,001 to 10,000	1 days
10,001 to 15,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

1.1 to 1.5	5 days

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

Travel Plan:

Yes	1 days
No	4 days

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

PTAL Rating:

No PTAL Present	5 days

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

LIST OF SITES relevant to selection parameters

1 CU-02-F-01 WAREHOUSING & DISTRIBUTION CUMBERLAND
CARLISLE ROAD
BRAMPTON

Edge of Town
Industrial Zone
Total Gross floor area: 4007 sqm
Survey date: WEDNESDAY 19/06/24 Survey Type: MANUAL

2 DR-02-F-01 TESCO DISTRIBUTION CENTRE DONCASTER
MIDDLE BANK
DONCASTER

Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 80100 sqm
Survey date: TUESDAY 21/09/21 Survey Type: MANUAL

3 EX-02-F-01 SPORTS SUPPLEMENTS ESSEX
BRUNEL WAY
COLCHESTER
SEVERALLS INDUSTRIAL PK
Edge of Town
Industrial Zone
Total Gross floor area: 6560 sqm
Survey date: FRIDAY 18/05/18 Survey Type: MANUAL

4 NT-02-F-01 LOGISTICS WAREHOUSING PARK NOTTINGHAMSHIRE
NOOK FLATT ROAD
NEAR WORKSOP
BLYTH
Edge of Town
Development Zone
Total Gross floor area: 105335 sqm
Survey date: WEDNESDAY 18/10/23 Survey Type: MANUAL

5 NY-02-F-01 REMOVALS SERVICE NORTH YORKSHIRE
GRIMBALD CRAG CLOSE
KNARESBOROUGH

Edge of Town
Industrial Zone
Total Gross floor area: 1750 sqm
Survey date: MONDAY 19/06/23 Survey Type: MANUAL

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.21

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.074	3	63147	0.029	3	63147	0.103
06:00 - 07:00	3	63147	0.028	3	63147	0.063	3	63147	0.091
07:00 - 08:00	5	39550	0.047	5	39550	0.025	5	39550	0.072
08:00 - 09:00	5	39550	0.039	5	39550	0.026	5	39550	0.065
09:00 - 10:00	5	39550	0.052	5	39550	0.035	5	39550	0.087
10:00 - 11:00	5	39550	0.049	5	39550	0.049	5	39550	0.098
11:00 - 12:00	5	39550	0.050	5	39550	0.040	5	39550	0.090
12:00 - 13:00	5	39550	0.050	5	39550	0.059	5	39550	0.109
13:00 - 14:00	5	39550	0.052	5	39550	0.041	5	39550	0.093
14:00 - 15:00	5	39550	0.050	5	39550	0.078	5	39550	0.128
15:00 - 16:00	5	39550	0.044	5	39550	0.042	5	39550	0.086
16:00 - 17:00	5	39550	0.034	5	39550	0.045	5	39550	0.079
17:00 - 18:00	5	39550	0.037	5	39550	0.041	5	39550	0.078
18:00 - 19:00	5	39550	0.022	5	39550	0.046	5	39550	0.068
19:00 - 20:00	3	63147	0.018	3	63147	0.023	3	63147	0.041
20:00 - 21:00	3	63147	0.016	3	63147	0.020	3	63147	0.036
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.662			0.662			1.324

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.

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Parameter summary

Trip rate parameter range selected:	1750 - 105335 (units: sqm)
Survey date date range:	01/01/16 - 19/06/24
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.007	3	63147	0.010	3	63147	0.017
06:00 - 07:00	3	63147	0.008	3	63147	0.010	3	63147	0.018
07:00 - 08:00	5	39550	0.013	5	39550	0.014	5	39550	0.027
08:00 - 09:00	5	39550	0.018	5	39550	0.016	5	39550	0.034
09:00 - 10:00	5	39550	0.022	5	39550	0.016	5	39550	0.038
10:00 - 11:00	5	39550	0.025	5	39550	0.027	5	39550	0.052
11:00 - 12:00	5	39550	0.022	5	39550	0.015	5	39550	0.037
12:00 - 13:00	5	39550	0.022	5	39550	0.021	5	39550	0.043
13:00 - 14:00	5	39550	0.018	5	39550	0.018	5	39550	0.036
14:00 - 15:00	5	39550	0.026	5	39550	0.021	5	39550	0.047
15:00 - 16:00	5	39550	0.024	5	39550	0.021	5	39550	0.045
16:00 - 17:00	5	39550	0.014	5	39550	0.015	5	39550	0.029
17:00 - 18:00	5	39550	0.020	5	39550	0.014	5	39550	0.034
18:00 - 19:00	5	39550	0.011	5	39550	0.018	5	39550	0.029
19:00 - 20:00	3	63147	0.007	3	63147	0.013	3	63147	0.020
20:00 - 21:00	3	63147	0.007	3	63147	0.012	3	63147	0.019
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.264			0.261			0.525

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.

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TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.002	3	63147	0.001	3	63147	0.003
06:00 - 07:00	3	63147	0.000	3	63147	0.000	3	63147	0.000
07:00 - 08:00	5	39550	0.000	5	39550	0.000	5	39550	0.000
08:00 - 09:00	5	39550	0.001	5	39550	0.000	5	39550	0.001
09:00 - 10:00	5	39550	0.000	5	39550	0.000	5	39550	0.000
10:00 - 11:00	5	39550	0.002	5	39550	0.001	5	39550	0.003
11:00 - 12:00	5	39550	0.000	5	39550	0.000	5	39550	0.000
12:00 - 13:00	5	39550	0.000	5	39550	0.000	5	39550	0.000
13:00 - 14:00	5	39550	0.002	5	39550	0.000	5	39550	0.002
14:00 - 15:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
15:00 - 16:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
16:00 - 17:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
17:00 - 18:00	5	39550	0.001	5	39550	0.000	5	39550	0.001
18:00 - 19:00	5	39550	0.001	5	39550	0.000	5	39550	0.001
19:00 - 20:00	3	63147	0.001	3	63147	0.004	3	63147	0.005
20:00 - 21:00	3	63147	0.000	3	63147	0.000	3	63147	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.009			0.019

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.080	3	63147	0.031	3	63147	0.111
06:00 - 07:00	3	63147	0.030	3	63147	0.065	3	63147	0.095
07:00 - 08:00	5	39550	0.053	5	39550	0.030	5	39550	0.083
08:00 - 09:00	5	39550	0.047	5	39550	0.028	5	39550	0.075
09:00 - 10:00	5	39550	0.062	5	39550	0.038	5	39550	0.100
10:00 - 11:00	5	39550	0.051	5	39550	0.051	5	39550	0.102
11:00 - 12:00	5	39550	0.054	5	39550	0.045	5	39550	0.099
12:00 - 13:00	5	39550	0.054	5	39550	0.062	5	39550	0.116
13:00 - 14:00	5	39550	0.055	5	39550	0.045	5	39550	0.100
14:00 - 15:00	5	39550	0.054	5	39550	0.091	5	39550	0.145
15:00 - 16:00	5	39550	0.048	5	39550	0.047	5	39550	0.095
16:00 - 17:00	5	39550	0.034	5	39550	0.053	5	39550	0.087
17:00 - 18:00	5	39550	0.038	5	39550	0.050	5	39550	0.088
18:00 - 19:00	5	39550	0.023	5	39550	0.054	5	39550	0.077
19:00 - 20:00	3	63147	0.017	3	63147	0.023	3	63147	0.040
20:00 - 21:00	3	63147	0.016	3	63147	0.020	3	63147	0.036
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.716			0.733			1.449

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.008	3	63147	0.011	3	63147	0.019
06:00 - 07:00	3	63147	0.006	3	63147	0.000	3	63147	0.006
07:00 - 08:00	5	39550	0.002	5	39550	0.001	5	39550	0.003
08:00 - 09:00	5	39550	0.002	5	39550	0.000	5	39550	0.002
09:00 - 10:00	5	39550	0.011	5	39550	0.001	5	39550	0.012
10:00 - 11:00	5	39550	0.002	5	39550	0.001	5	39550	0.003
11:00 - 12:00	5	39550	0.008	5	39550	0.002	5	39550	0.010
12:00 - 13:00	5	39550	0.004	5	39550	0.002	5	39550	0.006
13:00 - 14:00	5	39550	0.001	5	39550	0.001	5	39550	0.002
14:00 - 15:00	5	39550	0.000	5	39550	0.003	5	39550	0.003
15:00 - 16:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
16:00 - 17:00	5	39550	0.001	5	39550	0.010	5	39550	0.011
17:00 - 18:00	5	39550	0.003	5	39550	0.001	5	39550	0.004
18:00 - 19:00	5	39550	0.000	5	39550	0.003	5	39550	0.003
19:00 - 20:00	3	63147	0.002	3	63147	0.013	3	63147	0.015
20:00 - 21:00	3	63147	0.003	3	63147	0.010	3	63147	0.013
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.053			0.060			0.113

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.004	3	63147	0.003	3	63147	0.007
06:00 - 07:00	3	63147	0.003	3	63147	0.000	3	63147	0.003
07:00 - 08:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
08:00 - 09:00	5	39550	0.002	5	39550	0.000	5	39550	0.002
09:00 - 10:00	5	39550	0.002	5	39550	0.000	5	39550	0.002
10:00 - 11:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
11:00 - 12:00	5	39550	0.002	5	39550	0.001	5	39550	0.003
12:00 - 13:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
13:00 - 14:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
14:00 - 15:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
15:00 - 16:00	5	39550	0.000	5	39550	0.000	5	39550	0.000
16:00 - 17:00	5	39550	0.000	5	39550	0.001	5	39550	0.001
17:00 - 18:00	5	39550	0.001	5	39550	0.003	5	39550	0.004
18:00 - 19:00	5	39550	0.001	5	39550	0.000	5	39550	0.001
19:00 - 20:00	3	63147	0.001	3	63147	0.003	3	63147	0.004
20:00 - 21:00	3	63147	0.000	3	63147	0.000	3	63147	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.016			0.032

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.21

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.094	3	63147	0.045	3	63147	0.139
06:00 - 07:00	3	63147	0.040	3	63147	0.065	3	63147	0.105
07:00 - 08:00	5	39550	0.054	5	39550	0.031	5	39550	0.085
08:00 - 09:00	5	39550	0.052	5	39550	0.028	5	39550	0.080
09:00 - 10:00	5	39550	0.075	5	39550	0.039	5	39550	0.114
10:00 - 11:00	5	39550	0.055	5	39550	0.053	5	39550	0.108
11:00 - 12:00	5	39550	0.063	5	39550	0.048	5	39550	0.111
12:00 - 13:00	5	39550	0.058	5	39550	0.065	5	39550	0.123
13:00 - 14:00	5	39550	0.057	5	39550	0.046	5	39550	0.103
14:00 - 15:00	5	39550	0.054	5	39550	0.095	5	39550	0.149
15:00 - 16:00	5	39550	0.048	5	39550	0.048	5	39550	0.096
16:00 - 17:00	5	39550	0.034	5	39550	0.064	5	39550	0.098
17:00 - 18:00	5	39550	0.042	5	39550	0.054	5	39550	0.096
18:00 - 19:00	5	39550	0.024	5	39550	0.057	5	39550	0.081
19:00 - 20:00	3	63147	0.021	3	63147	0.043	3	63147	0.064
20:00 - 21:00	3	63147	0.019	3	63147	0.030	3	63147	0.049
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.790			0.811			1.601

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	63147	0.001	3	63147	0.002	3	63147	0.003
06:00 - 07:00	3	63147	0.002	3	63147	0.001	3	63147	0.003
07:00 - 08:00	5	39550	0.004	5	39550	0.005	5	39550	0.009
08:00 - 09:00	5	39550	0.004	5	39550	0.003	5	39550	0.007
09:00 - 10:00	5	39550	0.007	5	39550	0.002	5	39550	0.009
10:00 - 11:00	5	39550	0.006	5	39550	0.005	5	39550	0.011
11:00 - 12:00	5	39550	0.006	5	39550	0.004	5	39550	0.010
12:00 - 13:00	5	39550	0.003	5	39550	0.004	5	39550	0.007
13:00 - 14:00	5	39550	0.004	5	39550	0.002	5	39550	0.006
14:00 - 15:00	5	39550	0.003	5	39550	0.003	5	39550	0.006
15:00 - 16:00	5	39550	0.002	5	39550	0.002	5	39550	0.004
16:00 - 17:00	5	39550	0.004	5	39550	0.004	5	39550	0.008
17:00 - 18:00	5	39550	0.003	5	39550	0.002	5	39550	0.005
18:00 - 19:00	5	39550	0.001	5	39550	0.005	5	39550	0.006
19:00 - 20:00	3	63147	0.001	3	63147	0.001	3	63147	0.002
20:00 - 21:00	3	63147	0.001	3	63147	0.000	3	63147	0.001
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.052			0.045			0.097

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

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

Calculation Reference: AUDIT-703101-250130-0136

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
	HF	HERTFORDSHIRE	1 days
03	SOUTH WEST		
	DV	DEVON	1 days
06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	1500 to 17834 (units: sqm)
Range Selected by User:	1000 to 60000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 08/11/24

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:

Wednesday	3 days
Thursday	2 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	1

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:

Industrial Zone	4
Village	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	4 days - Selected
Servicing vehicles Excluded	1 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	5 days

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®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
5,001 to 10,000	2 days
15,001 to 20,000	2 days

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

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	2 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	3 days
1.6 to 2.0	1 days

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

Travel Plan:

No	5 days

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

PTAL Rating:

No PTAL Present	5 days

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

LIST OF SITES relevant to selection parameters

1 DV-02-C-02 ENERGY RECOVERY FACILITY DEVON
GRACE ROAD SOUTH
EXETER
MARSH BARTON TRAD. EST.
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 3513 sqm
Survey date: THURSDAY 06/07/17 Survey Type: MANUAL

2 HC-02-C-02 GIN DISTILLERY HAMPSHIRE
LONDON ROAD
LAVERSTOKE

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 8000 sqm
Survey date: WEDNESDAY 09/05/18 Survey Type: MANUAL

3 HF-02-C-02 FRESH PRODUCE HERTFORDSHIRE
COCKERELL CLOSE
STEVENAGE

Edge of Town
Industrial Zone
Total Gross floor area: 17834 sqm
Survey date: WEDNESDAY 08/11/23 Survey Type: MANUAL

4 NY-02-C-03 WORKWEAR MANUFACTURER NORTH YORKSHIRE
WETHERBY ROAD
KNARESBOROUGH

Edge of Town
Industrial Zone
Total Gross floor area: 1500 sqm
Survey date: THURSDAY 29/06/23 Survey Type: MANUAL

5 WK-02-C-01 MACHINE ENGINEERING WARWICKSHIRE
CASTLE MOUND WAY
RUGBY

Edge of Town
Industrial Zone
Total Gross floor area: 9216 sqm
Survey date: WEDNESDAY 10/11/21 Survey Type: MANUAL

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.32

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.078	2	13525	0.007	2	13525	0.085
06:00 - 07:00	2	13525	0.214	2	13525	0.148	2	13525	0.362
07:00 - 08:00	5	8013	0.220	5	8013	0.037	5	8013	0.257
08:00 - 09:00	5	8013	0.177	5	8013	0.037	5	8013	0.214
09:00 - 10:00	5	8013	0.130	5	8013	0.075	5	8013	0.205
10:00 - 11:00	5	8013	0.115	5	8013	0.050	5	8013	0.165
11:00 - 12:00	5	8013	0.057	5	8013	0.060	5	8013	0.117
12:00 - 13:00	5	8013	0.115	5	8013	0.145	5	8013	0.260
13:00 - 14:00	5	8013	0.082	5	8013	0.162	5	8013	0.244
14:00 - 15:00	5	8013	0.070	5	8013	0.072	5	8013	0.142
15:00 - 16:00	5	8013	0.040	5	8013	0.137	5	8013	0.177
16:00 - 17:00	5	8013	0.022	5	8013	0.217	5	8013	0.239
17:00 - 18:00	5	8013	0.047	5	8013	0.105	5	8013	0.152
18:00 - 19:00	5	8013	0.087	5	8013	0.105	5	8013	0.192
19:00 - 20:00	3	11683	0.006	3	11683	0.029	3	11683	0.035
20:00 - 21:00	3	11683	0.003	3	11683	0.049	3	11683	0.052
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.463			1.435			2.898

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

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

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Parameter summary

Trip rate parameter range selected:	1500 - 17834 (units: sqm)
Survey date date range:	01/01/16 - 08/11/24
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.004	2	13525	0.000	2	13525	0.004
06:00 - 07:00	2	13525	0.004	2	13525	0.007	2	13525	0.011
07:00 - 08:00	5	8013	0.027	5	8013	0.015	5	8013	0.042
08:00 - 09:00	5	8013	0.022	5	8013	0.020	5	8013	0.042
09:00 - 10:00	5	8013	0.025	5	8013	0.027	5	8013	0.052
10:00 - 11:00	5	8013	0.007	5	8013	0.007	5	8013	0.014
11:00 - 12:00	5	8013	0.017	5	8013	0.017	5	8013	0.034
12:00 - 13:00	5	8013	0.050	5	8013	0.050	5	8013	0.100
13:00 - 14:00	5	8013	0.027	5	8013	0.025	5	8013	0.052
14:00 - 15:00	5	8013	0.007	5	8013	0.010	5	8013	0.017
15:00 - 16:00	5	8013	0.012	5	8013	0.017	5	8013	0.029
16:00 - 17:00	5	8013	0.005	5	8013	0.012	5	8013	0.017
17:00 - 18:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
18:00 - 19:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
19:00 - 20:00	3	11683	0.003	3	11683	0.000	3	11683	0.003
20:00 - 21:00	3	11683	0.000	3	11683	0.003	3	11683	0.003
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.210			0.210			0.420

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.000	2	13525	0.000	2	13525	0.000
06:00 - 07:00	2	13525	0.022	2	13525	0.004	2	13525	0.026
07:00 - 08:00	5	8013	0.005	5	8013	0.002	5	8013	0.007
08:00 - 09:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
09:00 - 10:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
10:00 - 11:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
11:00 - 12:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
12:00 - 13:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
13:00 - 14:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
14:00 - 15:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
15:00 - 16:00	5	8013	0.000	5	8013	0.005	5	8013	0.005
16:00 - 17:00	5	8013	0.000	5	8013	0.002	5	8013	0.002
17:00 - 18:00	5	8013	0.000	5	8013	0.005	5	8013	0.005
18:00 - 19:00	5	8013	0.017	5	8013	0.002	5	8013	0.019
19:00 - 20:00	3	11683	0.000	3	11683	0.006	3	11683	0.006
20:00 - 21:00	3	11683	0.000	3	11683	0.000	3	11683	0.000
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.044			0.026			0.070

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.074	2	13525	0.007	2	13525	0.081
06:00 - 07:00	2	13525	0.288	2	13525	0.174	2	13525	0.462
07:00 - 08:00	5	8013	0.225	5	8013	0.050	5	8013	0.275
08:00 - 09:00	5	8013	0.207	5	8013	0.040	5	8013	0.247
09:00 - 10:00	5	8013	0.190	5	8013	0.095	5	8013	0.285
10:00 - 11:00	5	8013	0.197	5	8013	0.052	5	8013	0.249
11:00 - 12:00	5	8013	0.095	5	8013	0.077	5	8013	0.172
12:00 - 13:00	5	8013	0.190	5	8013	0.230	5	8013	0.420
13:00 - 14:00	5	8013	0.125	5	8013	0.265	5	8013	0.390
14:00 - 15:00	5	8013	0.117	5	8013	0.110	5	8013	0.227
15:00 - 16:00	5	8013	0.060	5	8013	0.200	5	8013	0.260
16:00 - 17:00	5	8013	0.032	5	8013	0.277	5	8013	0.309
17:00 - 18:00	5	8013	0.072	5	8013	0.127	5	8013	0.199
18:00 - 19:00	5	8013	0.130	5	8013	0.162	5	8013	0.292
19:00 - 20:00	3	11683	0.009	3	11683	0.046	3	11683	0.055
20:00 - 21:00	3	11683	0.003	3	11683	0.083	3	11683	0.086
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.014			1.995			4.009

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.000	2	13525	0.000	2	13525	0.000
06:00 - 07:00	2	13525	0.000	2	13525	0.000	2	13525	0.000
07:00 - 08:00	5	8013	0.017	5	8013	0.000	5	8013	0.017
08:00 - 09:00	5	8013	0.005	5	8013	0.000	5	8013	0.005
09:00 - 10:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
10:00 - 11:00	5	8013	0.002	5	8013	0.002	5	8013	0.004
11:00 - 12:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
12:00 - 13:00	5	8013	0.005	5	8013	0.007	5	8013	0.012
13:00 - 14:00	5	8013	0.000	5	8013	0.002	5	8013	0.002
14:00 - 15:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
15:00 - 16:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
16:00 - 17:00	5	8013	0.000	5	8013	0.012	5	8013	0.012
17:00 - 18:00	5	8013	0.000	5	8013	0.010	5	8013	0.010
18:00 - 19:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
19:00 - 20:00	3	11683	0.000	3	11683	0.000	3	11683	0.000
20:00 - 21:00	3	11683	0.000	3	11683	0.000	3	11683	0.000
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.029			0.033			0.062

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.004	2	13525	0.000	2	13525	0.004
06:00 - 07:00	2	13525	0.089	2	13525	0.078	2	13525	0.167
07:00 - 08:00	5	8013	0.020	5	8013	0.005	5	8013	0.025
08:00 - 09:00	5	8013	0.035	5	8013	0.000	5	8013	0.035
09:00 - 10:00	5	8013	0.077	5	8013	0.002	5	8013	0.079
10:00 - 11:00	5	8013	0.100	5	8013	0.087	5	8013	0.187
11:00 - 12:00	5	8013	0.140	5	8013	0.015	5	8013	0.155
12:00 - 13:00	5	8013	0.112	5	8013	0.102	5	8013	0.214
13:00 - 14:00	5	8013	0.075	5	8013	0.070	5	8013	0.145
14:00 - 15:00	5	8013	0.012	5	8013	0.167	5	8013	0.179
15:00 - 16:00	5	8013	0.170	5	8013	0.062	5	8013	0.232
16:00 - 17:00	5	8013	0.017	5	8013	0.107	5	8013	0.124
17:00 - 18:00	5	8013	0.167	5	8013	0.130	5	8013	0.297
18:00 - 19:00	5	8013	0.170	5	8013	0.097	5	8013	0.267
19:00 - 20:00	3	11683	0.060	3	11683	0.143	3	11683	0.203
20:00 - 21:00	3	11683	0.009	3	11683	0.203	3	11683	0.212
21:00 - 22:00	1	8000	0.013	1	8000	0.000	1	8000	0.013
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.270			1.268			2.538

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.32

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.078	2	13525	0.007	2	13525	0.085
06:00 - 07:00	2	13525	0.399	2	13525	0.255	2	13525	0.654
07:00 - 08:00	5	8013	0.267	5	8013	0.057	5	8013	0.324
08:00 - 09:00	5	8013	0.247	5	8013	0.040	5	8013	0.287
09:00 - 10:00	5	8013	0.267	5	8013	0.097	5	8013	0.364
10:00 - 11:00	5	8013	0.300	5	8013	0.142	5	8013	0.442
11:00 - 12:00	5	8013	0.235	5	8013	0.092	5	8013	0.327
12:00 - 13:00	5	8013	0.307	5	8013	0.339	5	8013	0.646
13:00 - 14:00	5	8013	0.200	5	8013	0.337	5	8013	0.537
14:00 - 15:00	5	8013	0.130	5	8013	0.277	5	8013	0.407
15:00 - 16:00	5	8013	0.230	5	8013	0.267	5	8013	0.497
16:00 - 17:00	5	8013	0.050	5	8013	0.399	5	8013	0.449
17:00 - 18:00	5	8013	0.240	5	8013	0.272	5	8013	0.512
18:00 - 19:00	5	8013	0.317	5	8013	0.262	5	8013	0.579
19:00 - 20:00	3	11683	0.068	3	11683	0.194	3	11683	0.262
20:00 - 21:00	3	11683	0.011	3	11683	0.285	3	11683	0.296
21:00 - 22:00	1	8000	0.013	1	8000	0.000	1	8000	0.013
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.359			3.322			6.681

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	13525	0.004	2	13525	0.000	2	13525	0.004
06:00 - 07:00	2	13525	0.011	2	13525	0.011	2	13525	0.022
07:00 - 08:00	5	8013	0.010	5	8013	0.005	5	8013	0.015
08:00 - 09:00	5	8013	0.030	5	8013	0.010	5	8013	0.040
09:00 - 10:00	5	8013	0.030	5	8013	0.025	5	8013	0.055
10:00 - 11:00	5	8013	0.030	5	8013	0.025	5	8013	0.055
11:00 - 12:00	5	8013	0.010	5	8013	0.012	5	8013	0.022
12:00 - 13:00	5	8013	0.015	5	8013	0.015	5	8013	0.030
13:00 - 14:00	5	8013	0.015	5	8013	0.022	5	8013	0.037
14:00 - 15:00	5	8013	0.017	5	8013	0.020	5	8013	0.037
15:00 - 16:00	5	8013	0.007	5	8013	0.007	5	8013	0.014
16:00 - 17:00	5	8013	0.005	5	8013	0.020	5	8013	0.025
17:00 - 18:00	5	8013	0.000	5	8013	0.000	5	8013	0.000
18:00 - 19:00	5	8013	0.007	5	8013	0.010	5	8013	0.017
19:00 - 20:00	3	11683	0.000	3	11683	0.000	3	11683	0.000
20:00 - 21:00	3	11683	0.003	3	11683	0.003	3	11683	0.006
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.194			0.185			0.379

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

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

Appendix H – Mode Share Models for Each Scenario

Opening Year

Public transport
Active travel
Traffic and parking management
Placemaking and land use planning

Internal trips and mode shares Trips made within each allocation site

| Site | Scale | Unit | Theme rating | | | | Mode | BAU Two-Way Trip Rates | | | | | | BAU Mode Share | | | | | | BAU Internal Trip Generation | | | | | | BAU CO2e emissions - Tonnes (2040 fleet mix assumptions) | | | | Vision-led Mode Share | | | | | | Vision-led Trip Rates | | | | | | Vision-led Internal Trip Generation | | | | | | Vision-led CO2e emissions - Tonnes | | | | Mode | Difference in trips between BAU and vision-led scenarios | | | CO2e savings between BAU and ambitious scenarios - Tonnes | | | |
|---|---|---

Interim Year

Public transport
Active travel
Traffic and parking management
Placemaking and land use planning

Internal trips and mode shares Trips made within each allocation site

| Site | Scale | Unit | Theme rating | | | | Mode | BAU Two-Way Trip Rates | | | | | | BAU Mode Share | | | | | | BAU Internal Trip Generation | | | | | | BAU CO2e emissions - Tonnes (2040 fleet mix assumptions) | | | | Vision-led Mode Share | | | | | | Vision-led Trip Rates | | | | | | Vision-led Internal Trip Generation | | | | | | Vision-led CO2e emissions - Tonnes | | | | Mode | Difference in trips between BAU and vision-led scenarios | | | CO2e savings between BAU and ambitious scenarios - Tonnes | | | |
|---|---|---

Full Build-Out With School

Public transport
Active travel
Traffic and parking management
Placemaking and land use planning

Internal trips and mode shares Trips made within each allocation site

| Site | Scale | Unit | Theme rating | | | | Mode | BAU Two-Way Trip Rates | | | | | | BAU Mode Share | | | | | | BAU Internal Trip Generation | | | | | | BAU CO2e emissions - Tonnes (2040 fleet mix assumptions) | | | | Vision-led Mode Share | | | | | | Vision-led Trip Rates | | | | | | Vision-led Internal Trip Generation | | | | | | Vision-led CO2e emissions - Tonnes | | | | Mode | Difference in trips between BAU and vision-led scenarios | | | CO2e savings between BAU and ambitious scenarios - Tonnes | | | |
|---|---|---

Full Build-Out No School

Public transport
Active travel
Traffic and parking management
Placemaking and land use planning

Internal trips and mode shares Trips made within each allocation site

| Site | Scale | Unit | Theme rating | | | | Mode | BAU Two-Way Trip Rates | | | | | | BAU Mode Share | | | | | | BAU Internal Trip Generation | | | | | | BAU CO2e emissions - Tonnes (2040 fleet mix assumptions) | | | | Vision-led Mode Share | | | | | | Vision-led Trip Rates | | | | | | Vision-led Internal Trip Generation | | | | | | Vision-led CO2e emissions - Tonnes | | | | Mode | Difference in trips between BAU and vision-led scenarios | | | CO2e savings between BAU and ambitious scenarios - Tonnes | | | |
|---|---|---

Full Build-Out Option 3 School

Public transport
Active travel
Traffic and parking management
Placemaking and land use planning

Internal trips and mode shares Trips made within each allocation site

| Site | Scale | Unit | Theme rating | | | | Mode | BAU Two-Way Trip Rates | | | | | | BAU Mode Share | | | | | | BAU Internal Trip Generation | | | | | | BAU CO2e emissions - Tonnes (2040 fleet mix assumptions) | | | | Vision-led Mode Share | | | | | | Vision-led Trip Rates | | | | | | Vision-led Internal Trip Generation | | | | | | Vision-led CO2e emissions - Tonnes | | | | Mode | Difference in trips between BAU and vision-led scenarios | | | CO2e savings between BAU and ambitious scenarios - Tonnes | | | |
|---|---|---

Appendix I – SEND and Secondary School Trip Generation

A - Felden Lodge, Hemel Hempstead

Table 5.2 Existing Traffic Generation & Trip Rates – Donor Sites

	Lakeside School (83 no. persons)			Abbeywood School (89 no. persons)		
Time Range	Arrive	Depart	Two-way	Arrive	Depart	Two-way
Traffic Movements						
Network / School AM Peak Period (08:00 – 09:00)	39	15	54	29	9	38
School PM Peak Period (15:00 – 16:00)	3	27	30	4	13	17
Network PM Peak (17:00 –18:00)	2	20	22	1	12	13
Person Trip Rates						
Network / School AM Peak Period (08:00 – 09:00)	0.470	0.181	0.651	0.326	0.101	0.427
School PM Peak Period (15:00 – 16:00)	0.036	0.325	0.361	0.045	0.146	0.191
Network PM Peak (17:00 –18:00)	0.024	0.241	0.265	0.011	0.135	0.146

Table 5.3 Average Donor Person Trip Rates

	Average Person Trip Rates (Lakeside
Time Range	Arrive	Depart	Two-way
Network / School AM Peak Period (08:00 –09:00)	0.398	0.141	0.539
School PM Peak Period (15:00 – 16:00)	0.041	0.236	0.276
Network PM Peak (17:00 – 18:00)	0.018	0.188	0.206

Proposed trip gen (OptA)

	Trip Generation		
Time Range	Arrive	Depart	Two-way
Network / School AM Peak Period (08:00 –09:00)	80	28	108
School PM Peak Period (15:00 – 16:00)	8	47	55
Network PM Peak (17:00 – 18:00)	4	38	41
Total	91	113	204

Vision-led & BAU	AM Peak		PM Peak		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Internal trips	0	0	0	0	0	0
Trips to Baldock and Letchworth	48	17	2	23	55	68
Residual trips	32	11	1	15	37	45
Total external trips	80	28	4	38	91	113
Total trips	80	28	4	38	91	113

Future Pupil Trips and Mode Share

Route	Trips by mode by route				
	Walk	Cycle	Car	Bus	Total
Footbridge, or bus link, or Royston Road / link	10	8	91	57	166
North Road	314	48	48	67	476
Footbridge, or bus link, or North Road access	241	36	36	51	365
Wallington Road and Yeomanry Drive	229	35	35	49	347
High Street	195	30	30	41	296
Pembroke Road or South Road	78	12	12	17	118
South Road and Crabtree Lane or London Roa	78	12	12	17	118
London Road or Baldock Lane	214	32	32	45	325
Clothall Road or South Road and High Street	39	6	6	8	59
Royston Road	4	3	32	20	59
A507 South	1	0	5	3	10
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	1403	222	340	375	2340

Vehicle Trips

Vision-led & BAU	AM Peak		PM Peak		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Internal trips	0	0	0	0	0	0
Trips to Baldock and Letchworth	204	204	0	0	408	408
Residual trips	136	136	0	0	272	272
Total external trips	340	340	0	0	679	679
Total trips	340	340	0	0	679	679

Public Transport

Vision-led & BAU	AM Peak		PM Peak		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Internal trips	0	0	0	0	0	0
Trips to Baldock and Letchworth	225	225	0	0	449	449
Residual trips	150	150	0	0	300	300
Total external trips	375	375	0	0	749	749
Total trips	375	375	0	0	749	749

Active Travel

Vision-led & BAU	AM Peak		PM Peak		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Internal trips	0	0	0	0	0	0
Trips to Baldock and Letchworth	975	975	0	0	1951	1951
Residual trips	650	650	0	0	1301	1301
Total external trips	1626	1626	0	0	3251	3251
Total trips	1626	1626	0	0	3251	3251

Future Staff Trips and Mode Share

Route		Trips by mode by route				
		Walk	Cycle	Car	Bus	Total
A	Ashwell Road via Station Road	1	0	5	0	7
A1	Bygrave Road via Station Road	1	0	5	0	7
A2	Bridge / Icknield Way East / Icknield Way	6	1	0	0	7
B	Wallington Road via South Road	1	0	5	0	7
C	Norton Road	3	0	12	0	16
D	Via Mansfield Road and High Street	1	0	5	0	7
E	Weston Way	8	1	29	1	39
F	Via Mansfield Road and High Street	1	0	5	0	7
G	Via Pepper Alley	5	0	0	0	5
H	Via Mansfield Road	1	0	4	0	5
I	North Road	7	1	28	1	37
J	Letchworth Road	8	1	30	1	39
K	A505 via Royston Road	4	1	15	0	20
L	A507 South	1	0	3	0	4
		48	7	146	4	205

Vehicle Trips

Vision-led & BAU	AM Peak	PM Peak			Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Internal trips	0	0	0	0	0	0
Trips to Baldock and Letchworth	88	0	0	88	175	175
Residual trips	58	0	0	58	117	117
Total external trips	146	0	0	146	292	292
Total trips	146	0	0	146	292	292

Public Transport

Vision-led & BAU	AM Peak	PM Peak			Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Internal trips	0	0	0	0	0	0
Trips to Baldock and Letchworth	2	0	0	2	4	4
Residual trips	1	0	0	1	3	3
Total external trips	4	0	0	4	7	7
Total trips	4	0	0	4	7	7

Active Travel

Vision-led & BAU	AM Peak	PM Peak			Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Internal trips	0	0	0	0	0	0
Trips to Baldock and Letchworth	33	0	0	33	66	66
Residual trips	22	0	0	22	44	44
Total external trips	55	0	0	55	110	110
Total trips	55	0	0	55	110	110

Future Staff and Pupil Trips

Vehicle Trips

Vision-led & BAU	AM Peak		PM Peak		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Internal trips	0	0	0	0	0	0
Trips to Baldock and Letchworth	291	204	0	88	583	583
Residual trips	194	136	0	58	389	389
Total external trips	486	340	0	146	972	972
Total trips	486	340	0	146	972	972

Public Transport

Vision-led & BAU	AM Peak		PM Peak		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Internal trips	0	0	0	0	0	0
Trips to Baldock and Letchworth	227	225	0	2	454	454
Residual trips	151	150	0	1	303	303
Total external trips	378	375	0	4	756	756
Total trips	378	375	0	4	756	756

Active Travel

Vision-led & BAU	AM Peak		PM Peak		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Internal trips	0	0	0	0	0	0
Trips to Baldock and Letchworth	1008	975	0	33	2017	2017
Residual trips	672	650	0	22	1345	1345
Total external trips	1681	1626	0	55	3361	3361
Total trips	1681	1626	0	55	3361	3361

by Haskoning

Appendix J – Mode Shift Model Full Trip Generation Outputs

Opening Year

Business as Usual

Internal trips

Site	Scale	Mode	AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	25	Vehicles	0	0	0	0	2	2
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	2	2
BA2	200	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
Whole site		Vehicles	0	0	0	0	2	2
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	2	2
BA10	0	HGVs	0	0	0	0	0	0

Trips to Baldock and Letchworth

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	25	Vehicles	2	5	4	2	25	25
		Public transport	0	0	0	0	1	1
		Active travel	0	1	1	0	5	5
BA2	200	Vehicles	15	40	36	16	228	229
		Public transport	0	4	0	0	13	13
		Active travel	4	11	5	4	46	47
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
Whole site		Vehicles	17	45	40	18	253	254
		Public transport	0	4	0	0	14	14
		Active travel	4	12	5	4	51	52
BA10	0	HGVs	0	0	0	0	0	0

Residual trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	25	Vehicles	1	3	3	1	19	19
		Public transport	0	0	0	0	1	1
		Active travel	0	1	0	0	4	4
BA2	200	Vehicles	10	27	24	11	152	152
		Public transport	0	2	0	0	8	8
		Active travel	2	7	3	2	31	31
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
Whole site		Vehicles	11	30	27	12	171	172
		Public transport	0	3	0	0	9	9
		Active travel	3	8	4	3	34	35
BA10	0	HGVs	0	0	0	0	0	0

Total external trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	25	Vehicles	3	8	7	3	44	44
		Public transport	0	1	0	0	2	2
		Active travel	1	2	1	1	9	9
BA2	200	Vehicles	25	67	60	27	380	381
		Public transport	1	6	1	1	21	21
		Active travel	6	18	8	6	76	78
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
Whole site		Vehicles	29	75	67	31	424	425
		Public transport	1	7	1	1	23	23
		Active travel	7	21	9	7	85	87
BA10	0	HGVs	0	0	0	0	0	0

Total trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	25	Vehicles	3	8	7	3	46	46
		Public transport	0	1	0	0	2	2
		Active travel	1	2	1	1	11	11
BA2	200	Vehicles	25	67	60	27	380	381
		Public transport	1	6	1	1	21	21
		Active travel	6	18	8	6	76	78
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
Whole site		Vehicles	29	75	67	31	426	427
		Public transport	1	7	1	1	23	23
		Active travel	7	21	10	7	87	89
			0	0	0	0	0	0
BA10	0	HGVs	0	0	0	0	0	0

Vision-led

Internal trips

Site	Mode	AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	0	0	0	0	2	2
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	2	2
BA2	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
Whole site	Vehicles	0	0	0	0	2	2
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	2	2
BA10	HGVs	0	0	0	0	0	0

Trips to Baldock and Letchworth

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	2	4	3	2	22	22
	Public transport	0	1	0	0	2	2
	Active travel	1	2	1	1	7	7
BA2	Vehicles	15	38	35	16	220	221
	Public transport	0	4	2	0	13	13
	Active travel	4	13	6	4	54	55
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
Whole site	Vehicles	16	43	38	18	242	243
	Public transport	0	4	2	0	15	15
	Active travel	5	14	7	5	60	62
BA10	HGVs	0	0	0	0	0	0

Residual trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	1	3	3	1	19	19
	Public transport	0	0	0	0	1	1
	Active travel	0	1	0	0	4	4
BA2	Vehicles	10	27	24	11	152	152
	Public transport	0	2	1	0	8	8
	Active travel	2	7	3	2	31	31
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
Whole site	Vehicles	11	30	27	12	171	172
	Public transport	0	3	2	0	9	9
	Active travel	3	8	4	3	34	35
BA10	HGVs	0	0	0	0	0	0

Total external trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	3	8	6	3	41	41
	Public transport	0	1	0	0	3	3
	Active travel	1	3	1	1	11	11
BA2	Vehicles	25	65	59	27	372	373
	Public transport	1	6	4	1	21	21
	Active travel	6	20	9	7	84	86
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
Whole site	Vehicles	28	73	65	30	414	415
	Public transport	1	7	4	1	24	24
	Active travel	7	23	11	7	95	97
BA10	HGVs	0	0	0	0	0	0

Total trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	3	8	7	3	44	44
	Public transport	0	1	1	0	3	3
	Active travel	1	3	2	1	13	13
BA2	Vehicles	25	65	59	27	372	373
	Public transport	1	6	4	1	21	21
	Active travel	6	20	9	7	84	86
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
Whole site	Vehicles	28	73	66	30	416	417
	Public transport	1	7	4	1	24	24
	Active travel	7	23	11	8	97	99
BA10	HGVs	0	0	0	0	0	0

Interim Year

Business as Usual

Internal trips

Site	Scale	Mode	AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	650	Vehicles	18	52	24	11	170	171
		Public transport	0	1	1	0	4	4
		Active travel	20	57	26	12	188	189
BA2	200	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	36650.2	Vehicles	7	2	5	13	113	113
		Public transport	1	0	4	3	27	27
		Active travel	1	1	1	3	23	23
Whole site		Vehicles	25	54	28	24	283	284
		Public transport	1	1	5	3	30	31
		Active travel	21	58	28	16	211	212
BA10	36650.2	HGVs	0	0	0	0	2	2

Trips to Baldock and Letchworth

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	650	Vehicles	19	50	75	34	453	454
		Public transport	0	5	1	1	25	25
		Active travel	4	14	10	8	91	93
BA2	200	Vehicles	15	40	36	16	228	229
		Public transport	0	4	0	0	13	13
		Active travel	4	11	5	4	46	47
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	36650.2	Vehicles	126	40	27	77	810	813
		Public transport	12	2	24	19	192	195
		Active travel	19	9	8	19	165	166
Whole site		Vehicles	161	130	138	128	1491	1496
		Public transport	13	10	25	20	229	232
		Active travel	27	34	24	30	302	305
BA10	36650.2	HGVs	2	2	2	2	2	2

Residual trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	650	Vehicles	33	87	78	36	494	496
		Public transport	1	8	1	1	27	27
		Active travel	8	24	11	8	99	101
BA2	200	Vehicles	10	27	24	11	152	152
		Public transport	0	2	0	0	8	8
		Active travel	2	7	3	2	31	31
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	36650.2	Vehicles	89	28	21	60	615	618
		Public transport	9	1	19	15	146	148
		Active travel	14	7	7	14	126	126
Whole site		Vehicles	133	142	123	107	1261	1266
		Public transport	10	12	19	16	181	184
		Active travel	24	38	21	25	255	258
BA10	36650.2	HGVs	2	1	0	1	10	10

Total external trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	650	Vehicles	52	137	153	70	948	950
		Public transport	1	12	1	1	52	52
		Active travel	12	38	21	16	190	194
BA2	200	Vehicles	25	67	60	27	380	381
		Public transport	1	6	1	1	21	21
		Active travel	6	18	8	6	76	78
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	36650.2	Vehicles	216	68	48	138	1425	1431
		Public transport	21	3	42	34	338	343
		Active travel	33	16	15	33	291	291
Whole site		Vehicles	293	271	261	235	2753	2762
		Public transport	23	22	44	36	411	416
		Active travel	51	72	44	55	557	564
BA10	36650.2	HGVs	4	3	2	3	12	12

Total trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	200	Vehicles	70	188	176	81	1118	1121
		Public transport	2	14	2	2	56	56
		Active travel	32	95	47	28	378	383
BA2	200	Vehicles	25	67	60	27	380	381
		Public transport	1	6	1	1	21	21
		Active travel	6	18	8	6	76	78
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	36650.2	Vehicles	223	70	53	151	1538	1544
		Public transport	22	3	46	37	364	370
		Active travel	34	17	16	36	314	315
Whole site		Vehicles	319	326	289	260	3036	3046
		Public transport	24	23	49	39	441	447
		Active travel	72	130	72	71	768	776
			0	0	0	0	0	0
BA10	36650.2	HGVs	4	3	2	3	14	14

Vision-led

Internal trips

Site	Mode	AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	13	36	16	8	118	119
	Public transport	2	5	2	1	15	16
	Active travel	24	69	32	15	228	230
BA2	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	6	2	3	11	96	96
	Public transport	1	1	1	3	24	24
	Active travel	2	0	5	5	43	43
Whole site	Vehicles	19	38	20	19	214	215
	Public transport	3	5	4	4	40	40
	Active travel	26	70	37	20	271	273
BA10	HGVs	0	0	0	0	2	2

Trips to Baldock and Letchworth

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	17	43	66	30	397	398
	Public transport	1	7	8	2	47	47
	Active travel	6	18	15	10	126	128
BA2	Vehicles	13	34	31	14	196	196
	Public transport	1	6	4	1	24	24
	Active travel	5	15	8	5	67	68
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	112	35	21	66	696	698
	Public transport	20	10	9	19	172	173
	Active travel	26	6	30	30	299	303
Whole site	Vehicles	141	111	118	111	1288	1292
	Public transport	22	23	20	23	242	243
	Active travel	37	40	53	45	492	499
BA10	HGVs	2	2	2	2	2	2

Residual trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	33	87	78	36	494	496
	Public transport	1	8	5	1	27	27
	Active travel	8	24	11	8	99	101
BA2	Vehicles	10	25	23	11	145	145
	Public transport	0	3	2	0	10	10
	Active travel	3	8	4	3	36	36
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	89	28	21	60	615	618
	Public transport	14	7	7	14	126	126
	Active travel	9	1	19	15	146	148
Whole site	Vehicles	132	140	122	107	1254	1258
	Public transport	15	17	13	16	163	163
	Active travel	19	34	33	26	280	286
BA10	HGVs	2	1	0	1	10	10

Total external trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	50	129	144	66	891	893
	Public transport	2	15	12	3	74	74
	Active travel	14	42	26	18	225	229
BA2	Vehicles	23	59	54	25	341	341
	Public transport	1	9	5	1	34	34
	Active travel	8	24	12	8	103	105
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	201	63	42	126	1311	1316
	Public transport	33	16	15	34	298	298
	Active travel	35	8	48	45	445	451
Whole site	Vehicles	273	252	240	217	2542	2550
	Public transport	37	40	33	38	406	406
	Active travel	56	73	87	71	772	785
BA10	HGVs	4	3	2	3	12	12

Total trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	62	165	160	74	1009	1012
	Public transport	4	20	14	4	89	89
	Active travel	38	112	58	34	453	459
BA2	Vehicles	23	59	54	25	341	341
	Public transport	1	9	5	1	34	34
	Active travel	8	24	12	8	103	105
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	207	65	45	137	1406	1412
	Public transport	35	17	17	37	322	322
	Active travel	37	8	54	50	488	495
Whole site	Vehicles	292	290	260	236	2756	2765
	Public transport	40	46	37	42	445	446
	Active travel	82	143	123	91	1044	1058
BA10	HGVs	4	3	2	3	14	14

Full Build-Out No School

Business as Usual

Internal trips

Site	Scale	Mode	AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	92	262	186	89	1204	1211
		Public transport	2	6	4	2	26	26
		Active travel	101	290	205	98	1332	1340
BA2	200	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA3	248	Vehicles	1	4	5	2	25	25
		Public transport	0	0	0	0	1	1
		Active travel	2	4	5	3	27	28
BA10	100000	Vehicles	27	8	17	47	410	412
		Public transport	3	0	15	12	97	99
		Active travel	4	2	5	11	84	84
Whole site		Vehicles	120	274	207	139	1640	1648
		Public transport	5	6	19	14	123	125
		Active travel	107	296	216	112	1444	1451

BA10	100000	HGVs	1	1	0	0	16	16

Trips to Baldock and Letchworth

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	55	143	164	75	1096	1099
		Public transport	1	13	2	2	60	60
		Active travel	13	40	23	17	220	225
BA2	200	Vehicles	15	40	36	16	228	229
		Public transport	0	4	0	0	13	13
		Active travel	4	11	5	4	46	47
BA3	248	Vehicles	64	61	38	39	296	309
		Public transport	0	4	0	0	13	13
		Active travel	4	12	5	4	48	49
BA10	100000	Vehicles	338	107	70	199	2107	2116
		Public transport	33	5	61	49	499	507
		Active travel	51	25	22	48	430	431
Whole site		Vehicles	473	351	308	330	3727	3753
		Public transport	35	26	63	51	585	594
		Active travel	71	88	54	72	744	752

BA10	100000	HGVs	8	8	0	0	82	82

Residual trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	140	367	329	151	2091	2097
		Public transport	3	33	3	3	115	115
		Active travel	32	101	45	34	420	429
BA2	200	Vehicles	10	27	24	11	152	152
		Public transport	0	2	0	0	8	8
		Active travel	2	7	3	2	31	31
BA3	248	Vehicles	44	44	31	29	225	234
		Public transport	0	3	0	0	10	10
		Active travel	3	9	4	3	38	39
BA10	100000	Vehicles	243	77	58	165	1678	1685
		Public transport	24	4	51	41	398	404
		Active travel	37	18	18	39	343	343
Whole site		Vehicles	438	515	442	355	4147	4169
		Public transport	27	43	54	44	531	538
		Active travel	75	136	71	79	830	842

BA10	100000	HGVs	6	0	0	0	65	66

Total external trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	195	511	493	226	3188	3196
		Public transport	4	47	5	5	175	175
		Active travel	45	141	68	51	639	653
BA2	200	Vehicles	25	67	60	27	380	381
		Public transport	1	6	1	1	21	21
		Active travel	6	18	8	6	76	78
BA3	248	Vehicles	109	105	69	68	521	543
		Public transport	1	7	1	1	24	24
		Active travel	7	21	9	7	86	88
BA10	100000	Vehicles	582	184	128	364	3785	3801
		Public transport	57	9	112	90	897	912
		Active travel	88	43	39	87	773	774
Whole site		Vehicles	911	866	750	685	7874	7921
		Public transport	63	68	118	96	1117	1131
		Active travel	146	224	124	152	1575	1594

BA10	100000	HGVs	14	8	0	0	147	148

Total trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	286	773	679	315	4392	4406
		Public transport	6	52	8	6	201	201
		Active travel	146	431	273	149	1972	1993
BA2	200	Vehicles	25	67	60	27	380	381
		Public transport	1	6	1	1	21	21
		Active travel	6	18	8	6	76	78
BA3	248	Vehicles	110	109	74	70	546	568
		Public transport	1	7	1	1	24	24
		Active travel	8	26	14	9	114	116
BA10	100000	Vehicles	609	192	144	412	4195	4213
		Public transport	60	9	126	102	994	1010
		Active travel	92	45	45	99	857	858
Whole site		Vehicles	1031	1141	957	824	9513	9569
		Public transport	67	74	136	109	1240	1257
		Active travel	253	520	340	264	3018	3045

BA10	100000	HGVs	15	9	0	0	163	164

Vision-led

Internal trips

Site	Mode	AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	22	63	45	21	291	292
	Public transport	12	35	25	12	159	160
	Active travel	161	459	326	156	2113	2124
BA2	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA3	Vehicles	1	3	4	2	19	19
	Public transport	0	0	0	0	1	1
	Active travel	2	5	6	3	33	34
BA10	Vehicles	24	8	10	39	346	347
	Public transport	6	3	7	15	114	114
	Active travel	4	1	20	16	132	134
Whole site	Vehicles	48	74	58	62	655	658
	Public transport	18	37	32	27	273	275
	Active travel	166	465	352	175	2278	2292

BA10	HGVs	1	1	0	0	16	16

Trips to Baldock and Letchworth

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	36	87	113	50	728	727
	Public transport	4	25	20	6	133	134
	Active travel	28	84	62	38	515	523
BA2	Vehicles	13	31	30	14	187	188
	Public transport	2	10	7	2	42	42
	Active travel	4	14	6	5	57	59
BA3	Vehicles	62	53	34	37	263	276
	Public transport	1	8	5	1	30	30
	Active travel	5	16	7	5	64	65
BA10	Vehicles	226	70	14	110	1206	1208
	Public transport	83	38	34	73	675	677
	Active travel	114	30	105	113	1155	1169
Whole site	Vehicles	289	224	190	188	2329	2332
	Public transport	91	80	65	83	881	883
	Active travel	152	143	179	161	1792	1815

BA10	HGVs	8	8	0	0	82	82

Residual trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	140	367	329	151	2091	2097
	Public transport	3	33	19	3	115	115
	Active travel	32	101	45	34	420	429
BA2	Vehicles	10	25	23	11	145	145
	Public transport	0	3	2	0	10	10
	Active travel	3	8	4	3	36	36
BA3	Vehicles	44	44	31	29	225	234
	Public transport	0	3	2	0	10	10
	Active travel	3	9	4	3	38	39
BA10	Vehicles	243	77	58	165	1678	1685
	Public transport	37	18	18	39	343	343
	Active travel	24	4	51	41	398	404
Whole site	Vehicles	406	503	440	340	4103	4116
	Public transport	41	58	40	43	479	479
	Active travel	62	123	104	81	891	908

BA10	HGVs	6	6	0	0	65	66

Total external trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	176	455	443	201	2819	2824
	Public transport	7	58	39	9	249	249
	Active travel	60	186	107	72	935	952
BA2	Vehicles	22	57	53	24	332	333
	Public transport	3	12	8	3	52	52
	Active travel	7	22	10	7	93	95
BA3	Vehicles	107	97	65	66	488	511
	Public transport	2	11	6	2	41	41
	Active travel	8	25	11	8	102	104
BA10	Vehicles	469	146	72	274	2884	2894
	Public transport	120	56	52	113	1018	1021
	Active travel	138	33	155	154	1553	1573
Whole site	Vehicles	695	727	630	528	6432	6448
	Public transport	131	138	106	126	1359	1362
	Active travel	214	266	283	241	2682	2723

BA10	HGVs	14	14	0	0	147	148

Total trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	198	518	487	223	3110	3116
	Public transport	19	93	64	20	408	409
	Active travel	221	645	433	228	3048	3076
BA2	Vehicles	22	57	53	24	332	333
	Public transport	3	12	8	3	52	52
	Active travel	7	22	10	7	93	95
BA3	Vehicles	108	100	69	67	507	530
	Public transport	2	11	6	2	41	41
	Active travel	10	30	17	11	135	137
BA10	Vehicles	493	154	82	314	3230	3241
	Public transport	125	59	59	128	1132	1134
	Active travel	142	34	175	170	1684	1707
Whole site	Vehicles	742	801	688	590	7088	7106
	Public transport	149	175	137	153	1633	1637
	Active travel	380	731	635	416	4960	5015

BA10	HGVs	15	14	0	0	163	164

Full Build-Out With School

Business as Usual

Internal trips

Site	Scale	Mode	AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	92	262	186	89	1204	1211
		Public transport	2	6	4	2	26	26
		Active travel	101	290	205	98	1332	1340
BA2	200	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA3	0	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	100000	Vehicles	27	8	17	47	410	412
		Public transport	3	0	15	12	97	99
		Active travel	4	2	5	11	84	84
Whole site		Vehicles	118	270	202	136	1615	1623
		Public transport	5	6	19	14	123	125
		Active travel	105	292	211	110	1416	1424
BA10	100000	HGVs	1	1	0	0	16	16

Trips to Baldock and Letchworth

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	55	143	164	75	1096	1099
		Public transport	1	13	2	2	60	60
		Active travel	13	40	23	17	220	225
BA2	200	Vehicles	15	40	36	16	228	229
		Public transport	0	4	0	0	13	13
		Active travel	4	11	5	4	46	47
BA3	0	Vehicles	339	221	2	110	638	651
		Public transport	227	225	0	2	454	454
		Active travel	1008	975	0	33	2017	2017
BA10	100000	Vehicles	338	107	70	199	2107	2116
		Public transport	33	5	61	49	499	507
		Active travel	51	25	22	48	430	431
Whole site		Vehicles	748	511	272	401	4069	4094
		Public transport	262	246	63	53	1026	1034
		Active travel	1076	1051	49	101	2713	2719
BA10	100000	HGVs	8	8	0	0	82	82

Residual trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	140	367	329	151	2091	2097
		Public transport	3	33	3	3	115	115
		Active travel	32	101	45	34	420	429
BA2	200	Vehicles	10	27	24	11	152	152
		Public transport	0	2	0	0	8	8
		Active travel	2	7	3	2	31	31
BA3	0	Vehicles	226	147	1	73	425	434
		Public transport	151	150	0	1	303	303
		Active travel	672	650	0	22	1345	1345
BA10	100000	Vehicles	243	77	58	165	1678	1685
		Public transport	24	4	51	41	398	404
		Active travel	37	18	18	39	343	343
Whole site		Vehicles	620	618	412	400	4347	4368
		Public transport	178	189	54	45	824	830
		Active travel	744	777	66	98	2137	2148
BA10	100000	HGVs	6	6	0	0	65	66

Total external trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	195	511	493	226	3188	3196
		Public transport	4	47	5	5	175	175
		Active travel	45	141	68	51	639	653
BA2	200	Vehicles	25	67	60	27	380	381
		Public transport	1	6	1	1	21	21
		Active travel	6	18	8	6	76	78
BA3	0	Vehicles	565	368	4	184	1063	1085
		Public transport	378	375	0	4	756	756
		Active travel	1681	1626	0	55	3361	3361
BA10	100000	Vehicles	582	184	128	364	3785	3801
		Public transport	57	9	112	90	897	912
		Active travel	88	43	39	87	773	774
Whole site		Vehicles	1367	1129	684	801	8416	8462
		Public transport	440	436	117	99	1849	1864
		Active travel	1820	1829	115	200	4850	4867
BA10	100000	HGVs	14	14	0	0	147	148

Total trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	286	773	679	315	4392	4406
		Public transport	6	52	8	6	201	201
		Active travel	146	431	273	149	1972	1993
BA2	200	Vehicles	25	67	60	27	380	381
		Public transport	1	6	1	1	21	21
		Active travel	6	18	8	6	76	78
BA3	0	Vehicles	565	368	4	184	1063	1085
		Public transport	378	375	0	4	756	756
		Active travel	1681	1626	0	55	3361	3361
BA10	100000	Vehicles	609	192	144	412	4195	4213
		Public transport	60	9	126	102	994	1010
		Active travel	92	45	45	99	857	858
Whole site		Vehicles	1486	1400	886	938	10031	10085
		Public transport	445	442	136	112	1972	1989
		Active travel	1925	2120	326	309	6266	6291
			0	0	0	0	0	0
BA10	100000	HGVs	15	14	0	0	163	164

Vision-led

Internal trips

Site	Mode	AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	22	63	45	21	291	292
	Public transport	12	35	25	12	159	160
	Active travel	161	459	326	156	2113	2124
BA2	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	25	8	10	40	352	353
	Public transport	5	3	7	15	111	111
	Active travel	3	1	19	16	128	131
Whole site	Vehicles	47	71	55	61	643	645
	Public transport	17	37	31	27	270	271
	Active travel	164	460	345	171	2241	2255
BA10	HGVs	1	1	0	0	16	16

Trips to Baldock and Letchworth

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	36	87	113	50	728	727
	Public transport	4	25	20	6	133	134
	Active travel	28	84	62	38	515	523
BA2	Vehicles	13	31	30	14	187	188
	Public transport	2	10	7	2	42	42
	Active travel	4	14	6	5	57	59
BA3	Vehicles	339	221	2	110	638	651
	Public transport	227	225	0	2	454	454
	Active travel	1008	975	0	33	2017	2017
BA10	Vehicles	226	70	14	110	1206	1208
	Public transport	83	38	34	73	675	677
	Active travel	114	30	105	113	1155	1169
Whole site	Vehicles	614	409	160	284	2759	2774
	Public transport	316	297	61	84	1304	1307
	Active travel	1155	1103	173	189	3744	3767
BA10	HGVs	8	8	0	0	82	82

Residual trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	140	367	329	151	2091	2097
	Public transport	3	33	19	3	115	115
	Active travel	32	101	45	34	420	429
BA2	Vehicles	10	25	23	11	145	145
	Public transport	0	3	2	0	10	10
	Active travel	3	8	4	3	36	36
BA3	Vehicles	226	147	1	73	425	434
	Public transport	151	150	0	1	303	303
	Active travel	672	650	0	22	1345	1345
BA10	Vehicles	243	77	58	165	1678	1685
	Public transport	37	18	18	39	343	343
	Active travel	24	4	51	41	398	404
Whole site	Vehicles	619	617	411	400	4340	4361
	Public transport	192	204	39	44	771	771
	Active travel	731	764	100	100	2197	2214
BA10	HGVs	6	6	0	0	65	66

Total external trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	176	455	443	201	2819	2824
	Public transport	7	58	39	9	249	249
	Active travel	60	186	107	72	935	952
BA2	Vehicles	22	57	53	24	332	333
	Public transport	3	12	8	3	52	52
	Active travel	7	22	10	7	93	95
BA3	Vehicles	565	368	4	184	1063	1085
	Public transport	378	375	0	4	756	756
	Active travel	1681	1626	0	55	3361	3361
BA10	Vehicles	469	146	72	274	2884	2894
	Public transport	120	56	52	113	1018	1021
	Active travel	138	33	155	154	1553	1573
Whole site	Vehicles	1233	1026	572	683	7099	7135
	Public transport	508	501	99	128	2075	2078
	Active travel	1886	1867	273	288	5942	5980
BA10	HGVs	14	14	0	0	147	148

Total trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	198	518	487	223	3110	3116
	Public transport	19	93	64	20	408	409
	Active travel	221	645	433	228	3048	3076
BA2	Vehicles	22	57	53	24	332	333
	Public transport	3	12	8	3	52	52
	Active travel	7	22	10	7	93	95
BA3	Vehicles	565	368	4	184	1063	1085
	Public transport	378	375	0	4	756	756
	Active travel	1681	1626	0	55	3361	3361
BA10	Vehicles	494	154	83	314	3236	3247
	Public transport	125	59	58	128	1129	1131
	Active travel	142	34	174	170	1681	1703
Whole site	Vehicles	1280	1097	627	745	7741	7781
	Public transport	525	539	131	155	2345	2349
	Active travel	2050	2327	618	460	8183	8235
BA10	HGVs	15	14	0	0	163	164

Full Build-Out Option 3 School

Business as Usual

Internal trips

Site	Scale	Mode	AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	92	262	186	89	1204	1211
		Public transport	2	6	4	2	26	26
		Active travel	101	290	205	98	1332	1340
BA2	200	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA3	86	Vehicles	0	0	0	0	0	0
		Public transport	0	0	0	0	0	0
		Active travel	0	0	0	0	0	0
BA10	100000	Vehicles	27	8	17	47	410	412
		Public transport	3	0	15	12	97	99
		Active travel	4	2	5	11	84	84
Whole site		Vehicles	118	270	202	136	1615	1623
		Public transport	5	6	19	14	123	125
		Active travel	105	292	211	110	1416	1424
BA10	100000	HGVs	1	1	0	0	16	16

Trips to Baldock and Letchworth

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	55	143	164	75	1096	1099
		Public transport	1	13	2	2	60	60
		Active travel	13	40	23	17	220	225
BA2	200	Vehicles	15	40	36	16	228	229
		Public transport	0	4	0	0	13	13
		Active travel	4	11	5	4	46	47
BA3	86	Vehicles	176	119	18	66	396	409
		Public transport	95	95	0	1	194	194
		Active travel	422	411	2	15	860	860
BA10	100000	Vehicles	338	107	70	199	2107	2116
		Public transport	33	5	61	49	499	507
		Active travel	51	25	22	48	430	431
Whole site		Vehicles	584	410	287	357	3827	3853
		Public transport	129	117	63	52	767	775
		Active travel	489	487	51	84	1556	1563
BA10	100000	HGVs	8	8	0	0	82	82

Residual trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	140	367	329	151	2091	2097
		Public transport	3	33	3	3	115	115
		Active travel	32	101	45	34	420	429
BA2	200	Vehicles	10	27	24	11	152	152
		Public transport	0	2	0	0	8	8
		Active travel	2	7	3	2	31	31
BA3	86	Vehicles	117	79	12	44	264	273
		Public transport	63	63	0	1	130	130
		Active travel	281	274	1	10	573	574
BA10	100000	Vehicles	243	77	58	165	1678	1685
		Public transport	24	4	51	41	398	404
		Active travel	37	18	18	39	343	343
Whole site		Vehicles	511	550	423	371	4186	4207
		Public transport	90	103	54	45	651	657
		Active travel	353	401	68	86	1366	1377
BA10	100000	HGVs	6	6	0	0	65	66

Total external trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	195	511	493	226	3188	3196
		Public transport	4	47	5	5	175	175
		Active travel	45	141	68	51	639	653
BA2	200	Vehicles	25	67	60	27	380	381
		Public transport	1	6	1	1	21	21
		Active travel	6	18	8	6	76	78
BA3	86	Vehicles	293	198	29	110	660	682
		Public transport	158	159	0	2	324	324
		Active travel	703	685	4	26	1433	1434
BA10	100000	Vehicles	582	184	128	364	3785	3801
		Public transport	57	9	112	90	897	912
		Active travel	88	43	39	87	773	774
Whole site		Vehicles	1095	960	710	728	8013	8060
		Public transport	220	220	117	97	1417	1432
		Active travel	842	888	119	170	2922	2940
BA10	100000	HGVs	14	14	0	0	147	148

Total trips

			AM Peak		PM Peak		Daily	
			Arr	Dep	Arr	Dep	Arr	Dep
BA1	2750	Vehicles	286	773	679	315	4392	4406
		Public transport	6	52	8	6	201	201
		Active travel	146	431	273	149	1972	1993
BA2	200	Vehicles	25	67	60	27	380	381
		Public transport	1	6	1	1	21	21
		Active travel	6	18	8	6	76	78
BA3	86	Vehicles	293	198	29	110	660	682
		Public transport	158	159	0	2	324	324
		Active travel	703	685	4	26	1433	1434
BA10	100000	Vehicles	609	192	144	412	4195	4213
		Public transport	60	9	126	102	994	1010
		Active travel	92	45	45	99	857	858
Whole site		Vehicles	1213	1230	912	864	9628	9683
		Public transport	224	226	136	110	1540	1557
		Active travel	947	1180	330	280	4338	4363
			0	0	0	0	0	0
BA10	100000	HGVs	15	14	0	0	163	164

Vision-led

Internal trips

Site	Mode	AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	22	63	45	21	291	292
	Public transport	12	35	25	12	159	160
	Active travel	161	459	326	156	2113	2124
BA2	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA3	Vehicles	0	0	0	0	0	0
	Public transport	0	0	0	0	0	0
	Active travel	0	0	0	0	0	0
BA10	Vehicles	25	8	10	40	352	353
	Public transport	5	3	7	15	111	111
	Active travel	3	1	19	16	128	131
Whole site	Vehicles	47	71	55	61	643	645
	Public transport	17	37	31	27	270	271
	Active travel	164	460	345	171	2241	2255
BA10	HGVs	1	1	0	0	16	16

Trips to Baldock and Letchworth

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	36	87	113	50	728	727
	Public transport	4	25	20	6	133	134
	Active travel	28	84	62	38	515	523
BA2	Vehicles	13	31	30	14	187	188
	Public transport	2	10	7	2	42	42
	Active travel	4	14	6	5	57	59
BA3	Vehicles	175	116	16	65	383	396
	Public transport	95	97	2	1	201	201
	Active travel	422	413	3	16	866	867
BA10	Vehicles	226	70	14	110	1206	1208
	Public transport	83	38	34	73	675	677
	Active travel	114	30	105	113	1155	1169
Whole site	Vehicles	449	304	174	239	2504	2519
	Public transport	185	169	63	83	1052	1054
	Active travel	569	540	176	172	2594	2617
BA10	HGVs	8	8	0	0	82	82

Residual trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	140	367	329	151	2091	2097
	Public transport	3	33	19	3	115	115
	Active travel	32	101	45	34	420	429
BA2	Vehicles	10	25	23	11	145	145
	Public transport	0	3	2	0	10	10
	Active travel	3	8	4	3	36	36
BA3	Vehicles	117	79	12	44	264	273
	Public transport	63	63	1	1	130	130
	Active travel	281	274	1	10	573	574
BA10	Vehicles	243	77	58	165	1678	1685
	Public transport	37	18	18	39	343	343
	Active travel	24	4	51	41	398	404
Whole site	Vehicles	510	549	422	370	4178	4200
	Public transport	103	118	39	44	598	598
	Active travel	340	388	101	88	1426	1443
BA10	HGVs	6	6	0	0	65	66

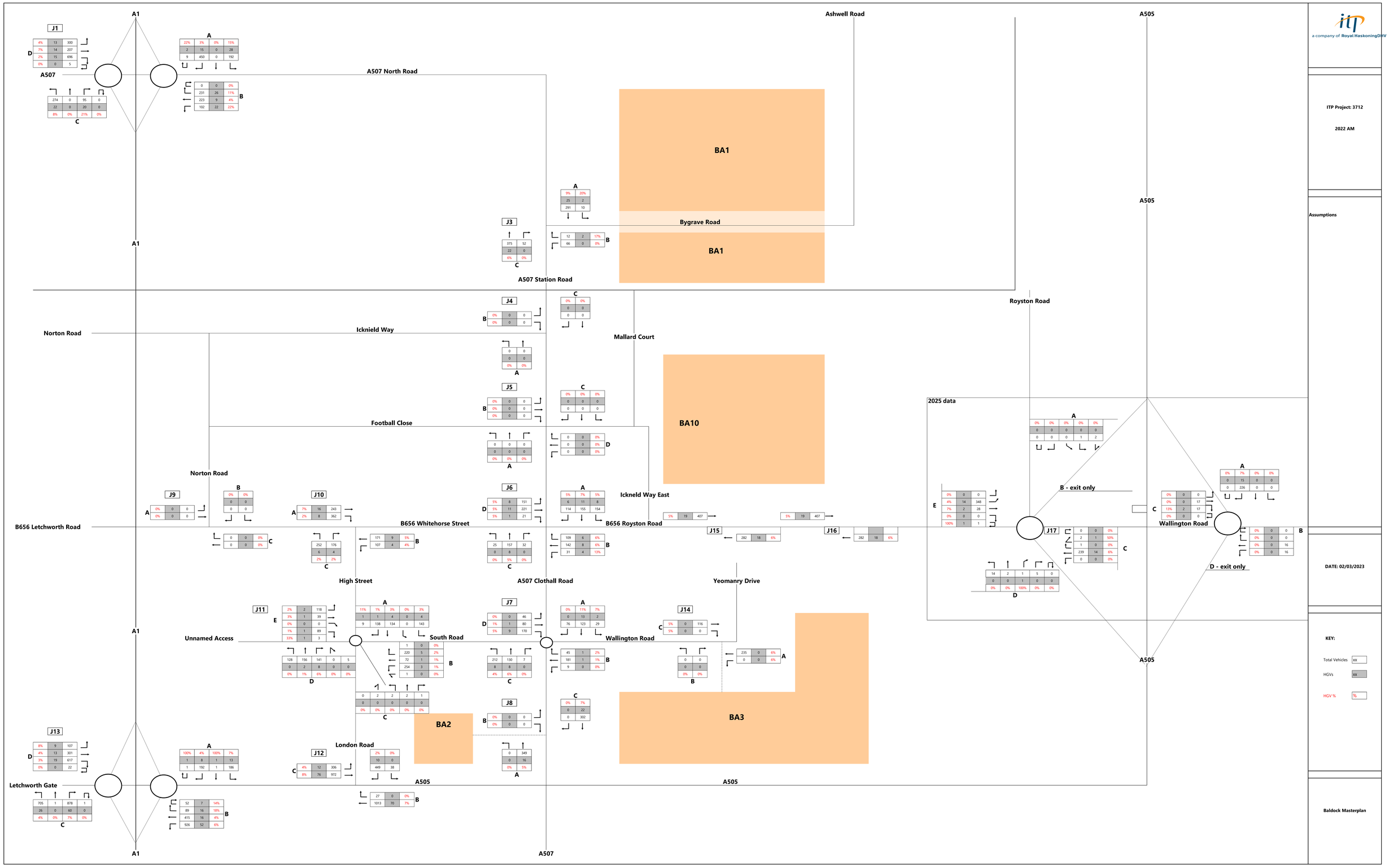
Total external trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	176	455	443	201	2819	2824
	Public transport	7	58	39	9	249	249
	Active travel	60	186	107	72	935	952
BA2	Vehicles	22	57	53	24	332	333
	Public transport	3	12	8	3	52	52
	Active travel	7	22	10	7	93	95
BA3	Vehicles	292	195	28	109	647	668
	Public transport	158	160	3	2	331	331
	Active travel	703	687	4	26	1440	1441
BA10	Vehicles	469	146	72	274	2884	2894
	Public transport	120	56	52	113	1018	1021
	Active travel	138	33	155	154	1553	1573
Whole site	Vehicles	960	853	596	609	6682	6719
	Public transport	288	287	102	126	1650	1653
	Active travel	909	928	277	259	4020	4060
BA10	HGVs	14	14	0	0	147	148

Total trips

		AM Peak		PM Peak		Daily	
		Arr	Dep	Arr	Dep	Arr	Dep
BA1	Vehicles	198	518	487	223	3110	3116
	Public transport	19	93	64	20	408	409
	Active travel	221	645	433	228	3048	3076
BA2	Vehicles	22	57	53	24	332	333
	Public transport	3	12	8	3	52	52
	Active travel	7	22	10	7	93	95
BA3	Vehicles	292	195	28	109	647	668
	Public transport	158	160	3	2	331	331
	Active travel	703	687	4	26	1440	1441
BA10	Vehicles	494	154	83	314	3236	3247
	Public transport	125	59	58	128	1129	1131
	Active travel	142	34	174	170	1681	1703
Whole site	Vehicles	1007	924	651	671	7325	7364
	Public transport	305	324	133	153	1920	1924
	Active travel	1073	1388	622	431	6261	6314
BA10	HGVs	15	14	0	0	163	164

Appendix K – Network Flow Diagrams



a company of Royal HaskoningDHV

ITP Project: 3712

2022 AM

Assumptions

DATE: 02/03/2023

KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan

a company of Royal HaskoningDHV

ITP Project: 3712

2022 PM

Assumptions

DATE: 02/03/2023

KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan

A1

A507

A507 North Road

A507 Station Road

A507 Clothall Road

A505

Ashwell Road

Royston Road

Bygrave Road

BA1

BA1

BA10

BA2

BA3

Norton Road

Icknield Way

Mallard Court

Football Close

Norton Road

Ickneld Way East

B656 Letchworth Road

B656 Whitehorse Street

B656 Royston Road

High Street

Yeomanry Drive

Unnamed Access

South Road

Wallington Road

B - exit only

C - exit only

Wallington Road

Letchworth Gate

A505

A505

A507

A1

J1

1%	2	422	
2%	4	248	
2%	9	431	
0%	0	5	

D

627	0	153	0
5	0	15	0
1%	0%	10%	0%

C

A

0%	1%	0%	6%
0	2	0	10
15	366	0	172

0	0	0%
382	10	3%
377	3	1%
73	5	7%

B

J3

638	72
5	1
1%	1%

C

A

2%	0%	
7	0	
312	4	

13	0	0%	
49	1	2%	

B

J4

0%	0	0	
0%	0	0	

B

C

0%	0%	
0	0	
0	0	

0	0
0	0
0%	0%

A

J5

0%	0	0	
0%	0	0	
0%	0	0	

B

C

0%	0%	0%	
0	0	0	
0	0	0	

0	0	0	
0	0	0	
0%	0%	0%	

A

0	0	0%	
0	0	0%	
0	0	0%	

D

J9

0%	0	0	
0%	0	0	

A

B

0%	0%
0	0
0	0

0	0	0%	
0	0	0%	

C

J10

1%	2	265	
1%	2	371	

A

320	258		
4	0		
1%	0%		

C

172	2	1%	
137	0	0%	

B

J6

0%	0	268	
1%	1	194	
6%	1	17	

D

30	235	26	
0	4	1	
0%	2%	4%	

C

A

2%	1%	3%	
2	2	3	
133	162	90	

206	2	1%	
142	0	0%	
32	0	0%	

B

2%	5	310

2%	5	310

J15

380	2	1%

J16

380	2	1%

E

0%	0	2	
3%	8	282	
0%	0	27	
0%	0	0	
0%	0	0	

J17

0	0	0%	
2	1	50%	
2	0	0%	
258	5	2%	
0	0	0%	

C

5	0	0	20	0
0	0	0	0	0
0%	0%	0%	0%	0%

D

A

0%	0%	0%	0%	0%
0	0	0	0	0
0	2	0	1	1

A

0%	2%	0%	0%
0	6	0	0
0	251	0	1

D

0%	0	0	
0%	0	21	
0%	0	27	
0%	0	0	

Wallington Road

0%	0	0	
0%	0	0	
0%	0	11	
0%	0	7	

B

J11

0%	0	245	
0%	0	96	
0%	0	0	
0%	0	113	
0%	0	0	

E

154	171	177	1	1
1	1	0	0	0
1%	1%	0%	0%	0%

D

A

0%	1%	0%	0%	1%	
0	1	0	0	1	
9	180	163	2	177	

1	0	0%	
160	1	1%	
87	0	0%	
211	2	1%	
0	0	0%	

B

0	2	0	2	1
0	0	0	0	0
0%	0%	0%	0%	0%

C

J7

0%	0	37	
1%	1	184	
0%	0	176	

D

198	197	10	
2	3	0	
1%	2%	0%	

C

A

1%	1%	0%	
1	2	0	
72	142	37	

40	1	3%	
128	0	0%	
6	0	0%	

B

C

0%	1%	
0	2	
0	324	

J14

0%	0	231	
0%	0	0	

C

0	0
0	0
0%	0%

B

174	0	0%	
0	0	0%	

A

J8

0%	0	0	
0%	0	0	

B

0	405		
0	5		
0%	1%		

A

J13

3%	4	139	
3%	4	145	
1%	4	629	
0%	0	4	

D

725	2	1217	0
8	0	35	0
1%	0%	3%	0%

C

A

0%	1%	0%	3%
0	1	0	3
0	149	0	113

100	0	0%	
148	5	3%	
450	4	1%	
1053	17	2%	

B

J12

0%	2	450	
4%	38	1042	

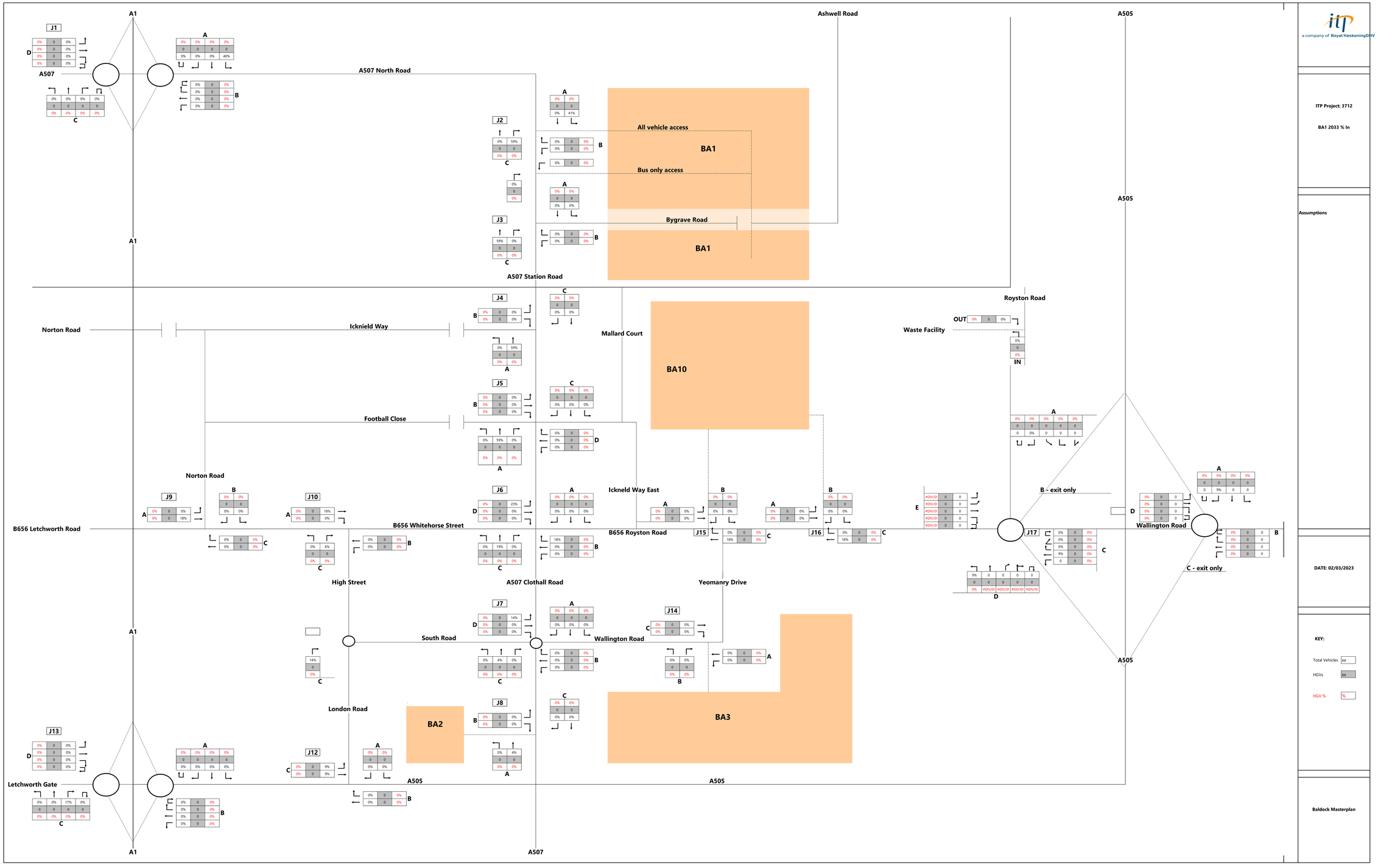
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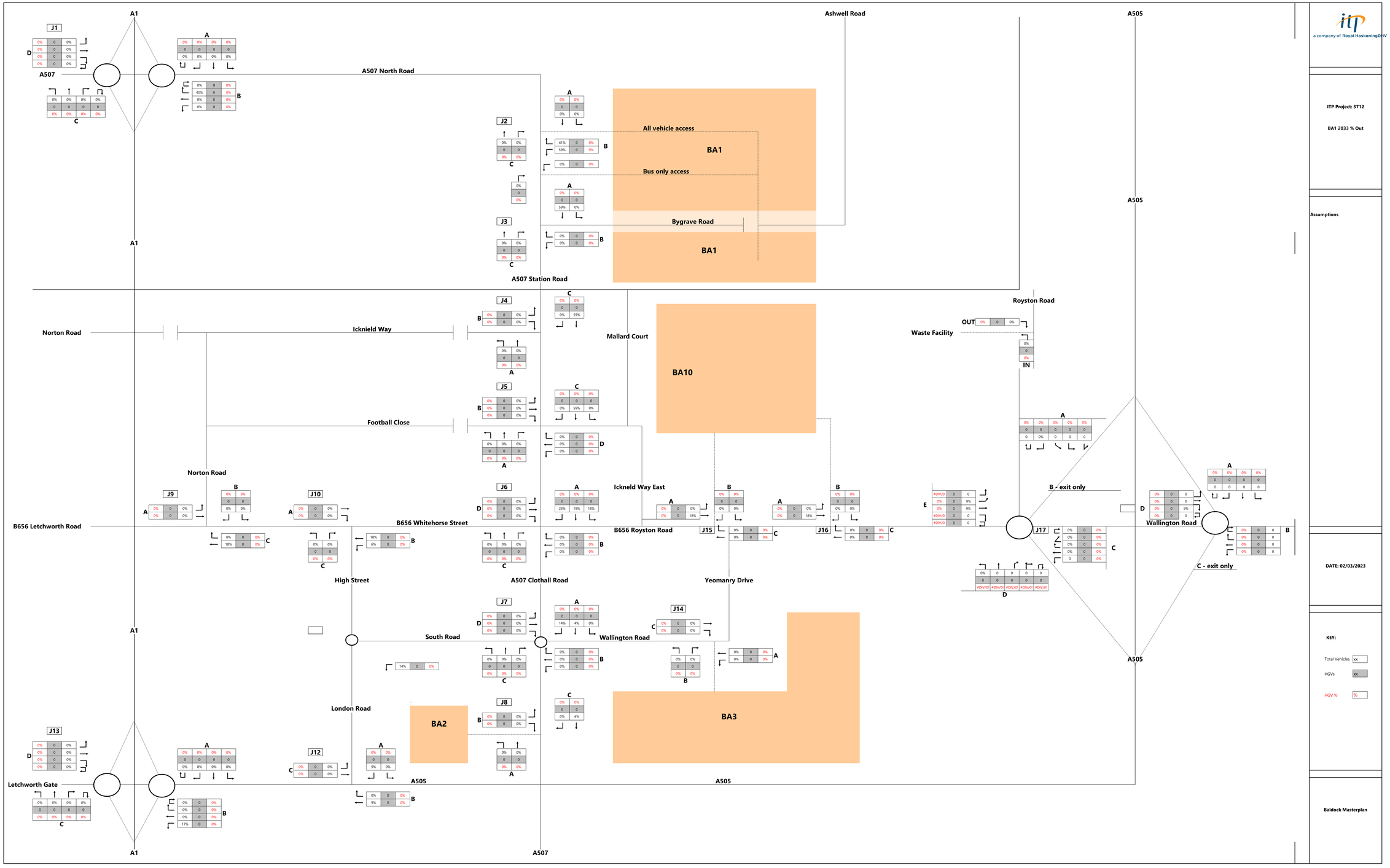
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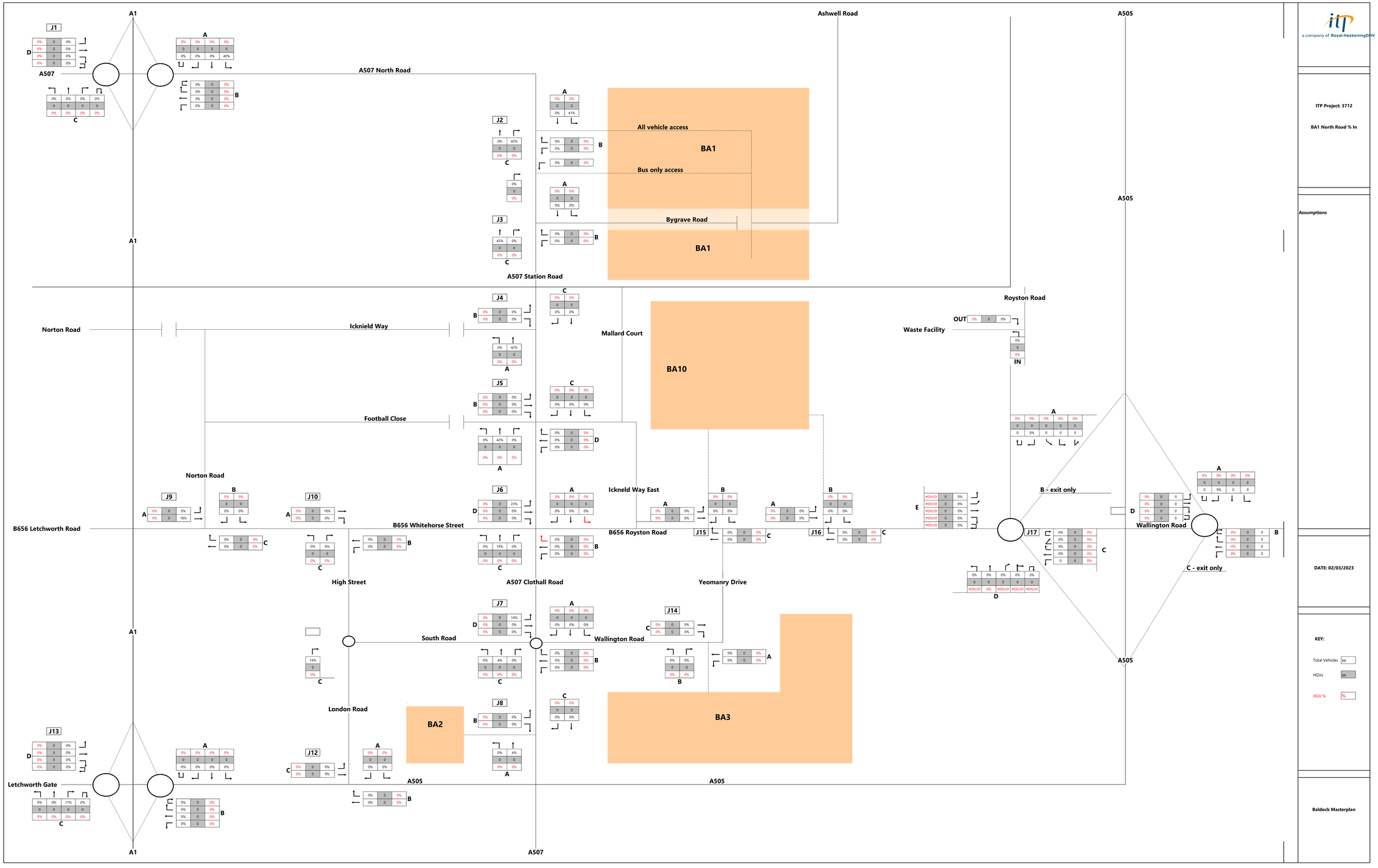
0%	0%
1	0
386	30

31	1	3%	
1245	22	2%	

B


A1
A507
A507 North Road
Ashwell Road
A505
J1
D
A
B
C
J2
All vehicle access
BA1
Bus only access
Bygrave Road
J3
A507 Station Road
Royston Road
Norton Road
Icknield Way
Mallard Court
J4
OUT
Waste Facility
IN
J5
Football Close
Norton Road
Ickneld Way East
J9
J10
J6
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
J15
J16
J17
B - exit only
Wallington Road
C - exit only
High Street
A507 Clothall Road
Yeomanry Drive
J7
South Road
Wallington Road
J14
London Road
BA2
J8
BA3
J13
Letchworth Gate
J12
A505
A507
ITP Project: 3712
BA1 2033 % In
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles
HGVs
HGV %
Baldock Masterplan


A1
A507
A507 North Road
Ashwell Road
A505
J1
J2
J3
All vehicle access
BA1
Bus only access
Bygrave Road
A507 Station Road
Royston Road
OUT
IN
Waste Facility
Norton Road
Icknield Way
Mallard Court
BA10
J4
J5
Football Close
J6
Ickneld Way East
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
J9
J10
J15
J16
J17
B - exit only
C - exit only
Wallington Road
High Street
A507 Clothall Road
Yeomanry Drive
J7
J14
South Road
Wallington Road
London Road
BA2
BA3
J8
J12
J13
Letchworth Gate
A505
A507
ITP Project: 3712
BA1 2033 % Out
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles
HGVs
HGV %
Baldock Masterplan



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ITP Project: 3712

BA1 North Road % In

Assumptions

DATE: 02/03/2023

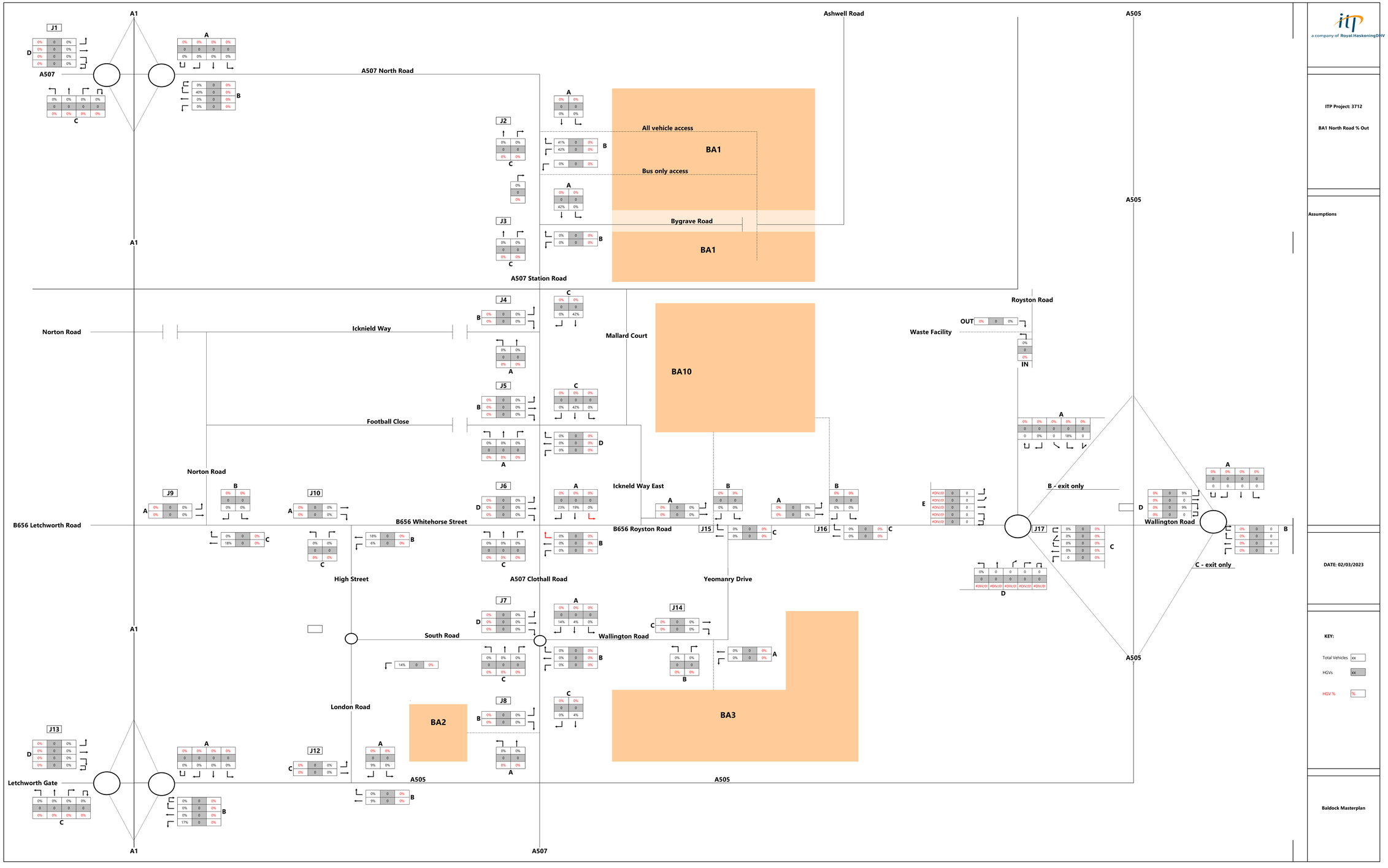
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA1 North Road % Out

Assumptions

DATE: 02/03/2023

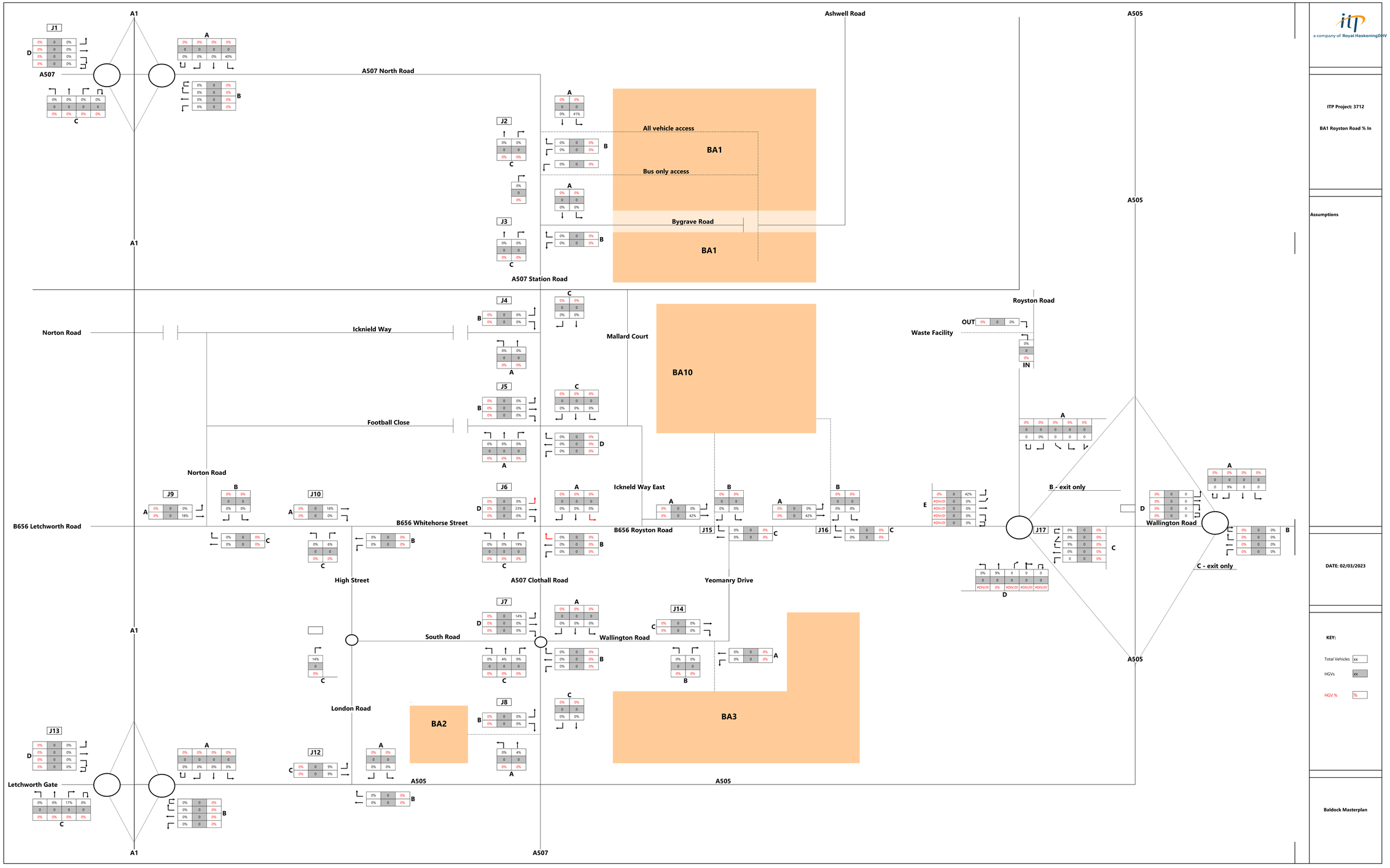
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

BA1 Royston Road % In

Assumptions

DATE: 02/03/2023

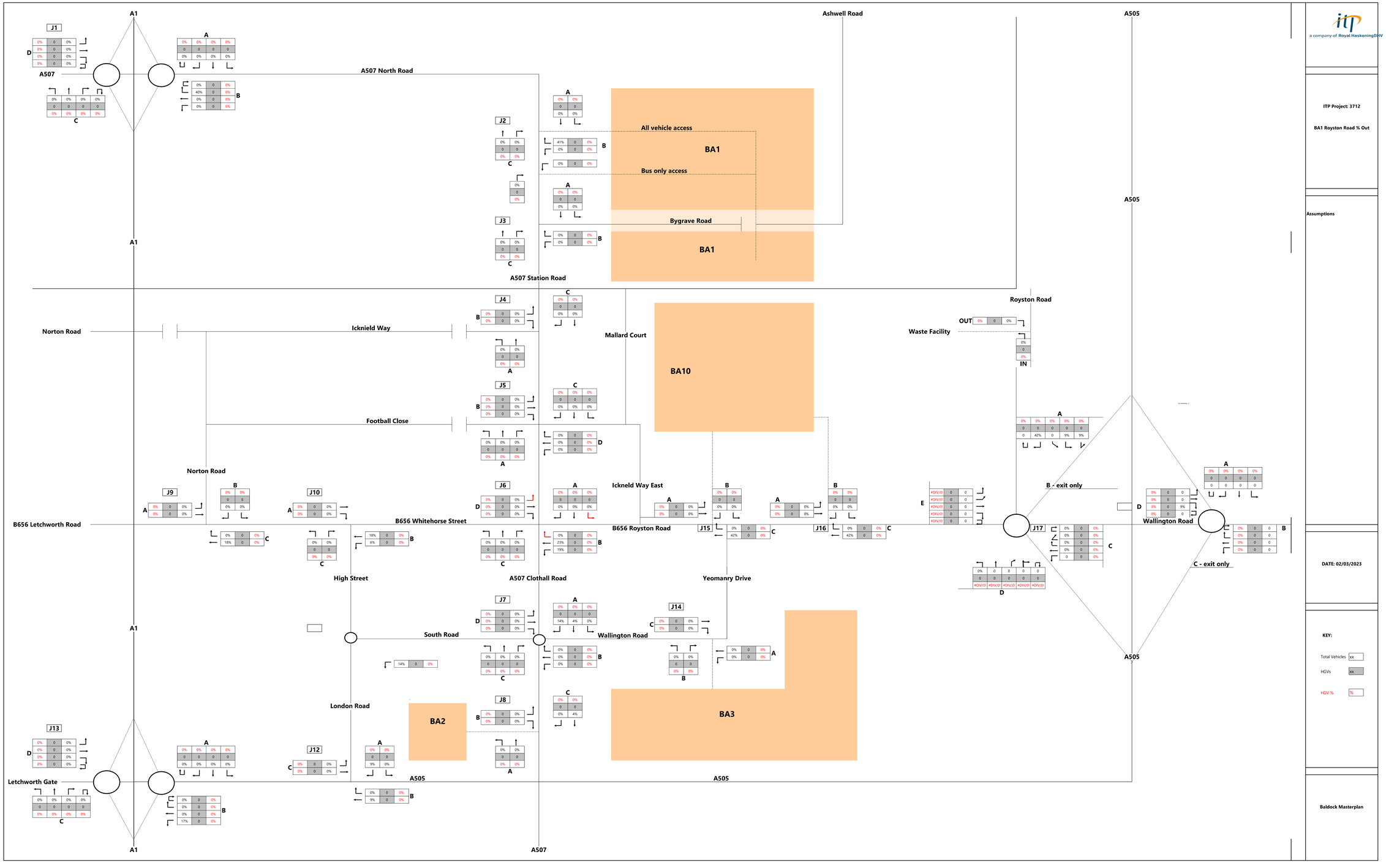
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HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

BA1 Royston Road % Out

Assumptions

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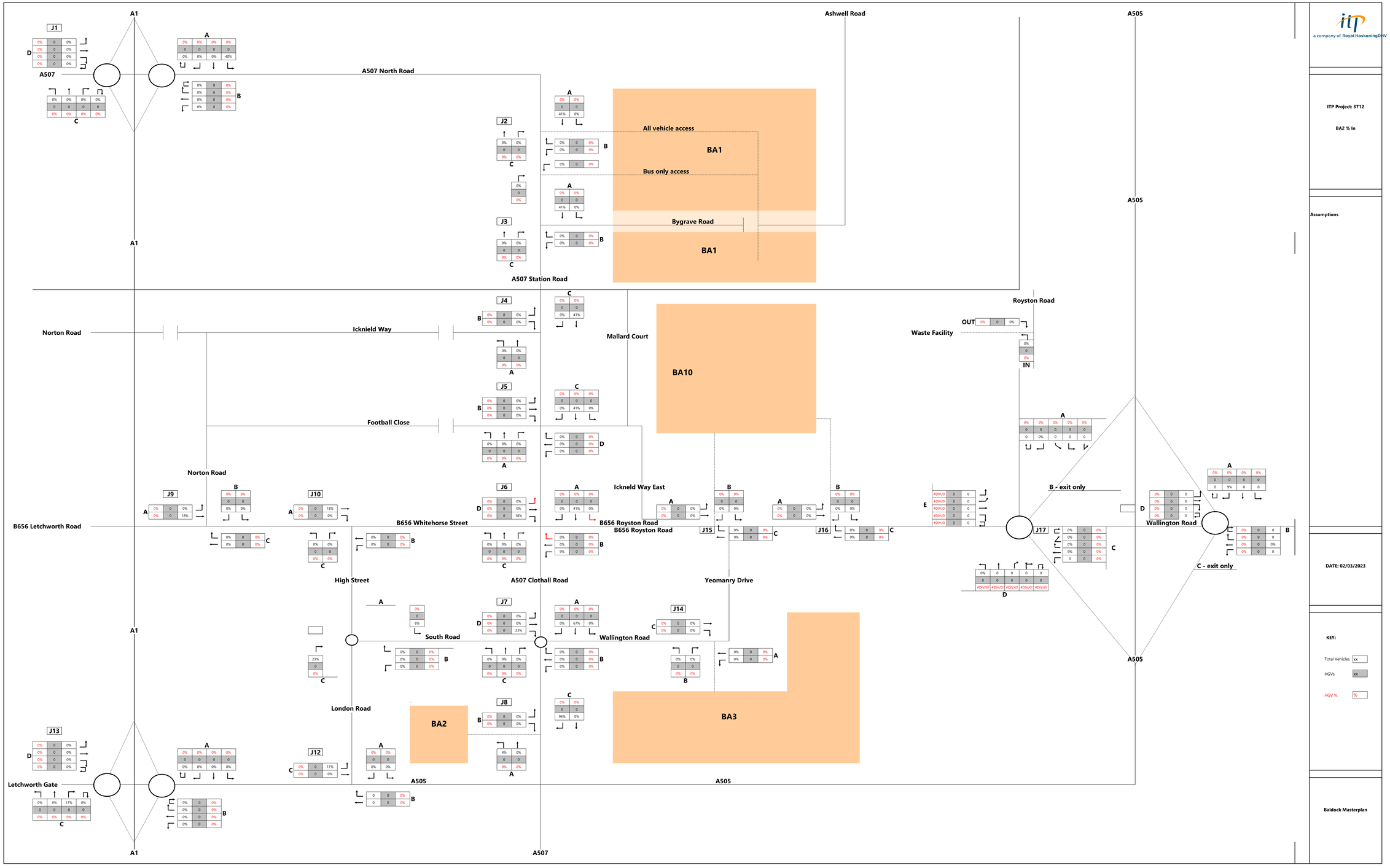
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

BA2 % In

Assumptions

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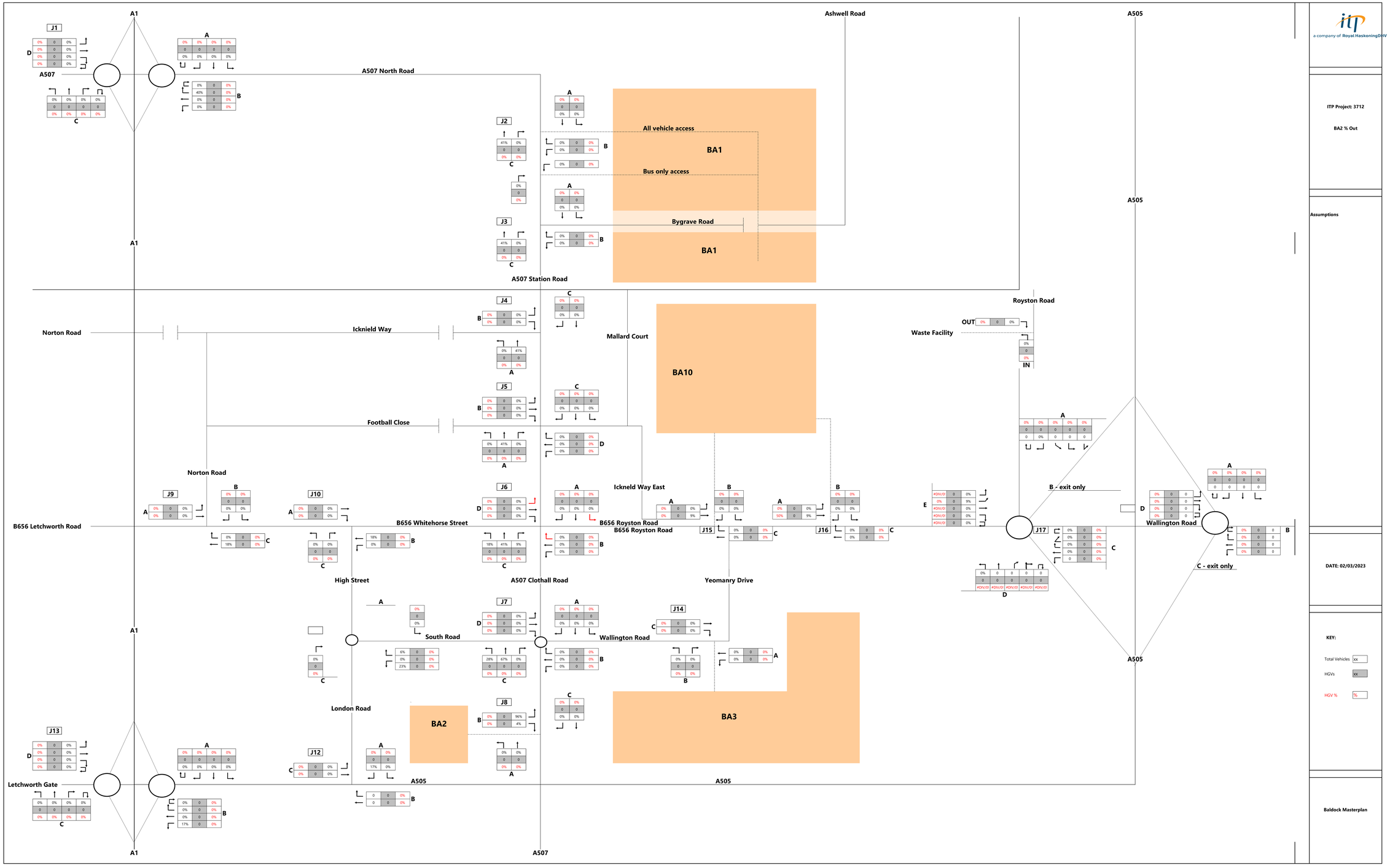
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA2 % Out

Assumptions

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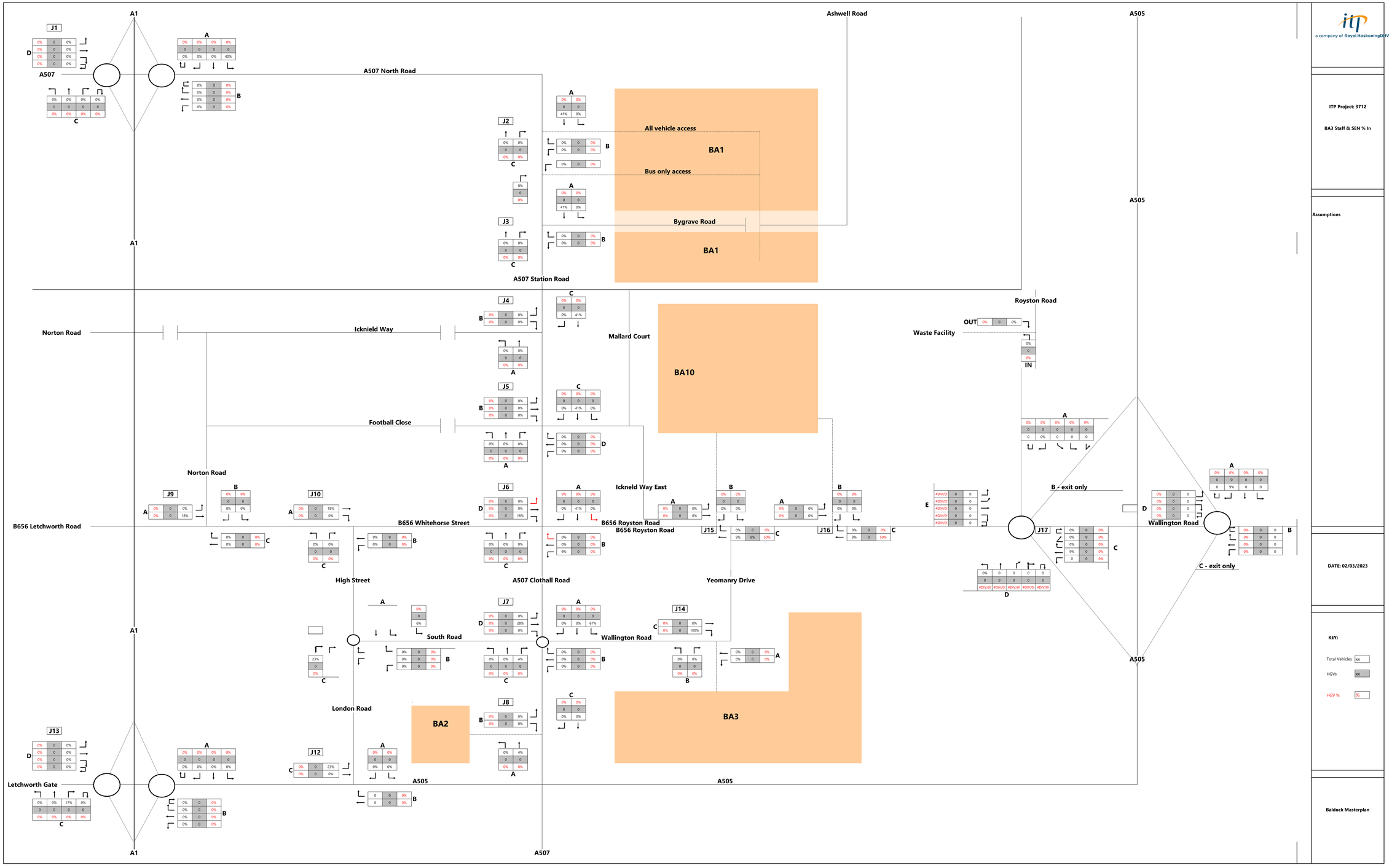
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

BA3 Staff & SEN % In

Assumptions

DATE: 02/03/2023

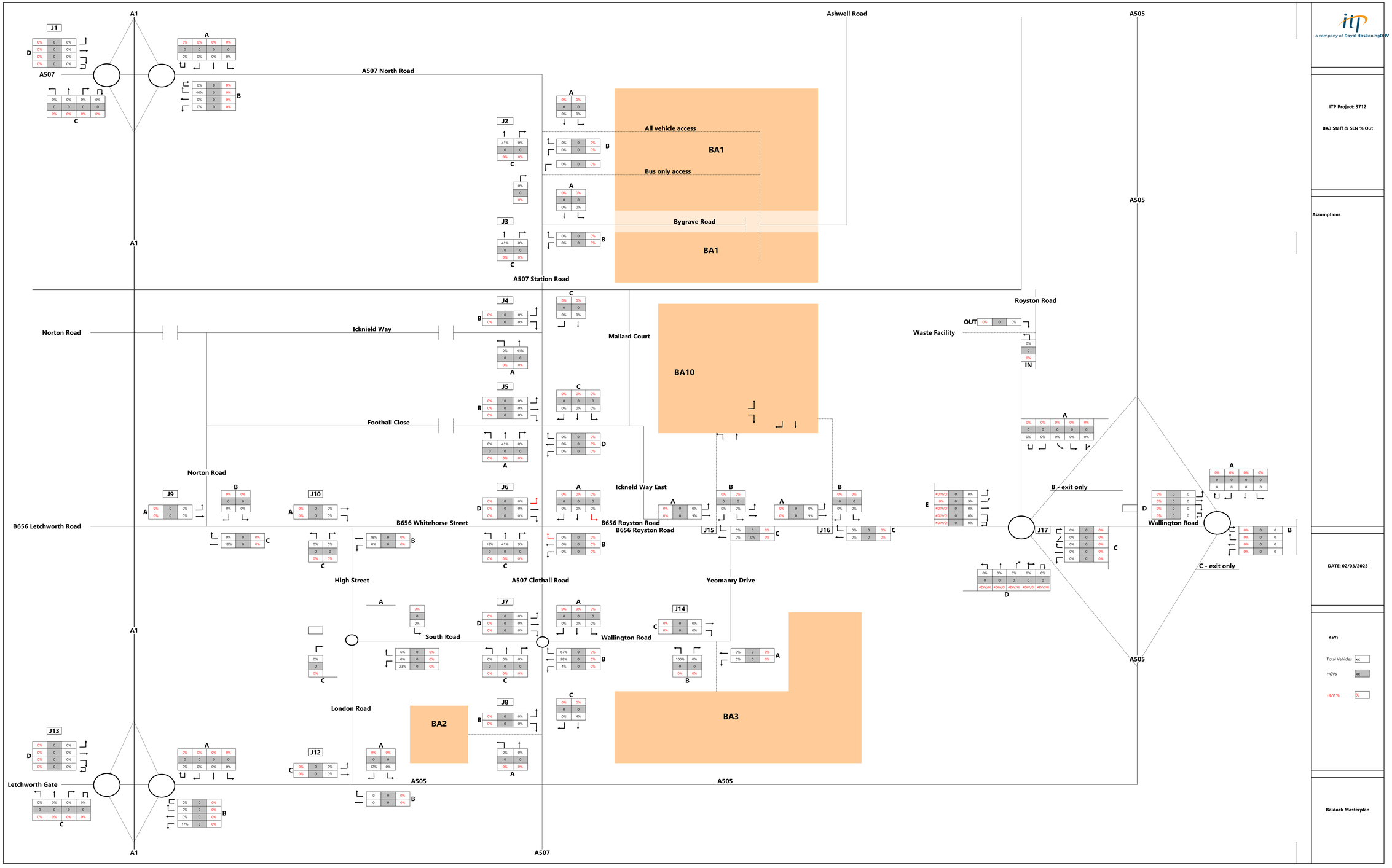
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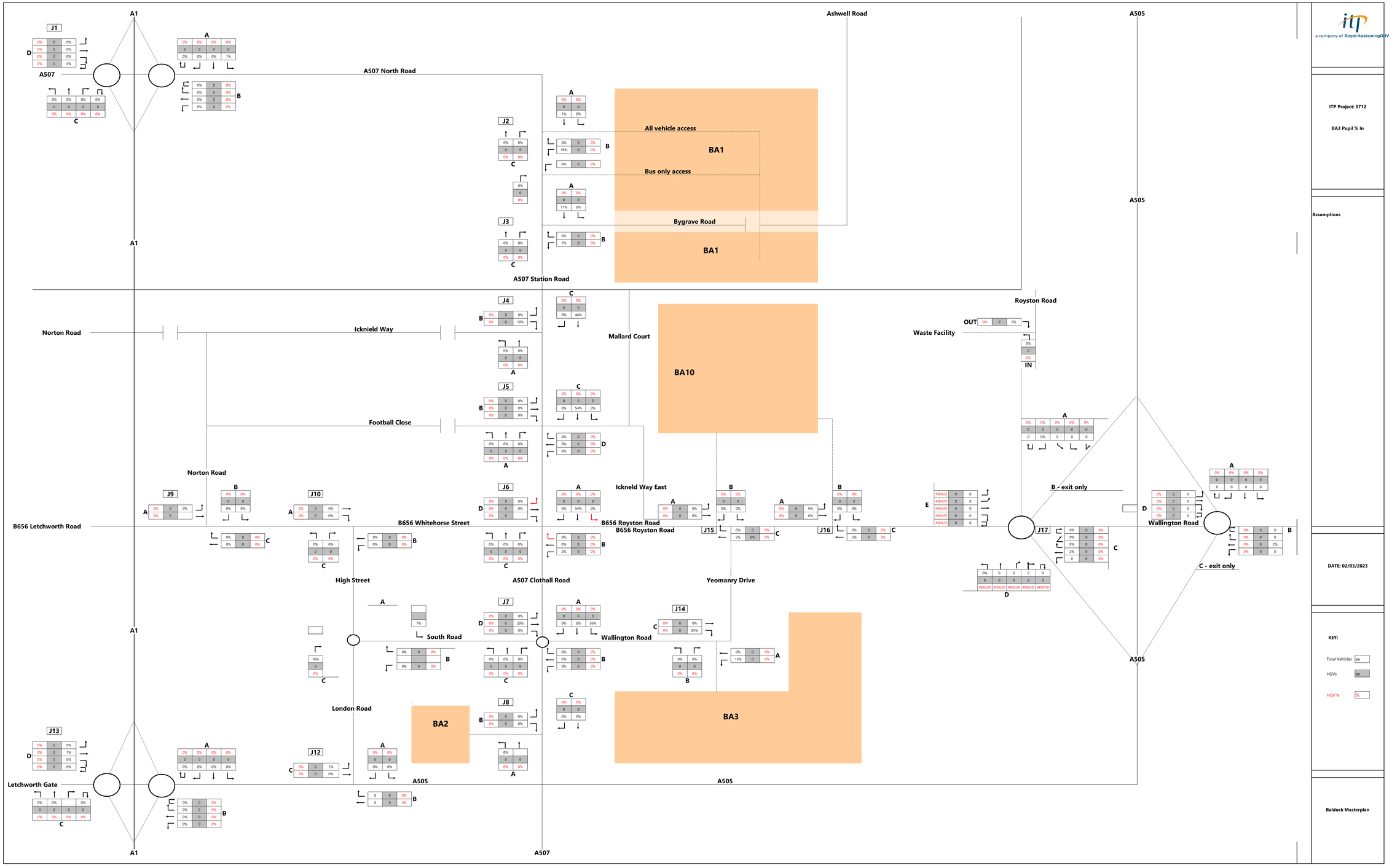
Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan


A1
A507
A507 North Road
Ashwell Road
A505
J1
A
B
C
D
J2
J3
All vehicle access
BA1
Bus only access
Bygrave Road
A507 Station Road
Royston Road
OUT
Waste Facility
IN
Norton Road
Icknield Way
Mallard Court
BA10
J4
J5
Football Close
J6
Icknield Way East
B - exit only
C - exit only
Wallington Road
J9
J10
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
J15
J16
J17
High Street
A507 Clothall Road
Yeomanry Drive
J7
South Road
Wallington Road
J14
London Road
BA2
J8
BA3
J13
Letchworth Gate
J12
A505
A507
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV % %
Baldock Masterplan
ITP Project: 3712
BA3 Staff & SEN % Out
Assumptions



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 Pupil % In

Assumptions

DATE: 02/03/2023

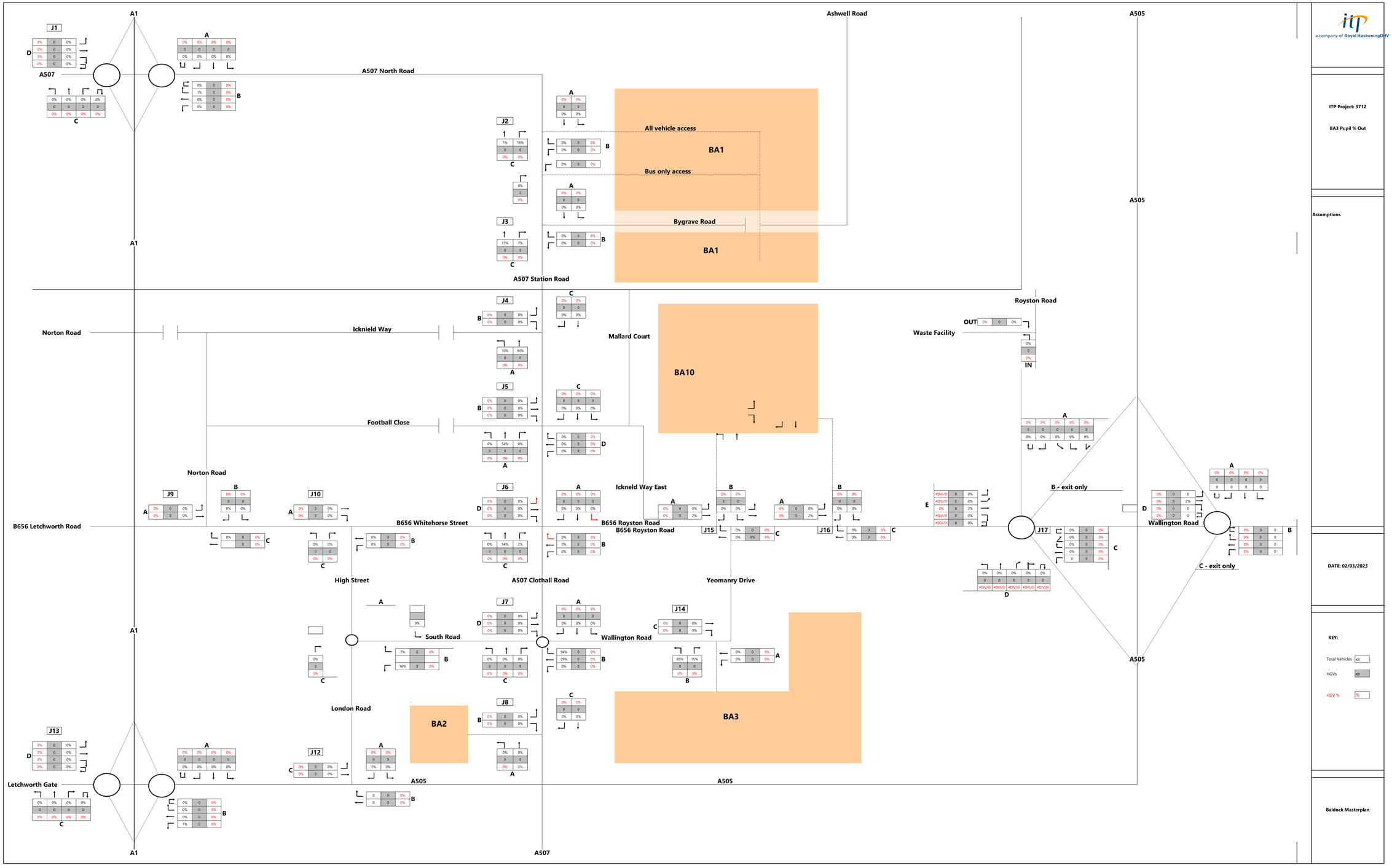
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 Pupil % Out

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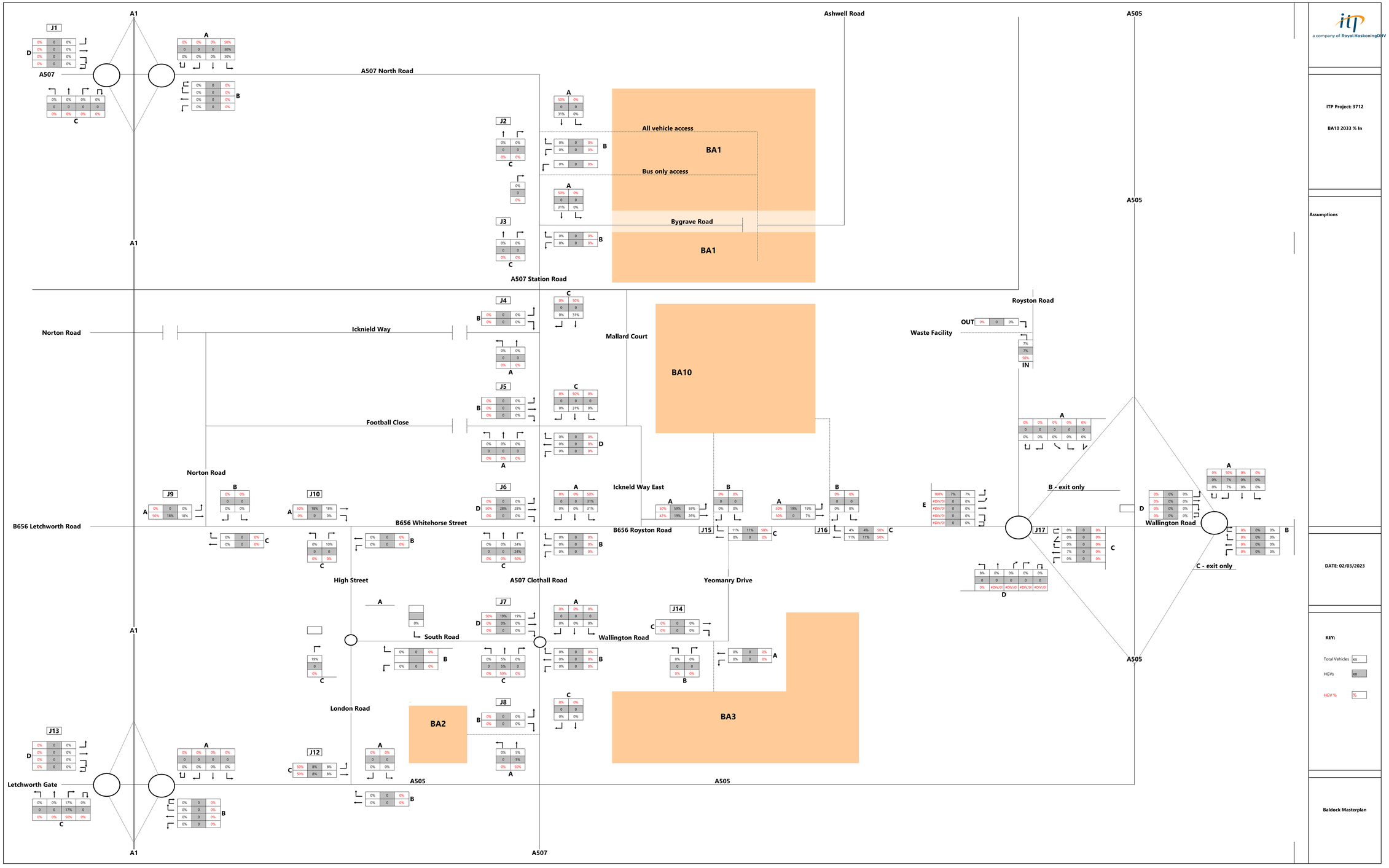
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



ITP a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2033 % In

Assumptions

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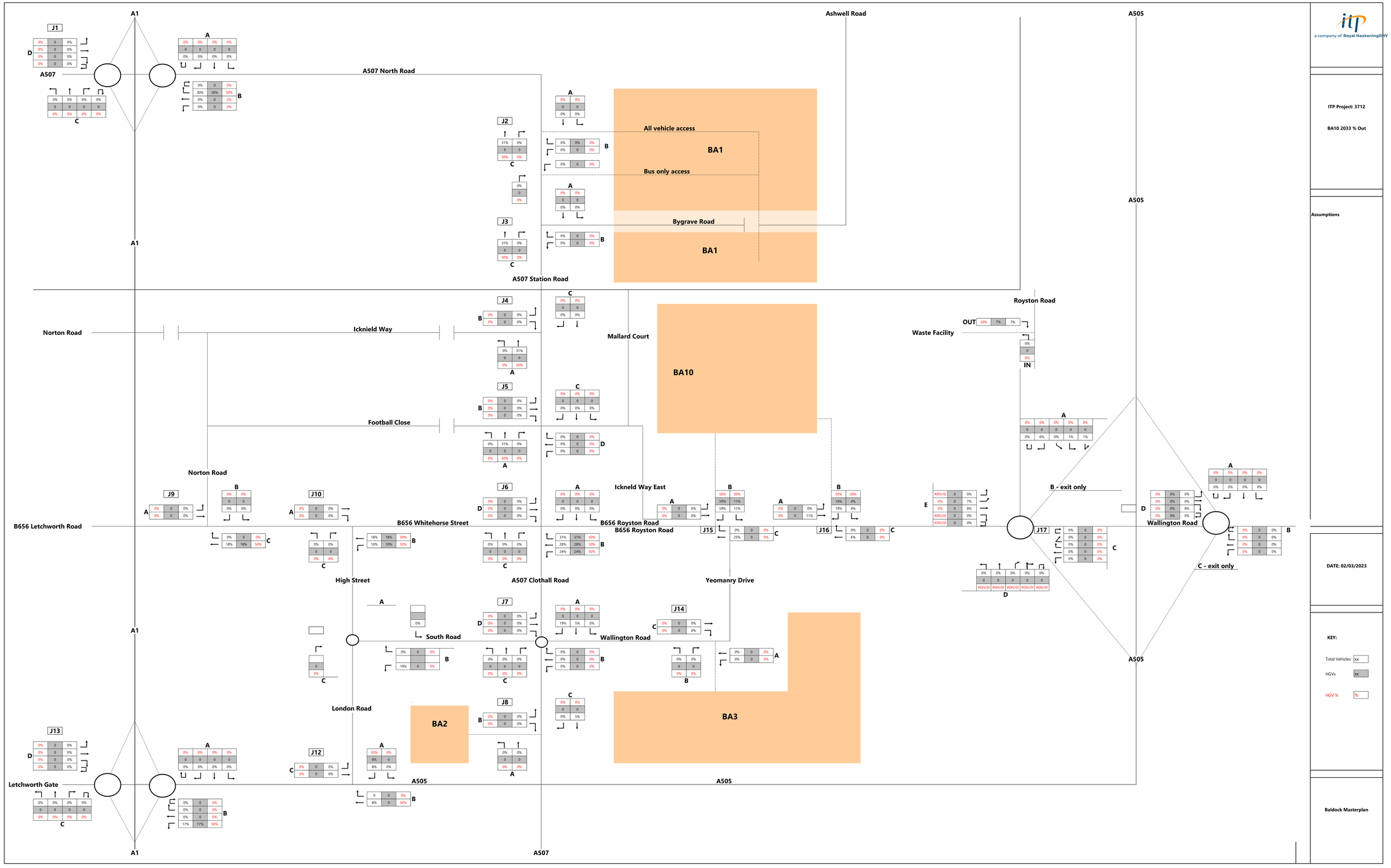
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2033 % Out

Assumptions

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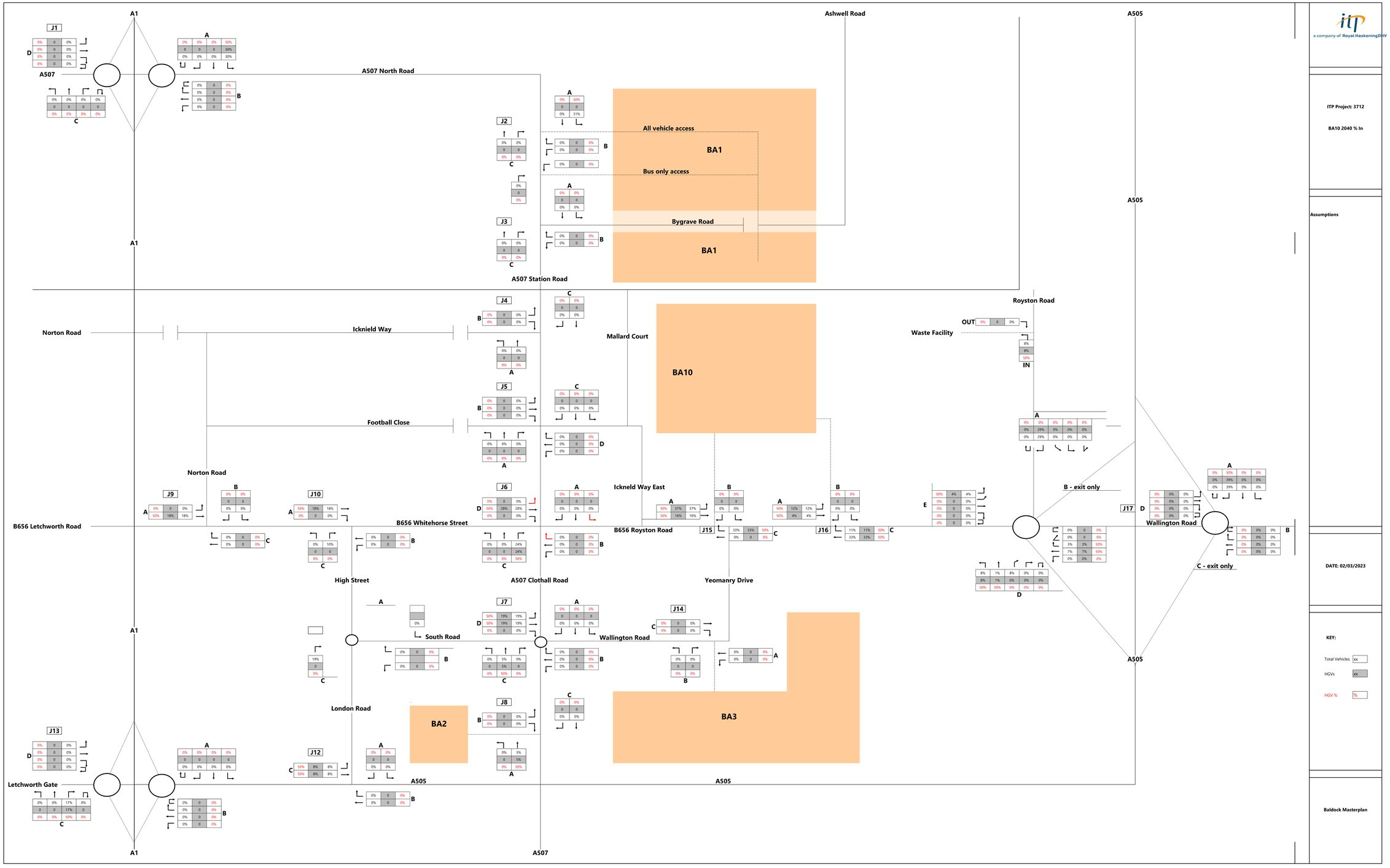
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2040 % In

Assumptions

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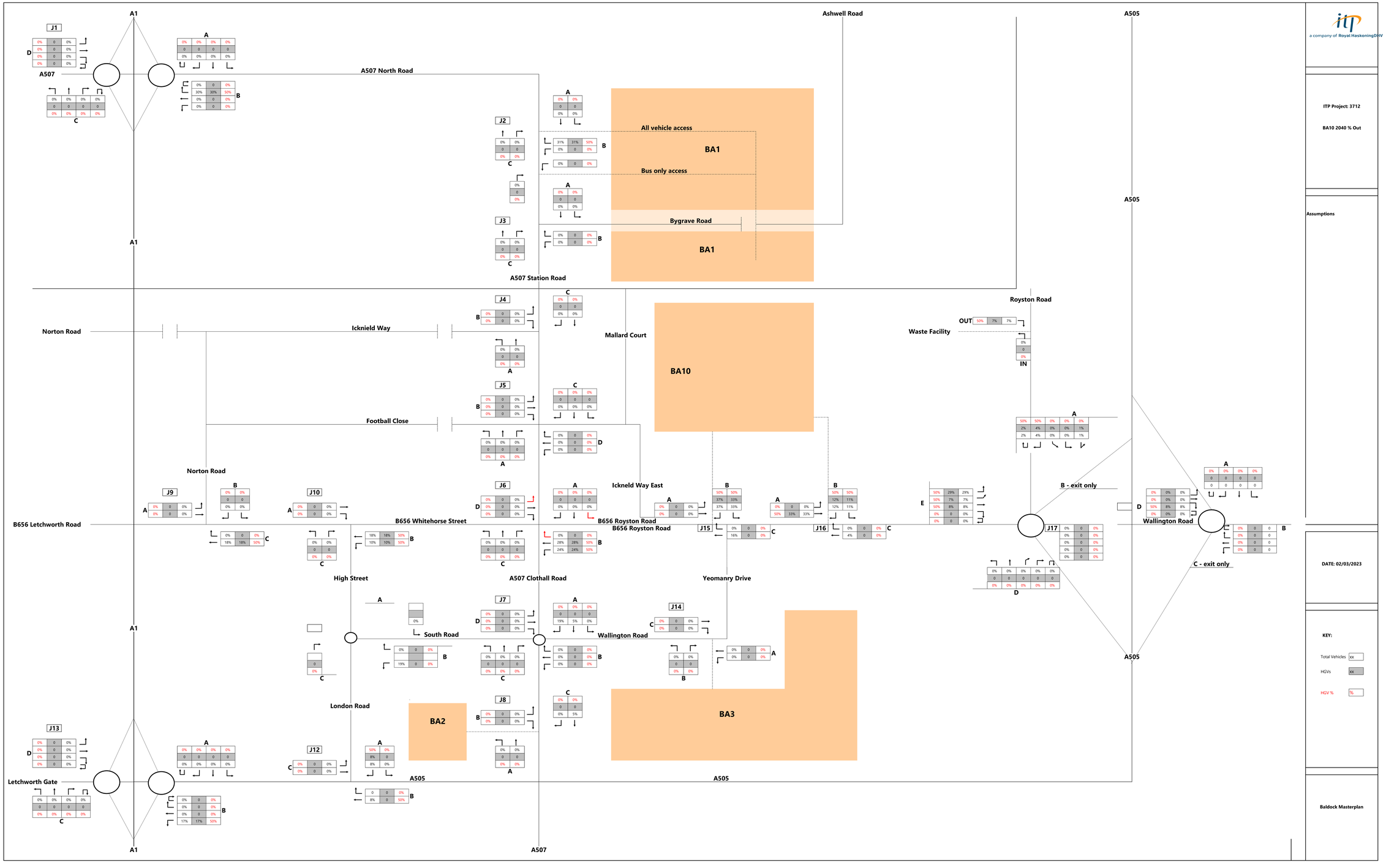
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2040 % Out

Assumptions

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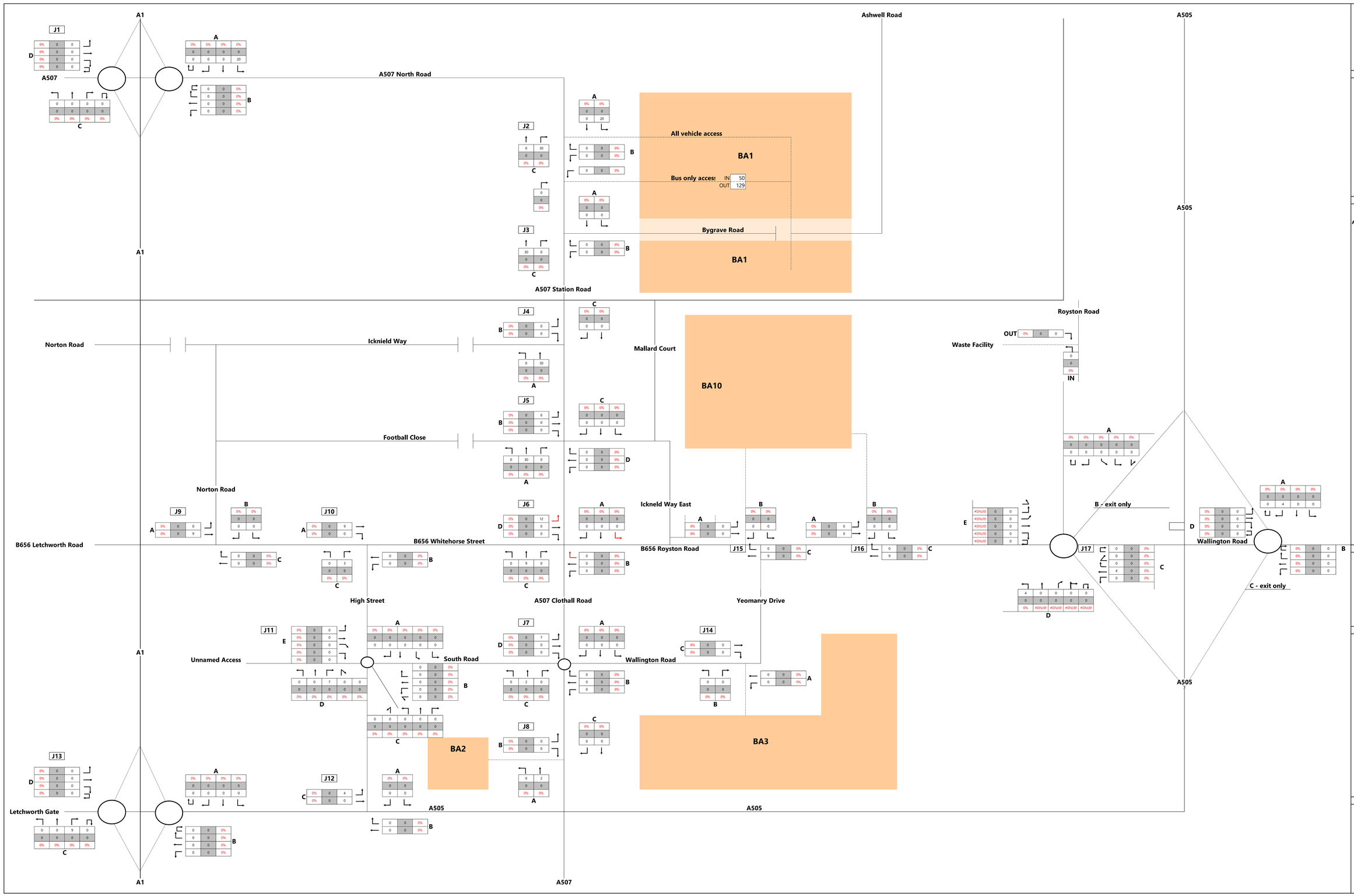
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA1 2033 Assign In AM

Assumptions

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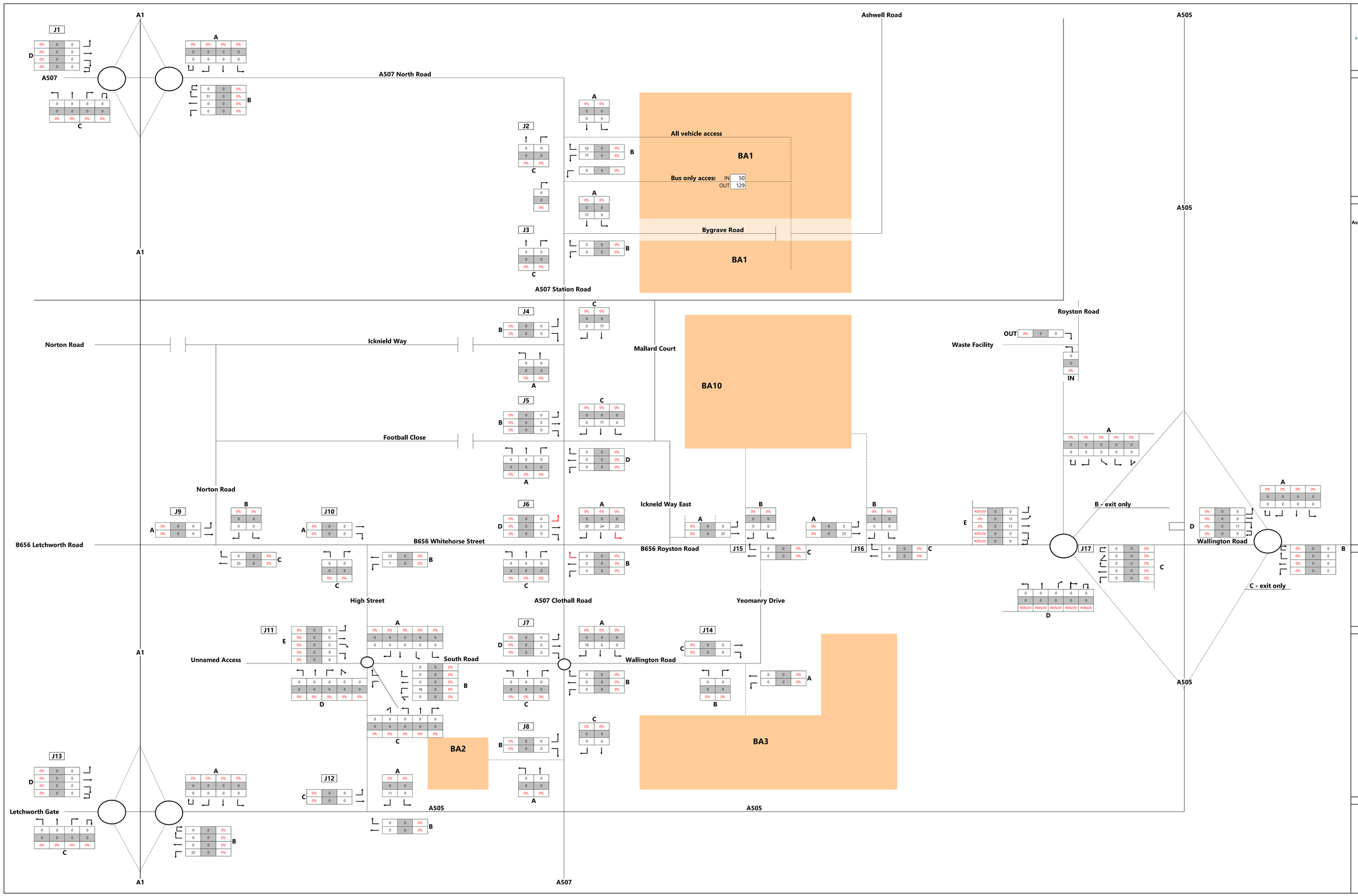
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA1 2033 Assign Out AM

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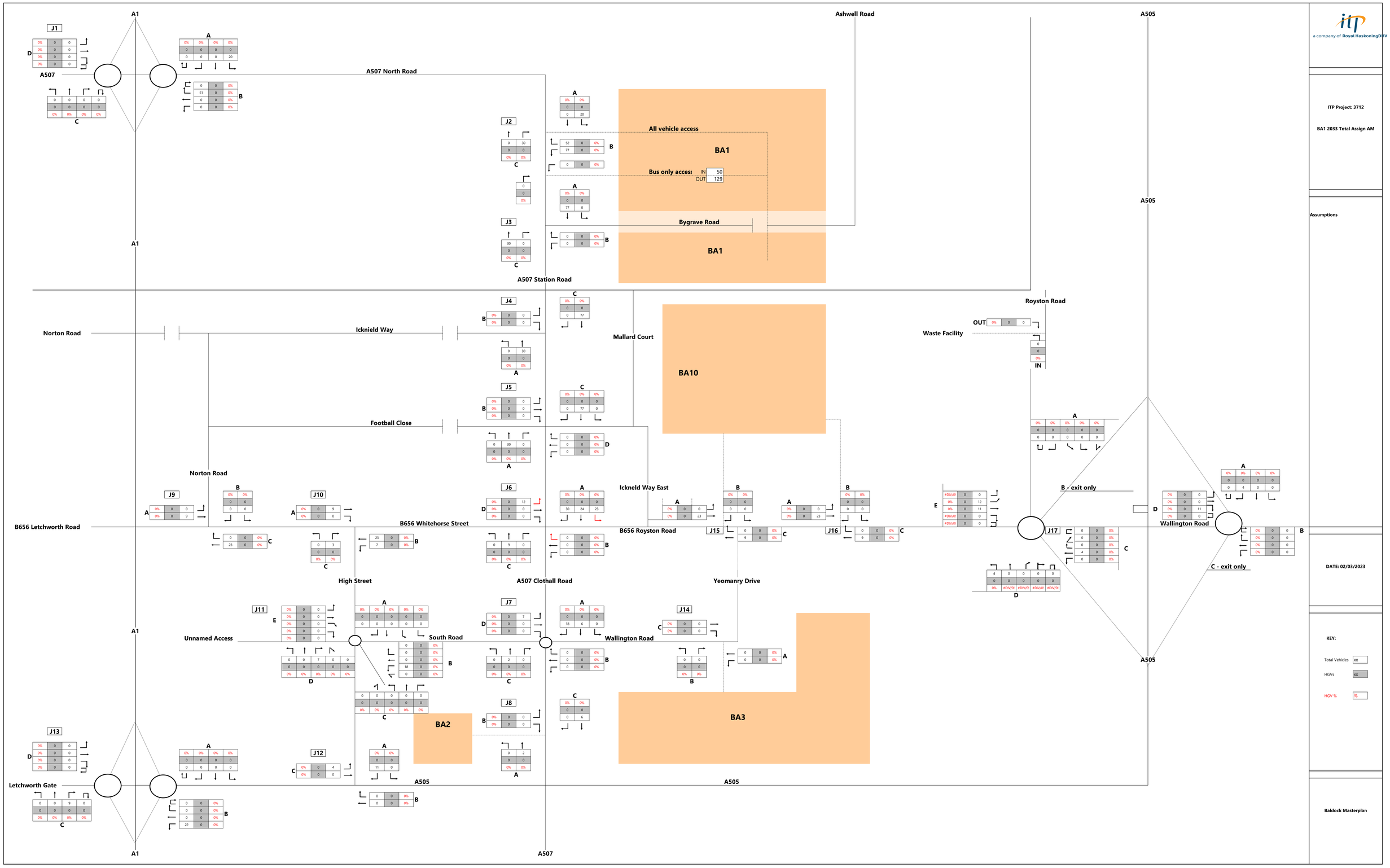
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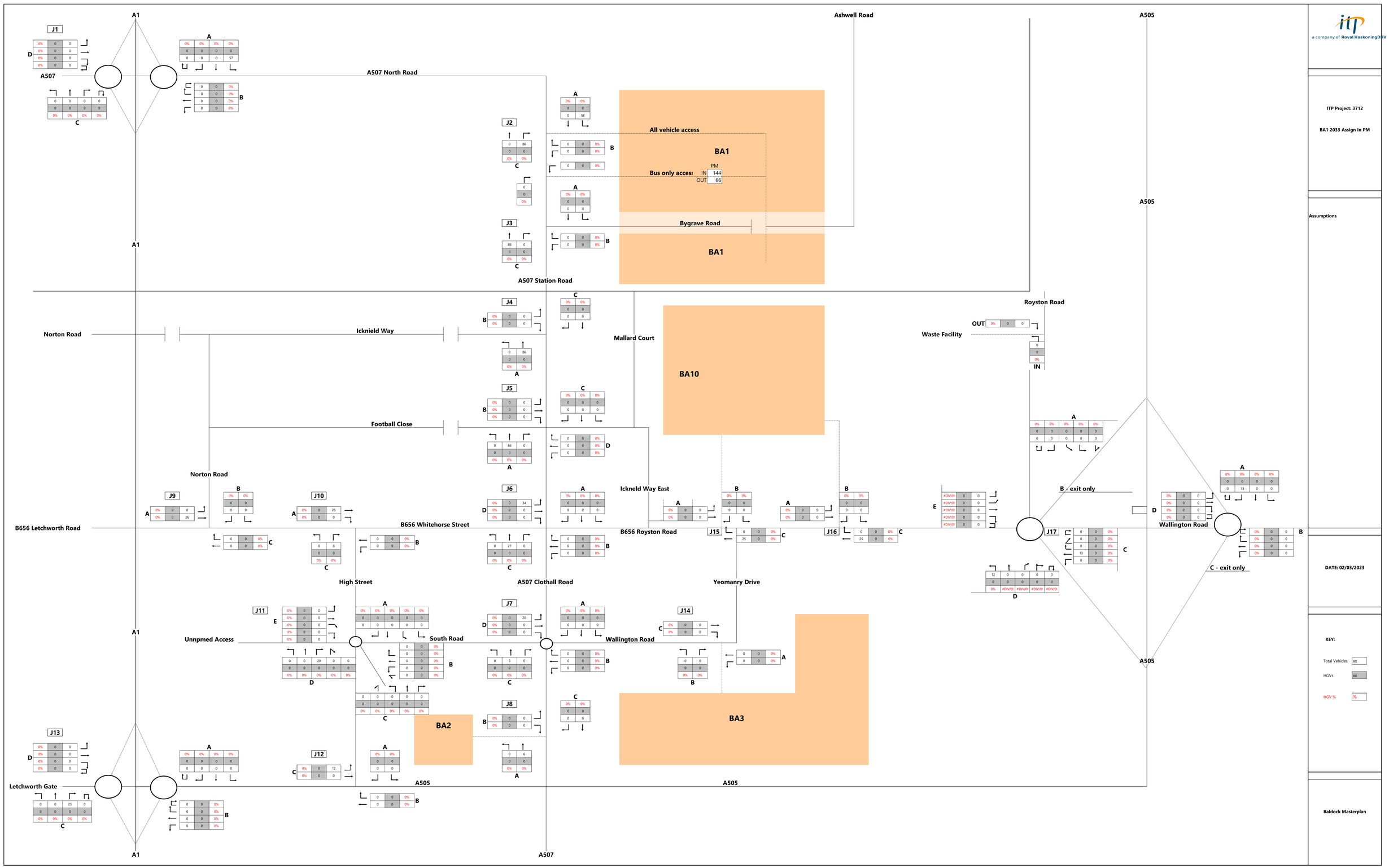
Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan


A1
A507
A507 North Road
Ashwell Road
A505
J1
A
B
C
D
J2
J3
All vehicle access
BA1
Bus only access
IN 50
OUT 129
Bygrave Road
A507 Station Road
Royston Road
OUT
Waste Facility
IN
Norton Road
Icknield Way
Mallard Court
BA10
J4
J5
Football Close
Norton Road
J9
J10
B656 Letchworth Road
B656 Whitehorse Street
J6
Ickneld Way East
B656 Royston Road
J15
J16
J17
B - exit only
Wallington Road
C - exit only
High Street
A507 Clothall Road
Yeomanry Drive
J7
J11
Unnamed Access
South Road
Wallington Road
J14
BA2
BA3
J8
J12
J13
Letchworth Gate
A505
A507
A1
ITP Project: 3712
BA1 2033 Total Assign AM
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV % %
Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA1 2033 Assign In PM

Assumptions

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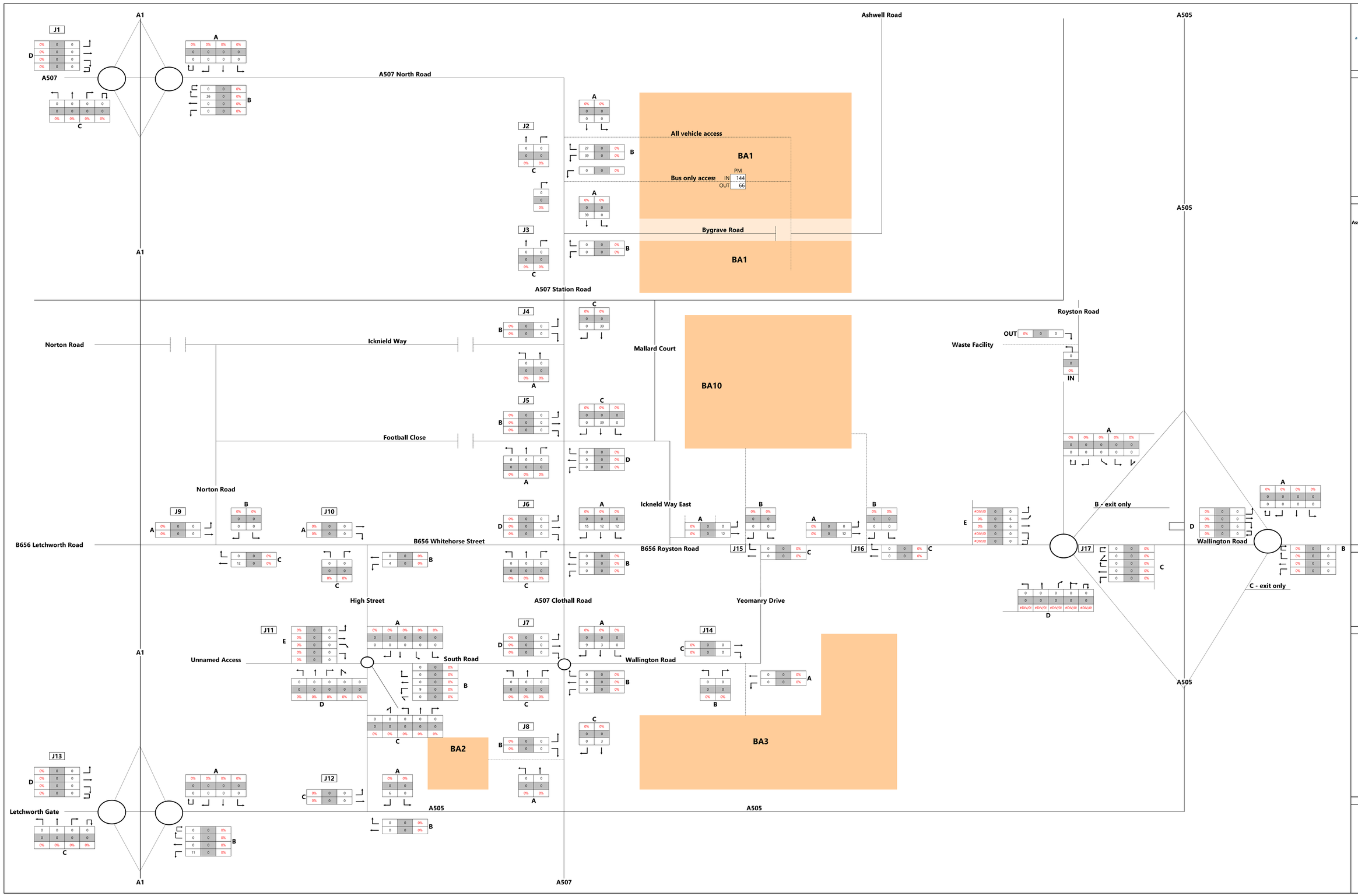
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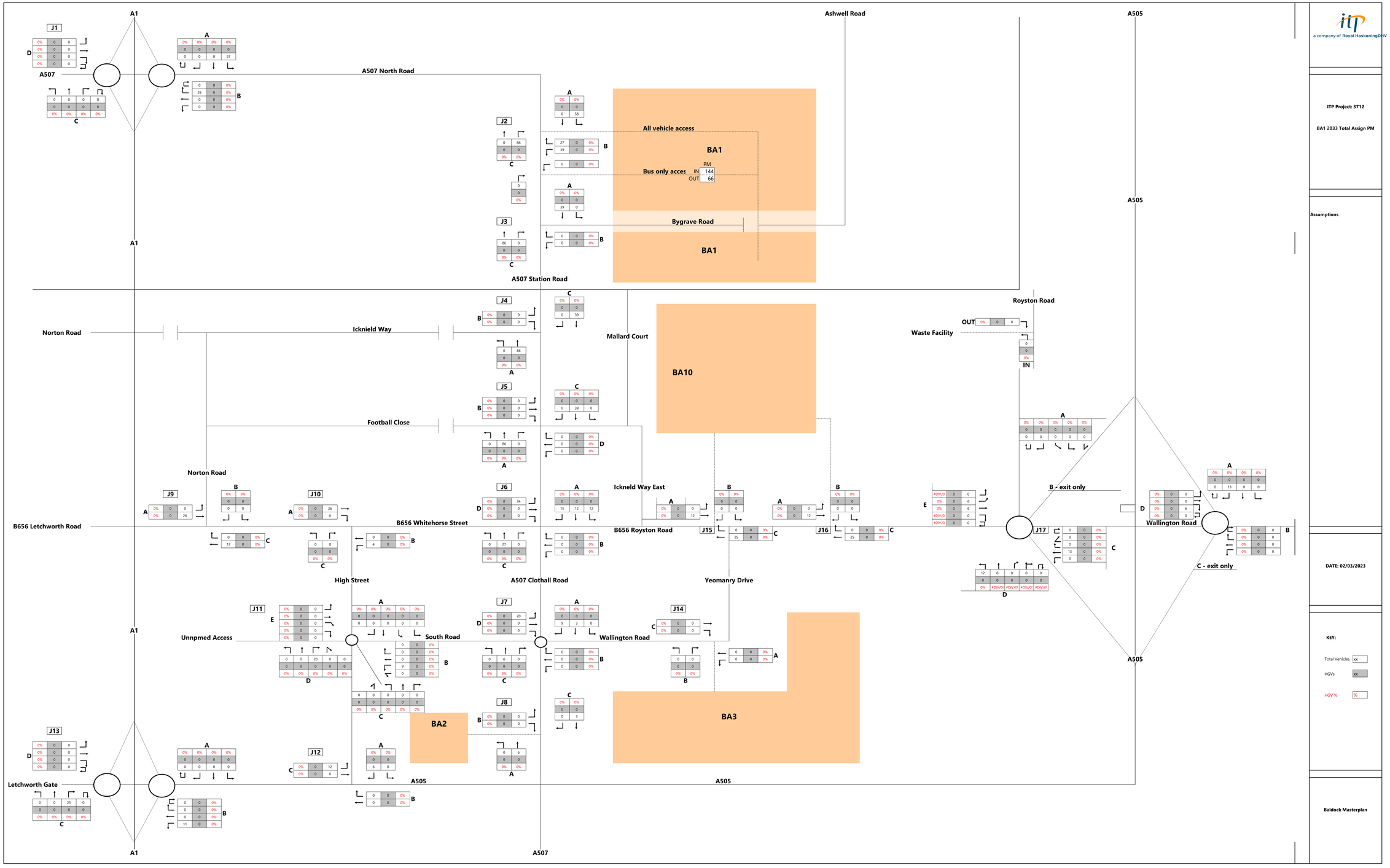
Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan


A1
A507
J1
D
A
B
C
A507 North Road
Ashwell Road
A505
J2
All vehicle access
BA1
PM
Bus only access IN 144
OUT 66
J3
Bygrave Road
A507 Station Road
Royston Road
OUT
Waste Facility
IN
Norton Road
Icknield Way
J4
Mallard Court
BA10
J5
Football Close
Norton Road
J9
B656 Letchworth Road
J10
B656 Whitehorse Street
J6
Ickneld Way East
B656 Royston Road
J15
J16
J17
B - exit only
Wallington Road
C - exit only
High Street
A507 Clothall Road
Yeomanry Drive
J11
Unnamed Access
South Road
J7
Wallington Road
J14
BA2
J8
BA3
J13
Letchworth Gate
J12
A505
A507
ITP Project: 3712
BA1 2033 Assign Out PM
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV %
Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA1 2033 Total Assign PM

Assumptions

DATE: 02/03/2023

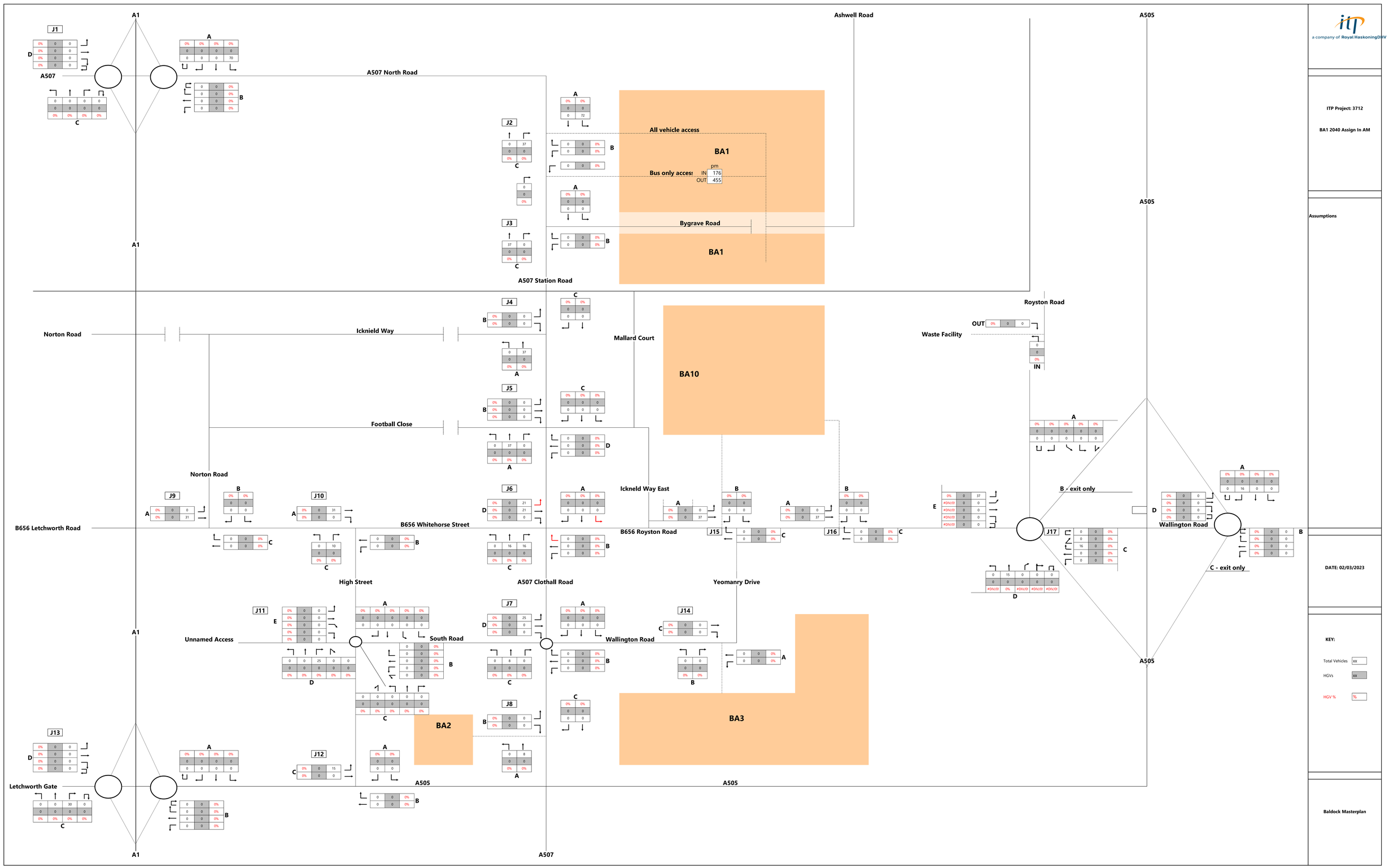
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HGVs xx

HGV % %

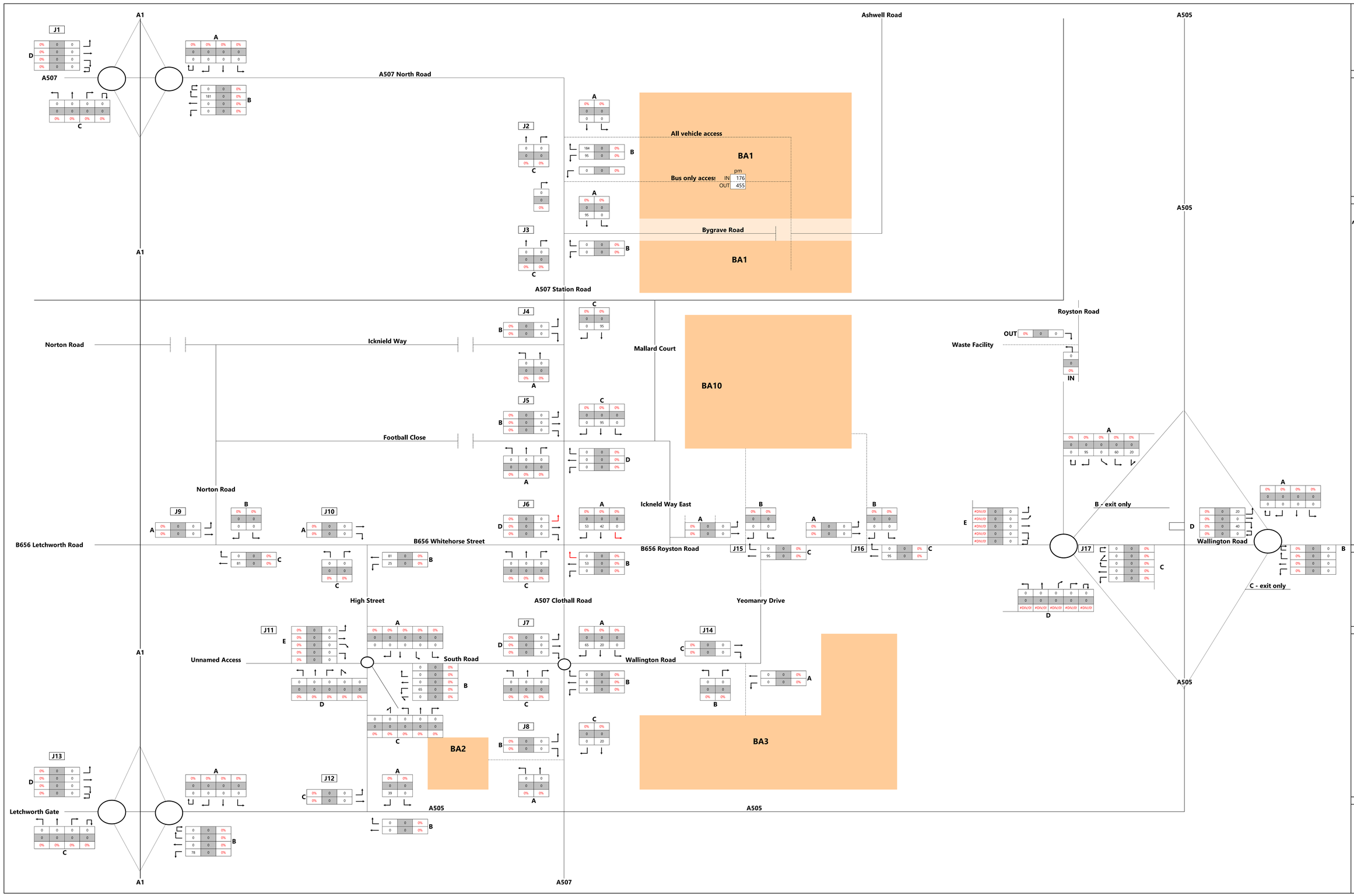
Baldock Masterplan



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ITP Project: 3712

BA1 2040 Assign In AM



itp
a company of Royal HaskoningDHV

ITP Project: 3712

BA1 2040 Assign Out AM

Assumptions

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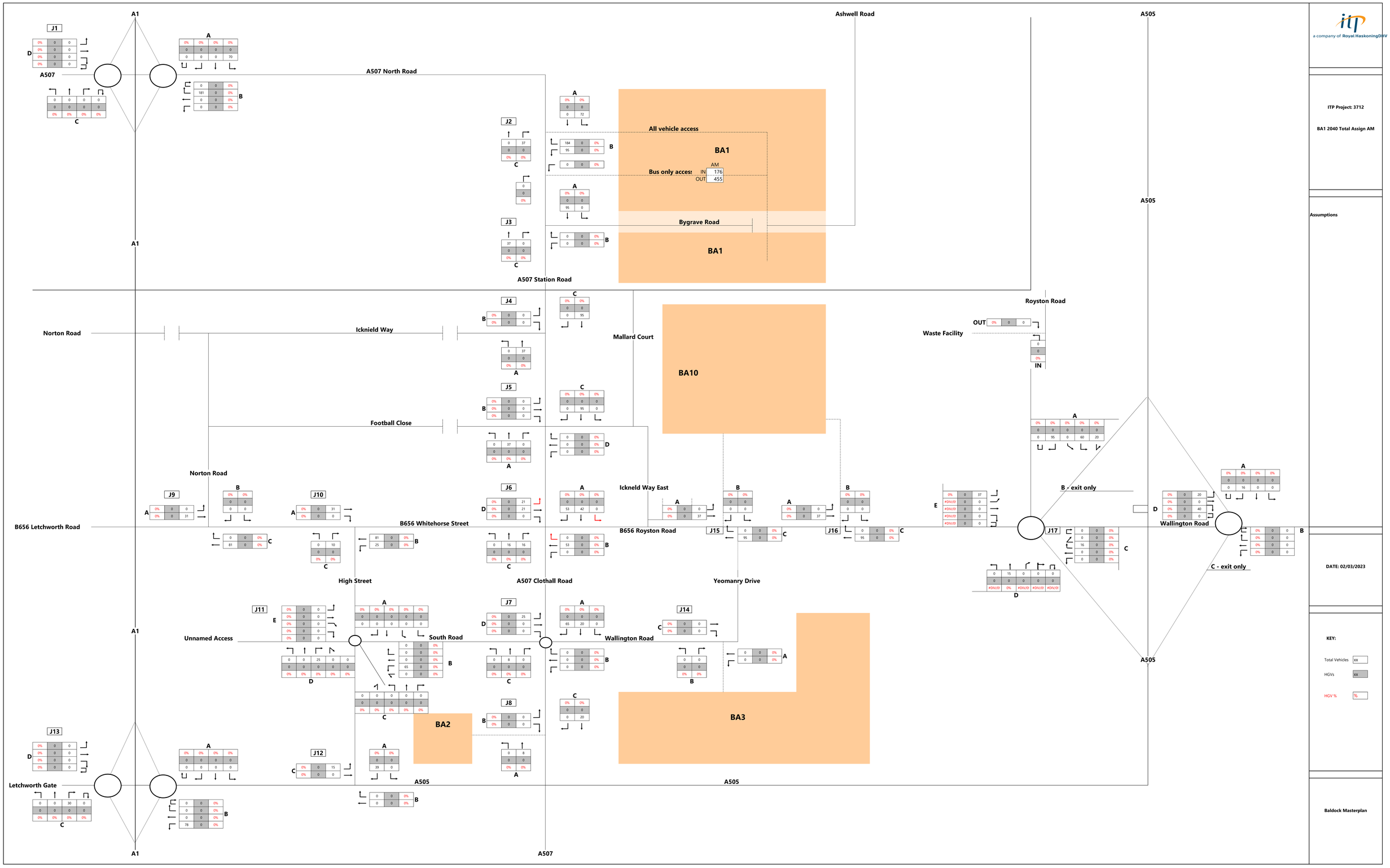
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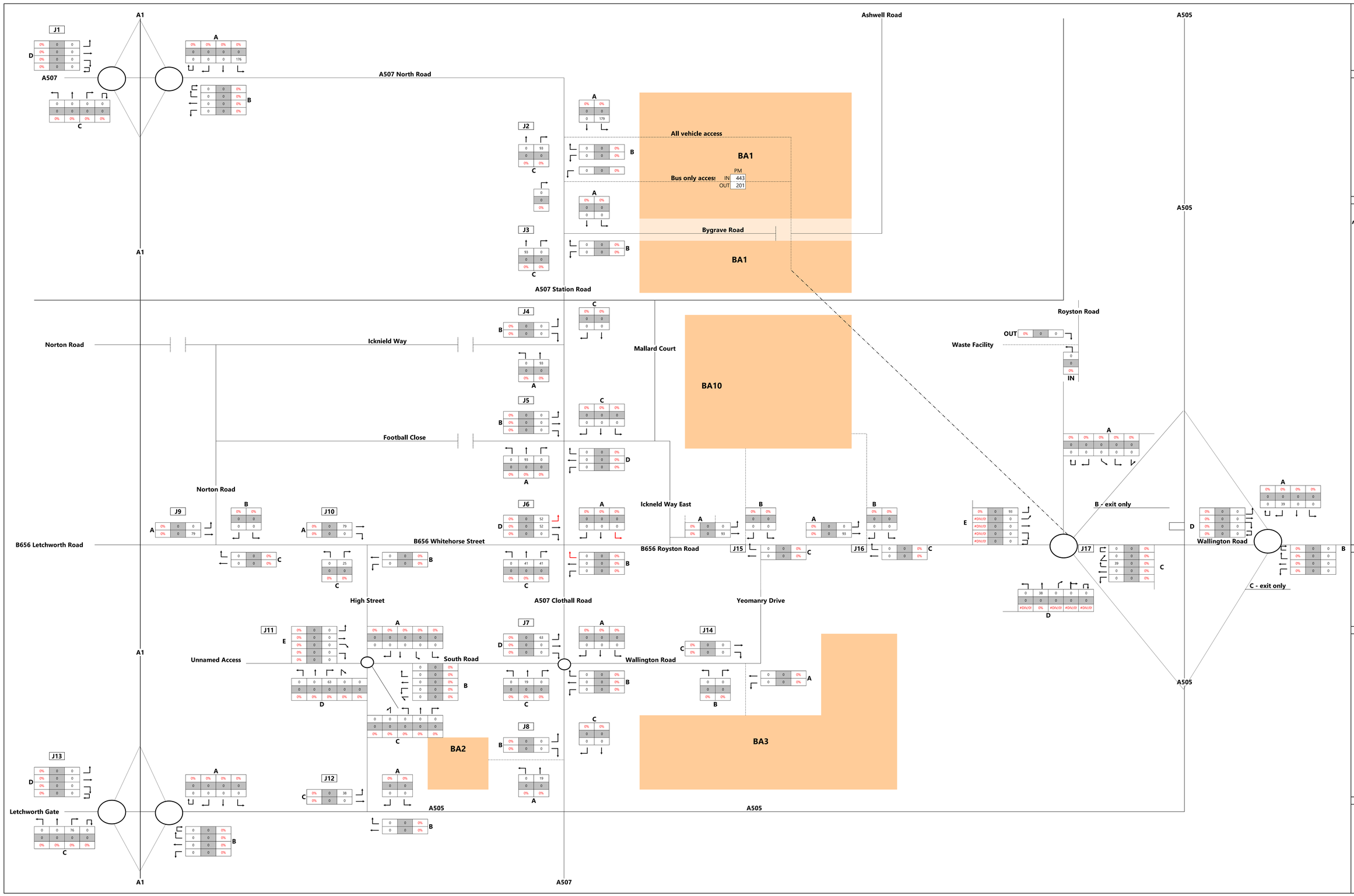
Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan


A1
A507
A507 North Road
Ashwell Road
A505
A505
A1
A507 Station Road
Norton Road
Icknield Way
Mallard Court
Royston Road
Waste Facility
OUT
IN
All vehicle access
BA1
Bus only access
AM
IN 176
OUT 455
Bygrave Road
BA1
BA10
Football Close
Norton Road
Ickneld Way East
B - exit only
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
Wallington Road
C - exit only
High Street
A507 Clothall Road
Yeomanry Drive
A1
Unnamed Access
South Road
Wallington Road
A505
BA2
BA3
Letchworth Gate
A505
A1
A507
J1
J2
J3
J4
J5
J6
J7
J8
J9
J10
J11
J12
J13
J14
J15
J16
J17
ITP Project: 3712
BA1 2040 Total Assign AM
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV % %
Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA1 2040 Assign In PM

Assumptions

DATE: 02/03/2023

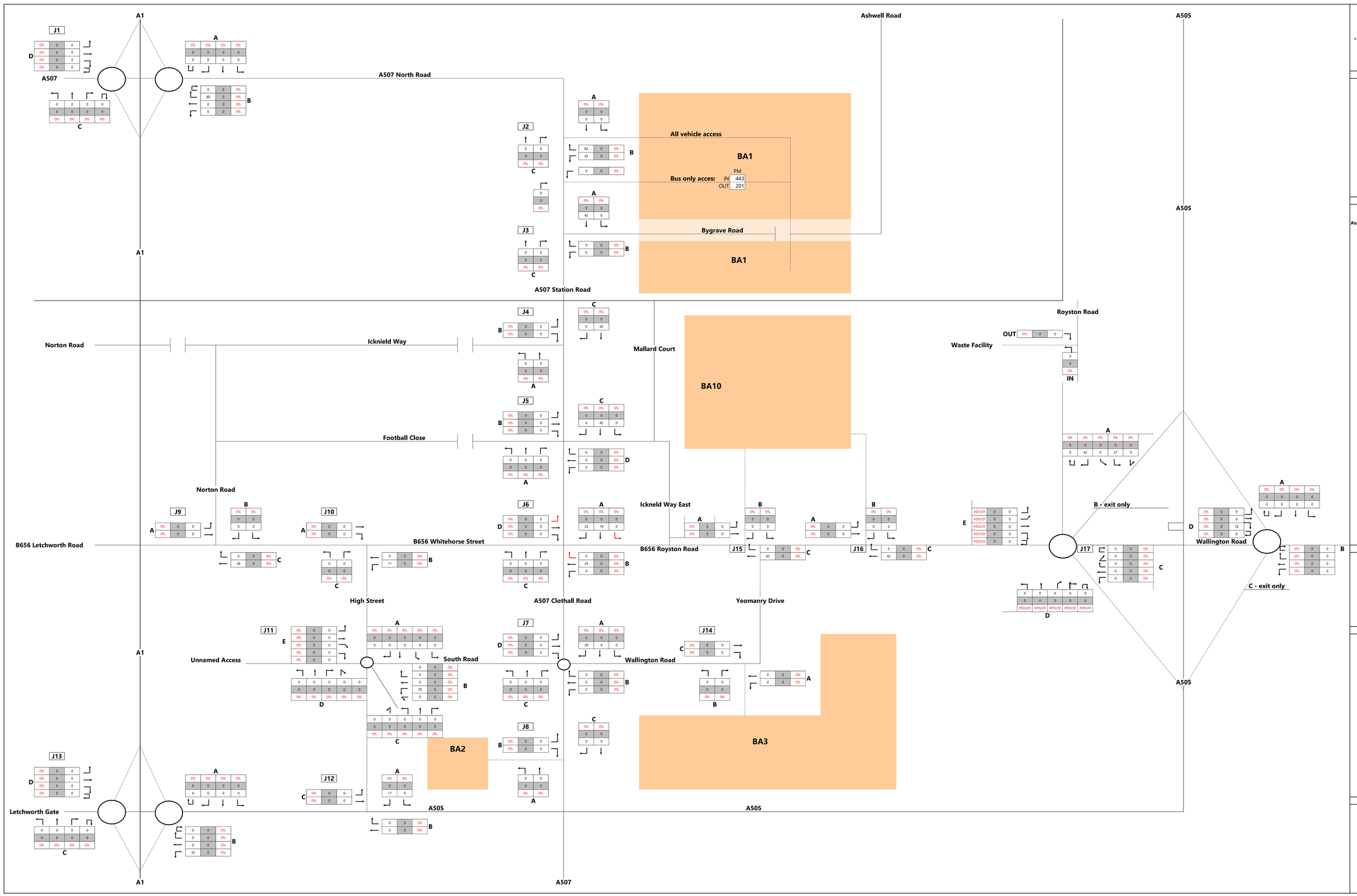
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA1 2040 Assign Out PM

Assumptions

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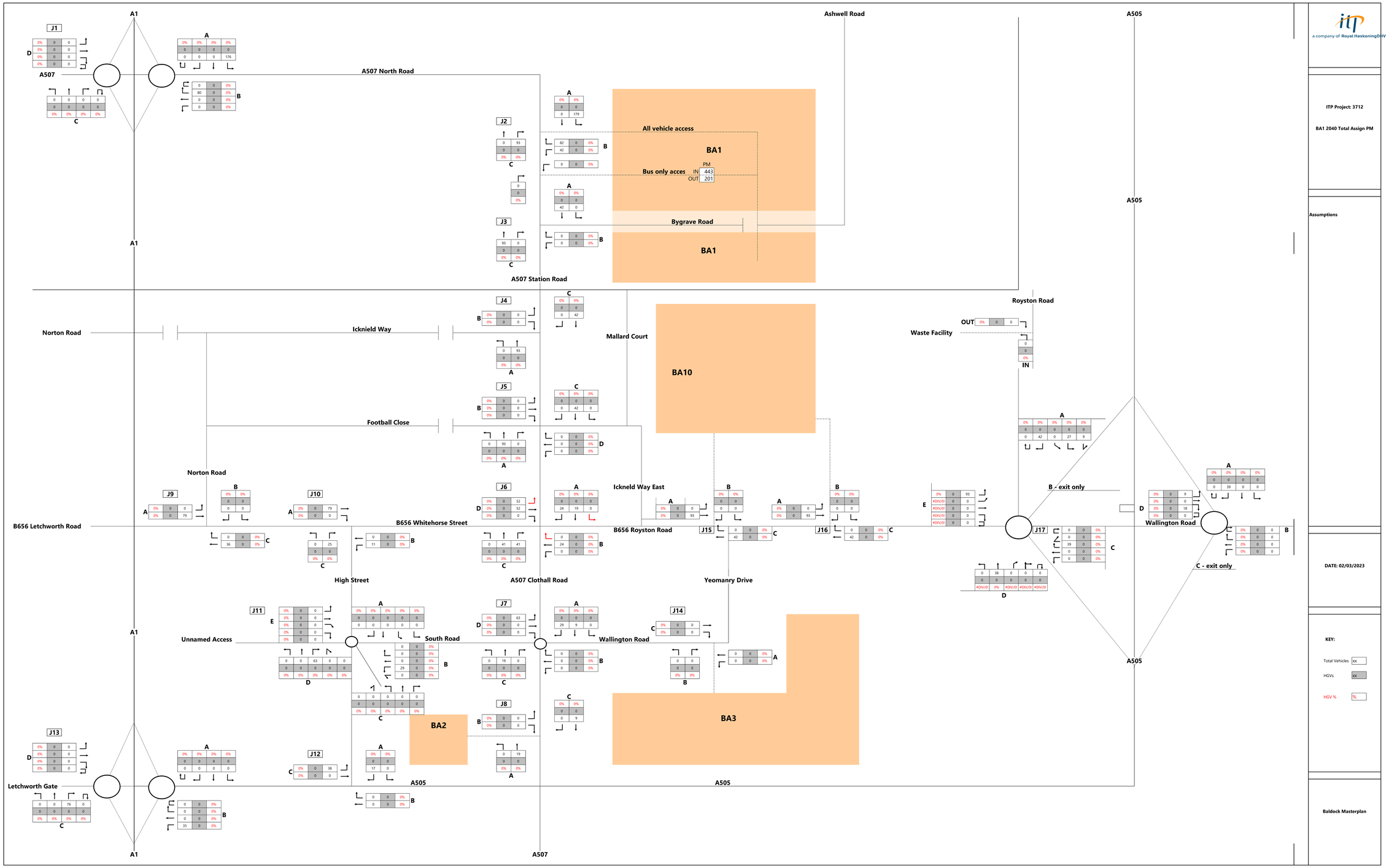
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA1 2040 Total Assign PM

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DATE: 02/03/2023

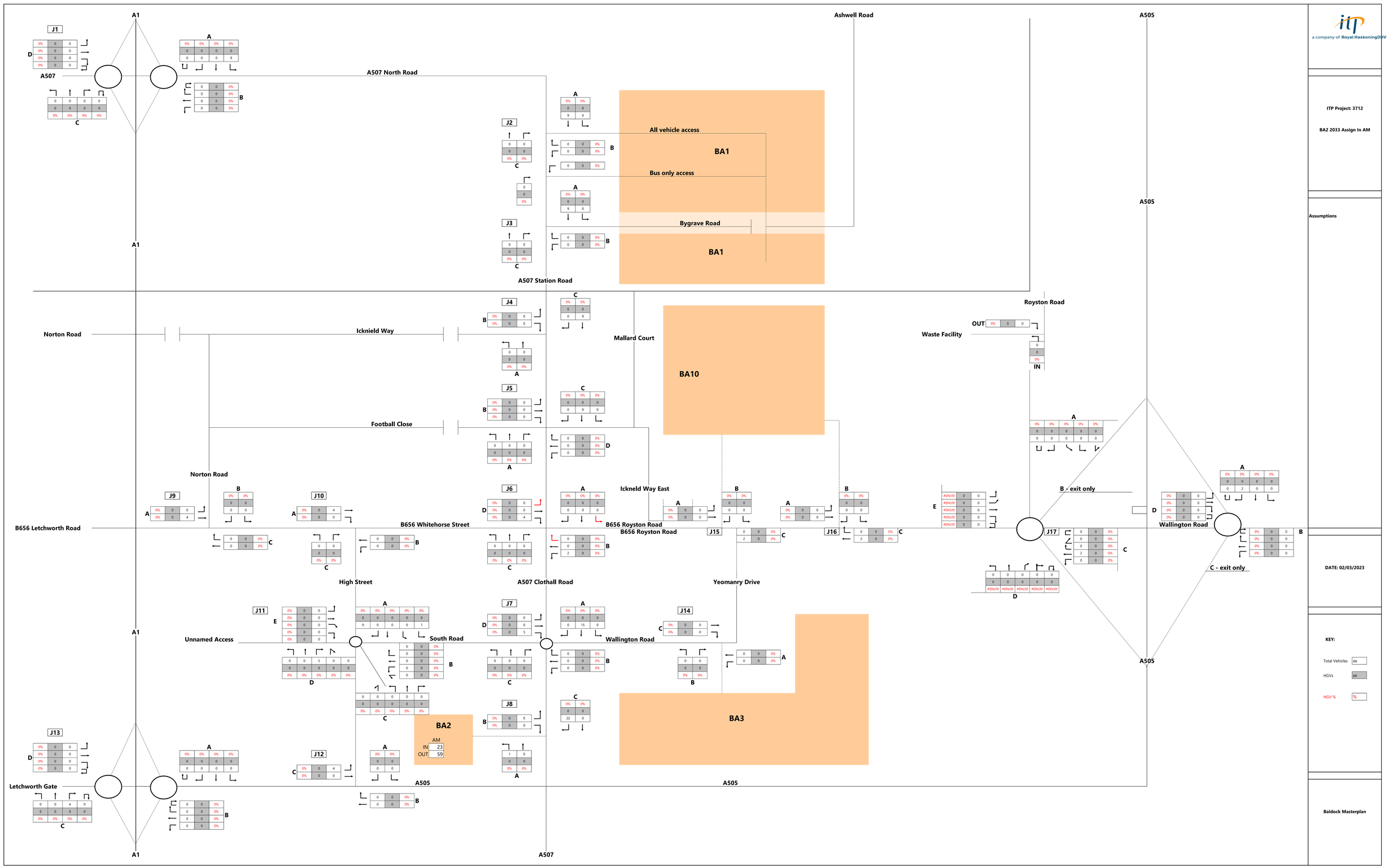
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

BA2 2033 Assign In AM

Assumptions

DATE: 02/03/2023

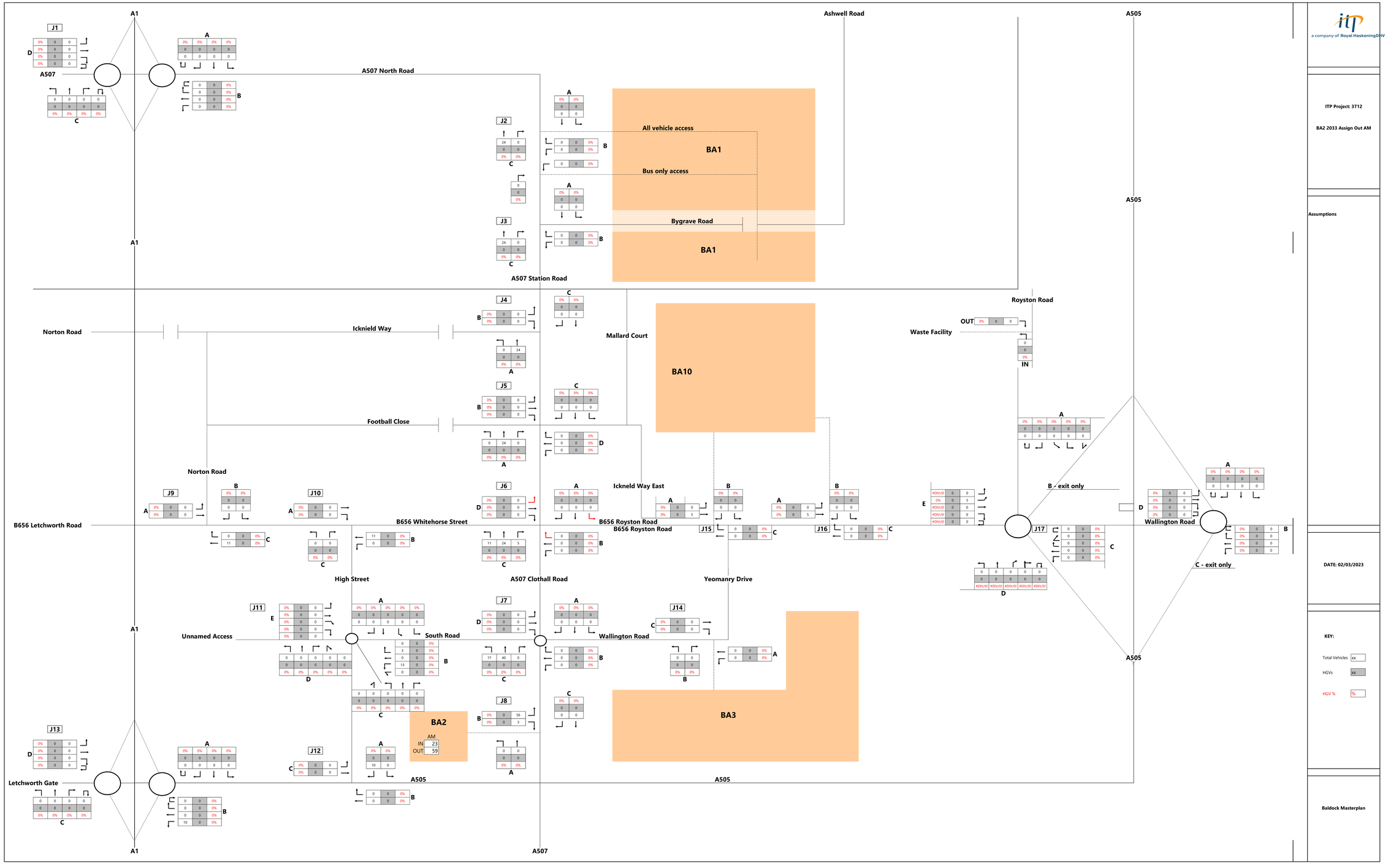
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA2 2033 Assign Out AM

Assumptions

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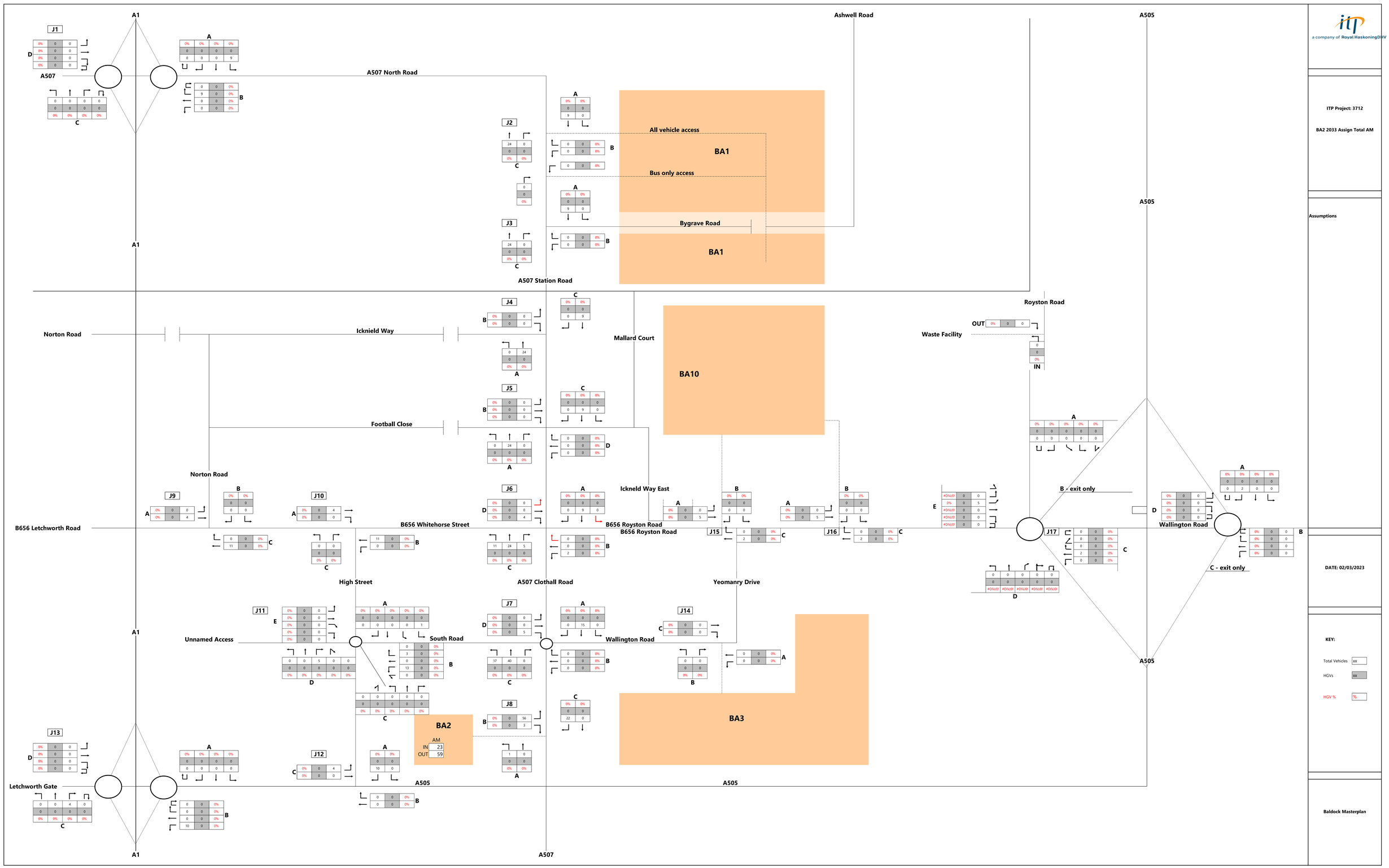
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

BA2 2033 Assign Total AM

Assumptions

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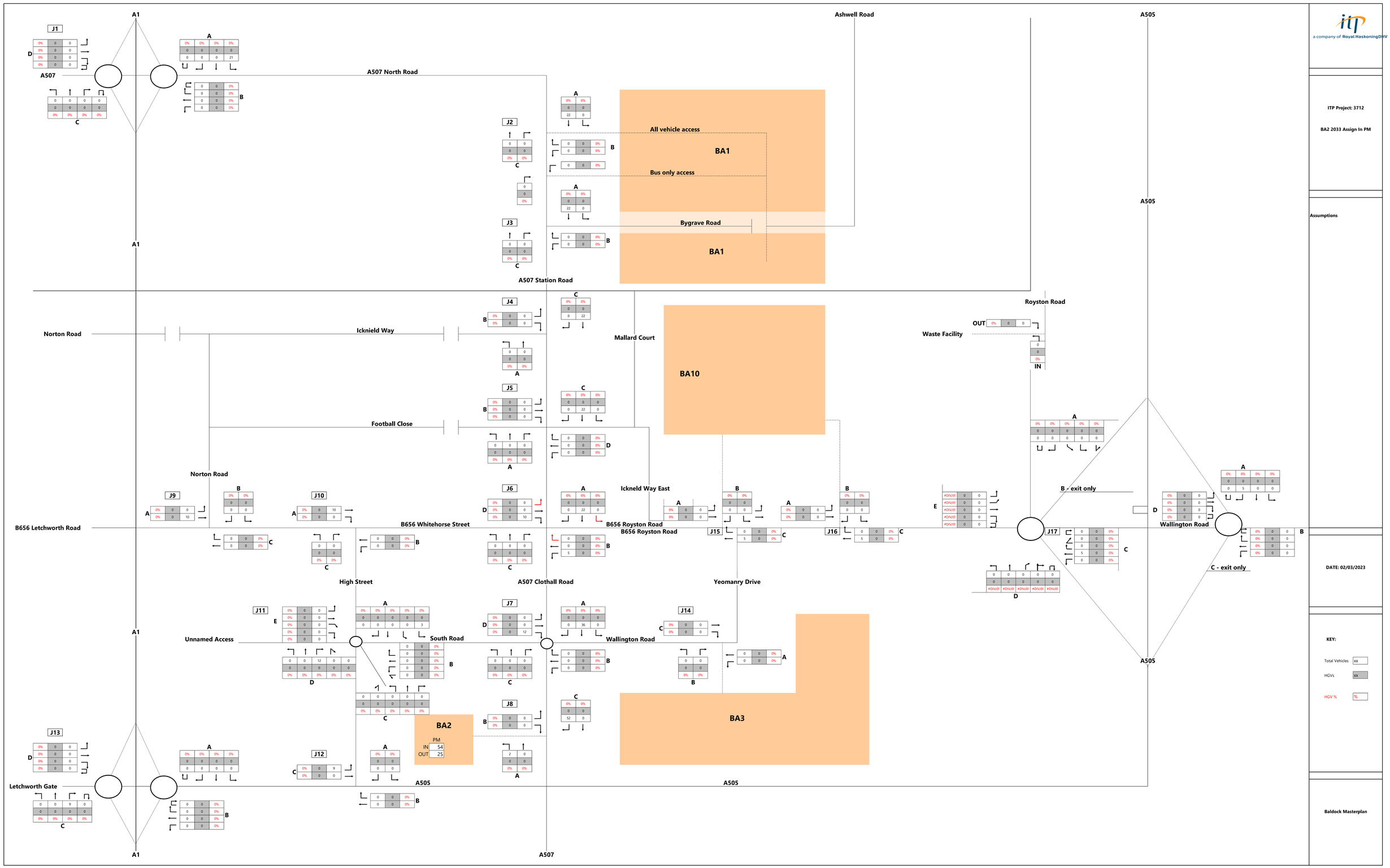
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

BA2 2033 Assign In PM

Assumptions

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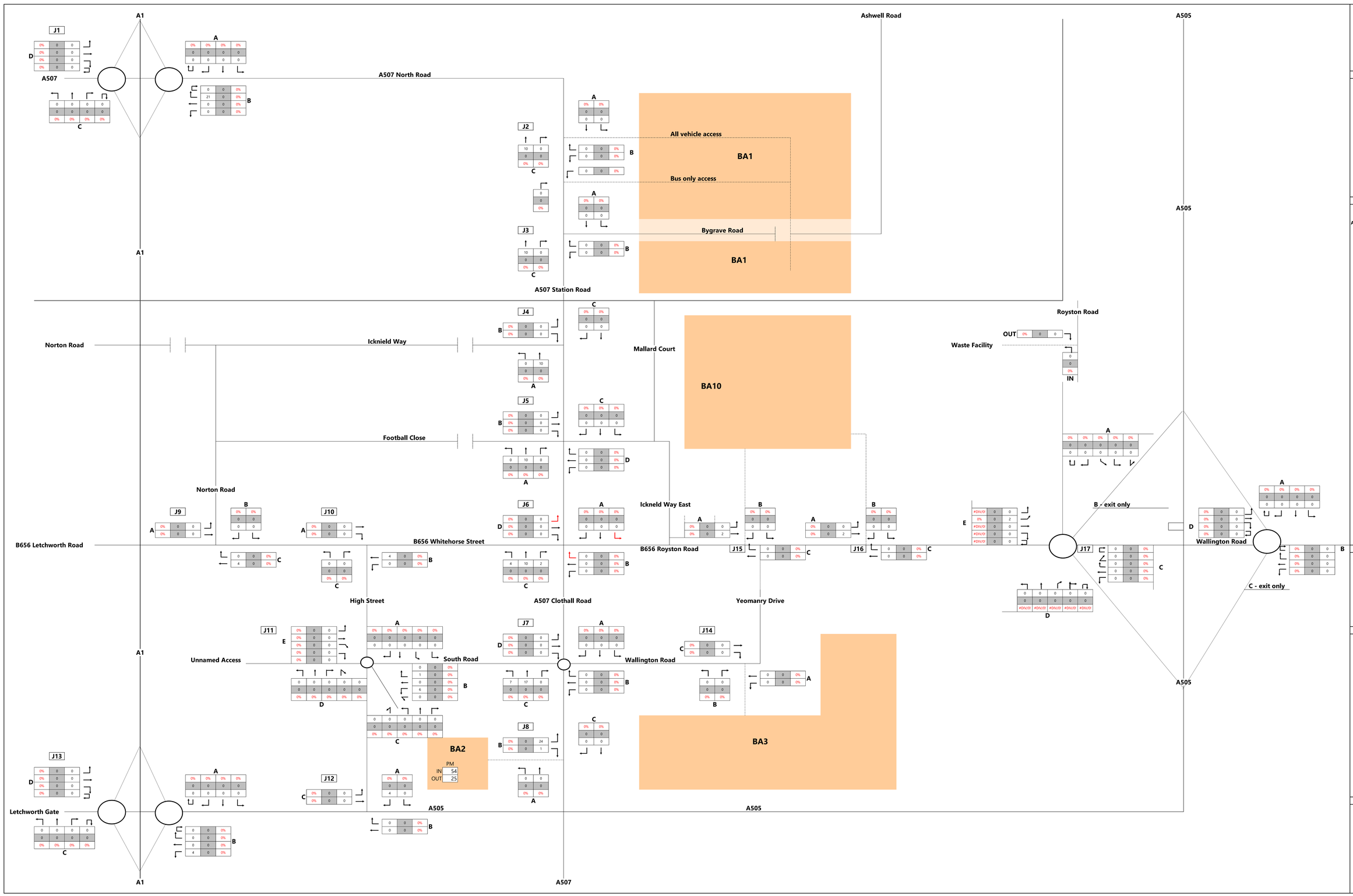
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA2 2033 Assign Out PM

Assumptions

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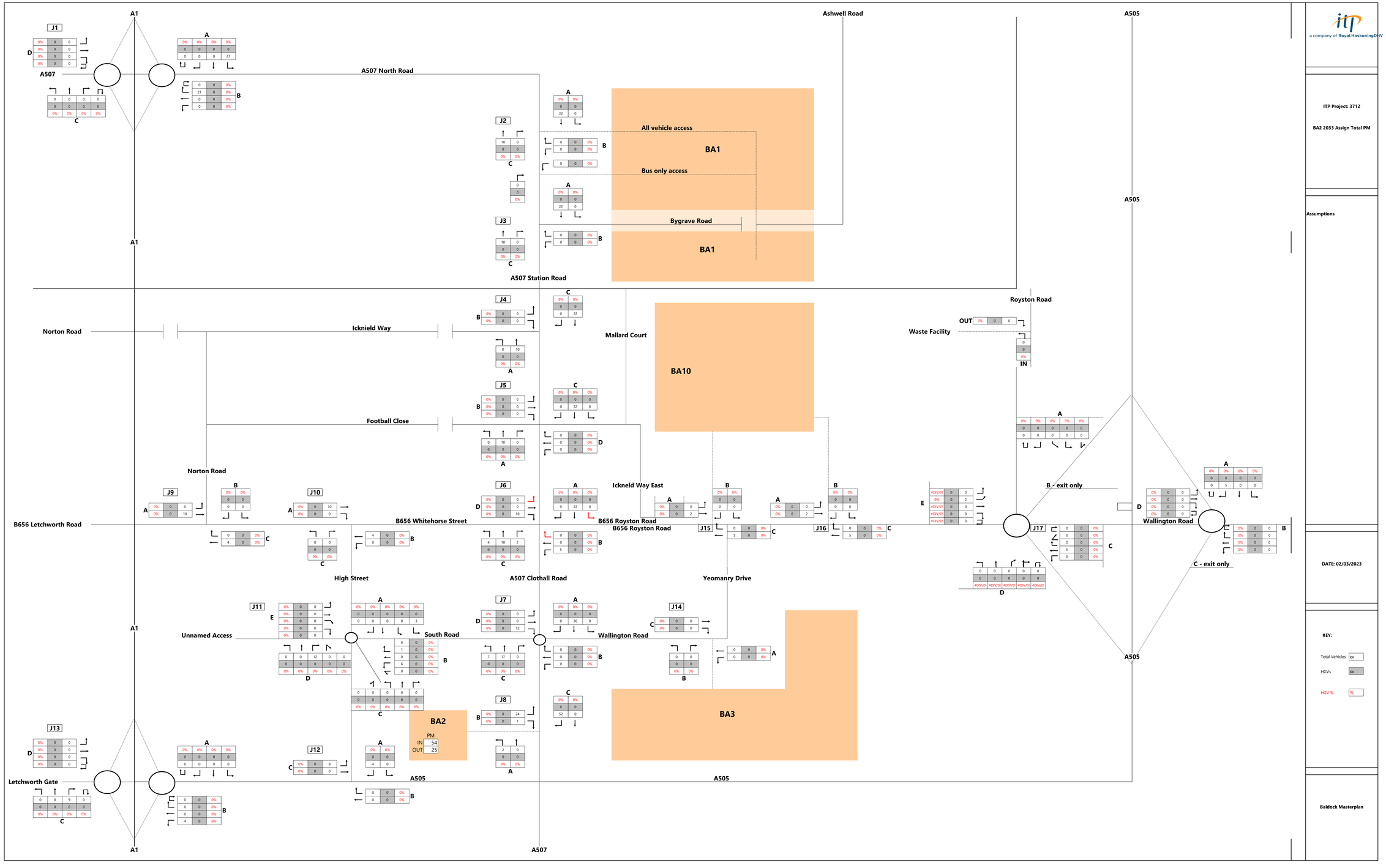
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA2 2033 Assign Total PM

Assumptions

DATE: 02/03/2023

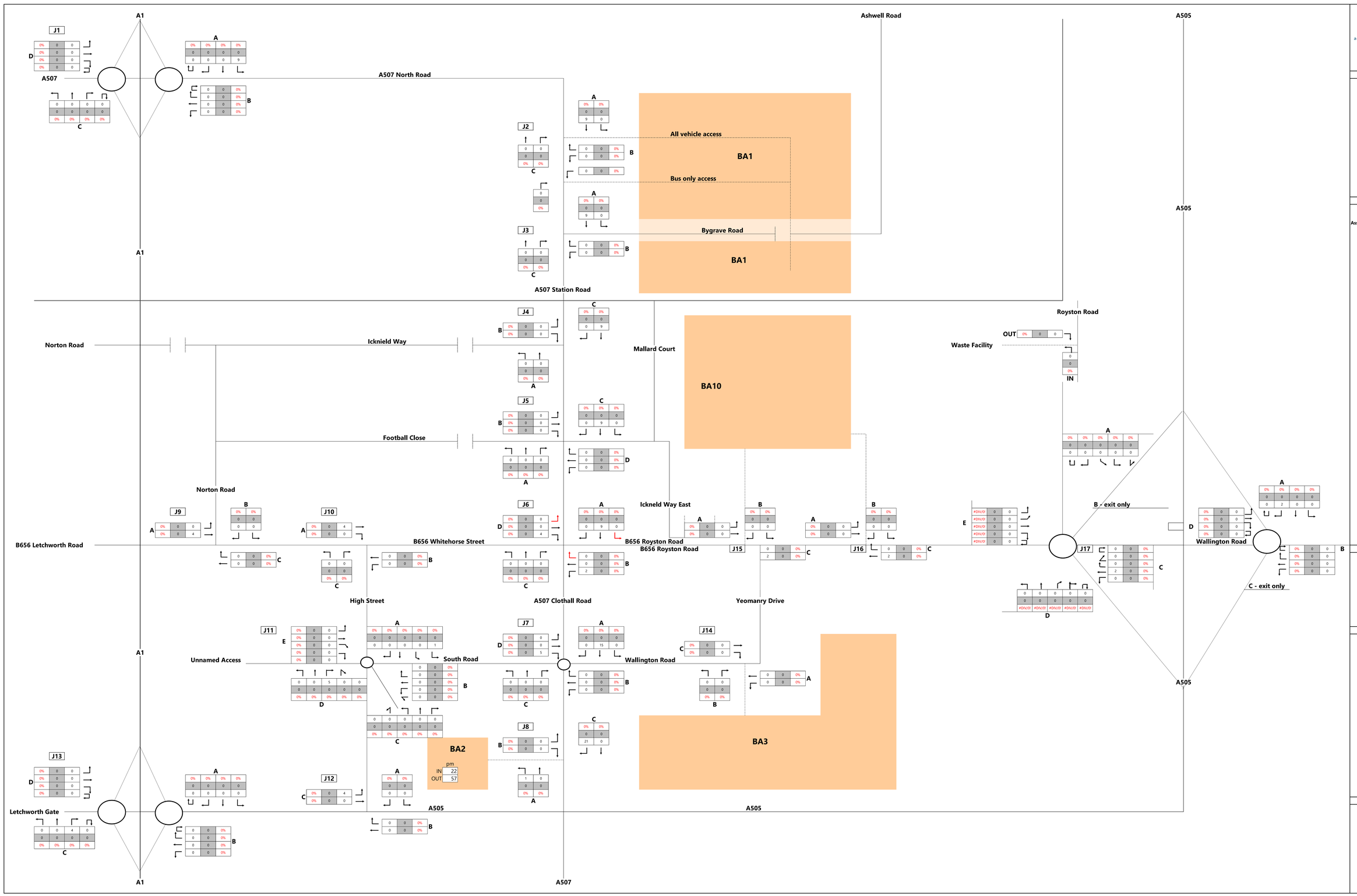
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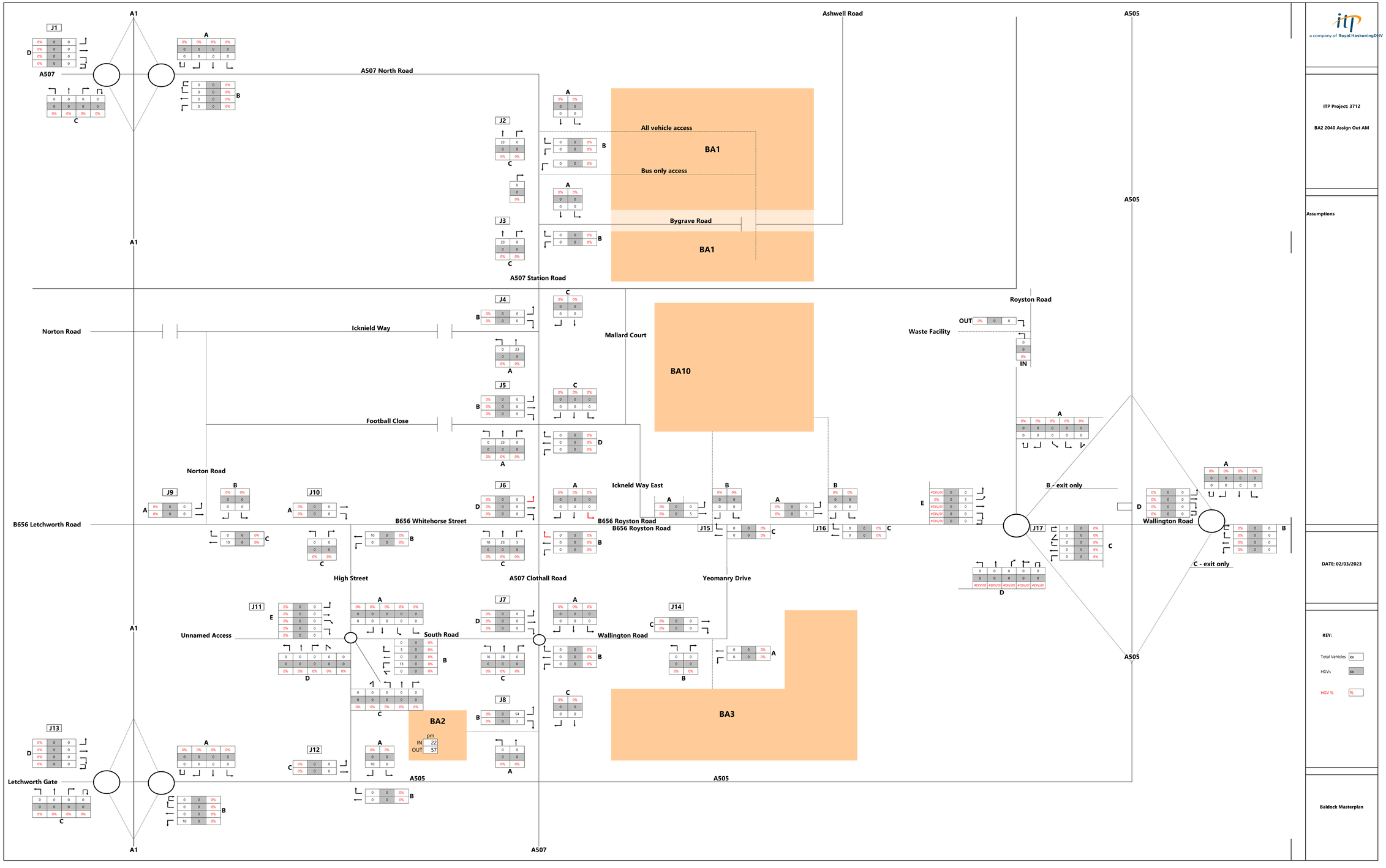
Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan


A1
A507
J1
D
A
B
C
A507 North Road
Ashwell Road
A505
J2
All vehicle access
BA1
Bus only access
J3
Bygrave Road
BA1
A507 Station Road
A505
Royston Road
OUT
Waste Facility
IN
Norton Road
Icknield Way
J4
Mallard Court
BA10
J5
Football Close
Norton Road
J9
B656 Letchworth Road
J10
B656 Whitehorse Street
J6
Ickneld Way East
B656 Royston Road
B656 Royston Road
J15
J16
J17
B - exit only
Wallington Road
C - exit only
High Street
A507 Clothall Road
Yeomanry Drive
J11
Unnamed Access
South Road
J7
J14
Wallington Road
BA2
pm
IN 22
OUT 57
J8
BA3
J13
Letchworth Gate
J12
A505
A505
A1
A507
ITP Project: 3712
BA2 2033 Assign In AM
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV % %
Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA2 2040 Assign Out AM

Assumptions

DATE: 02/03/2023

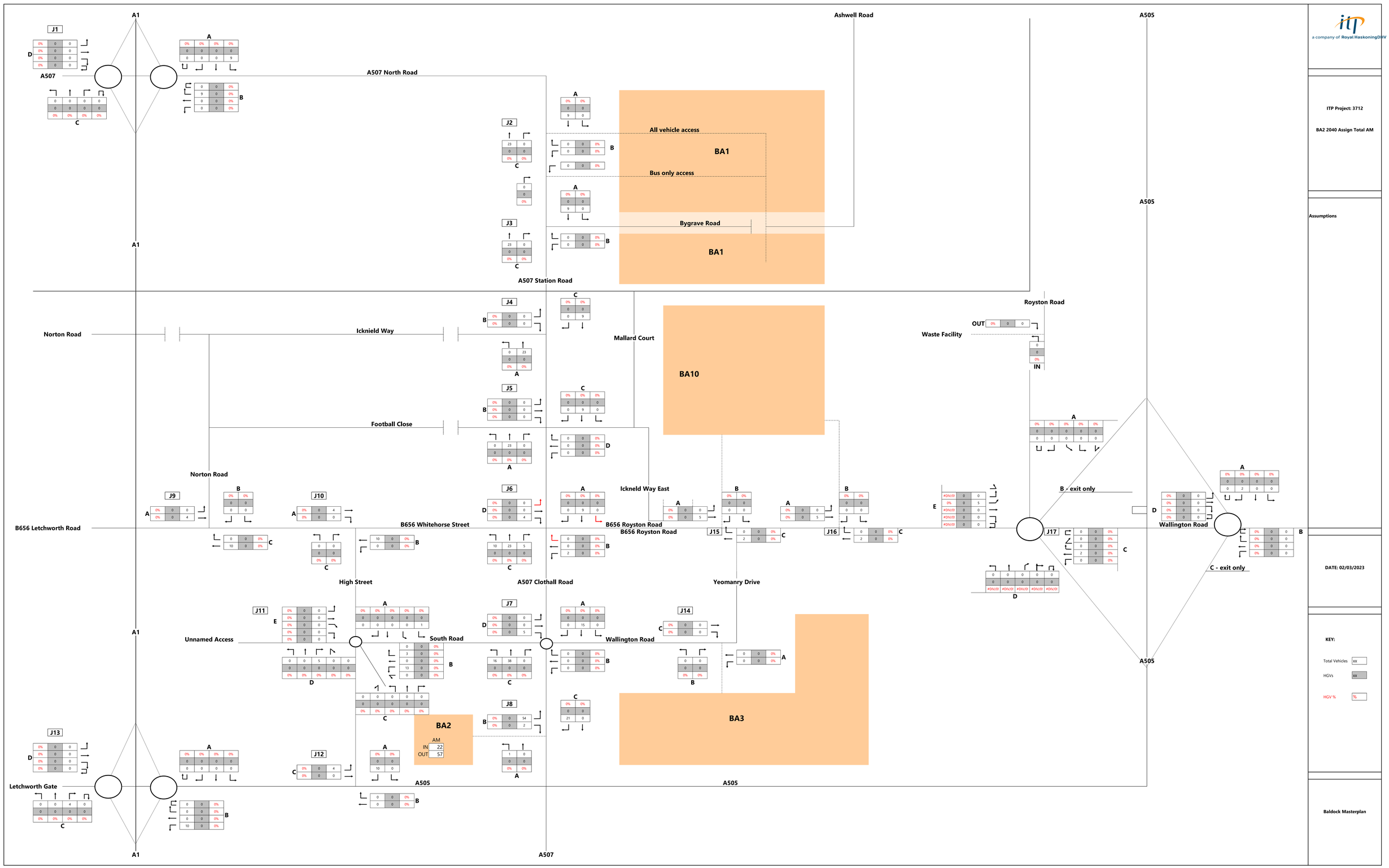
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA2 2040 Assign Total AM

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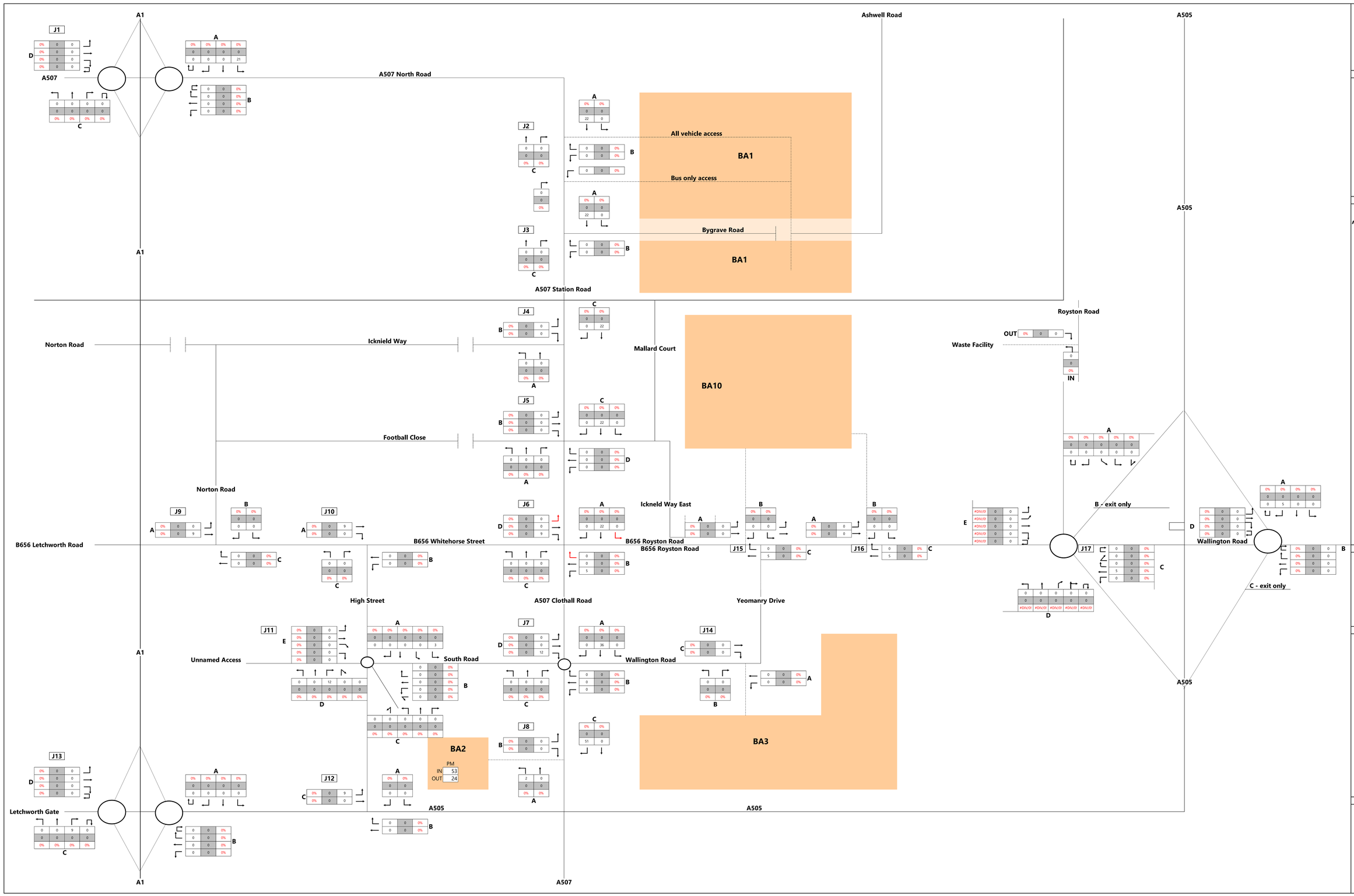
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA2 2040 Assign In PM

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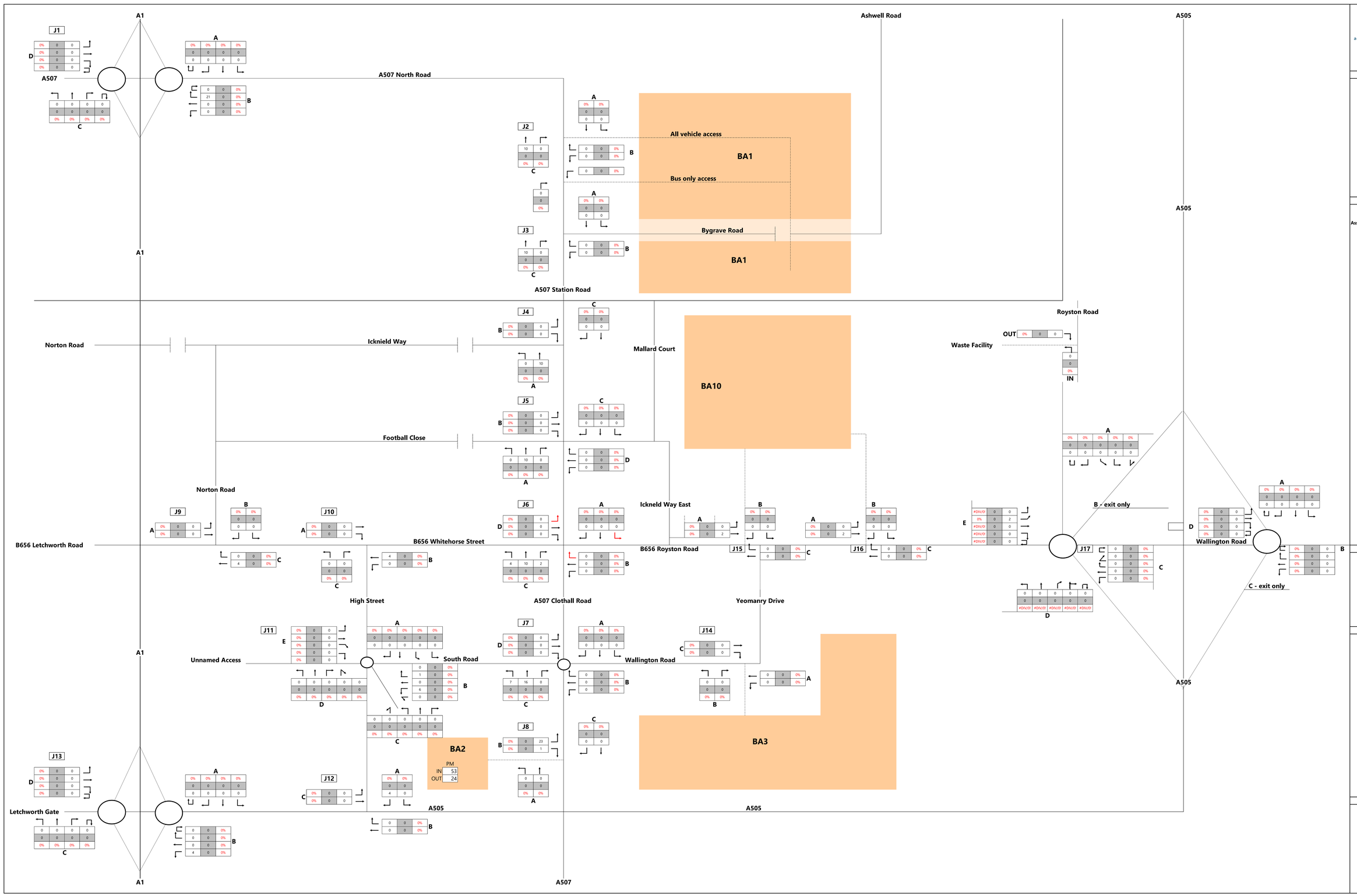
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA2 2040 Assign Out PM

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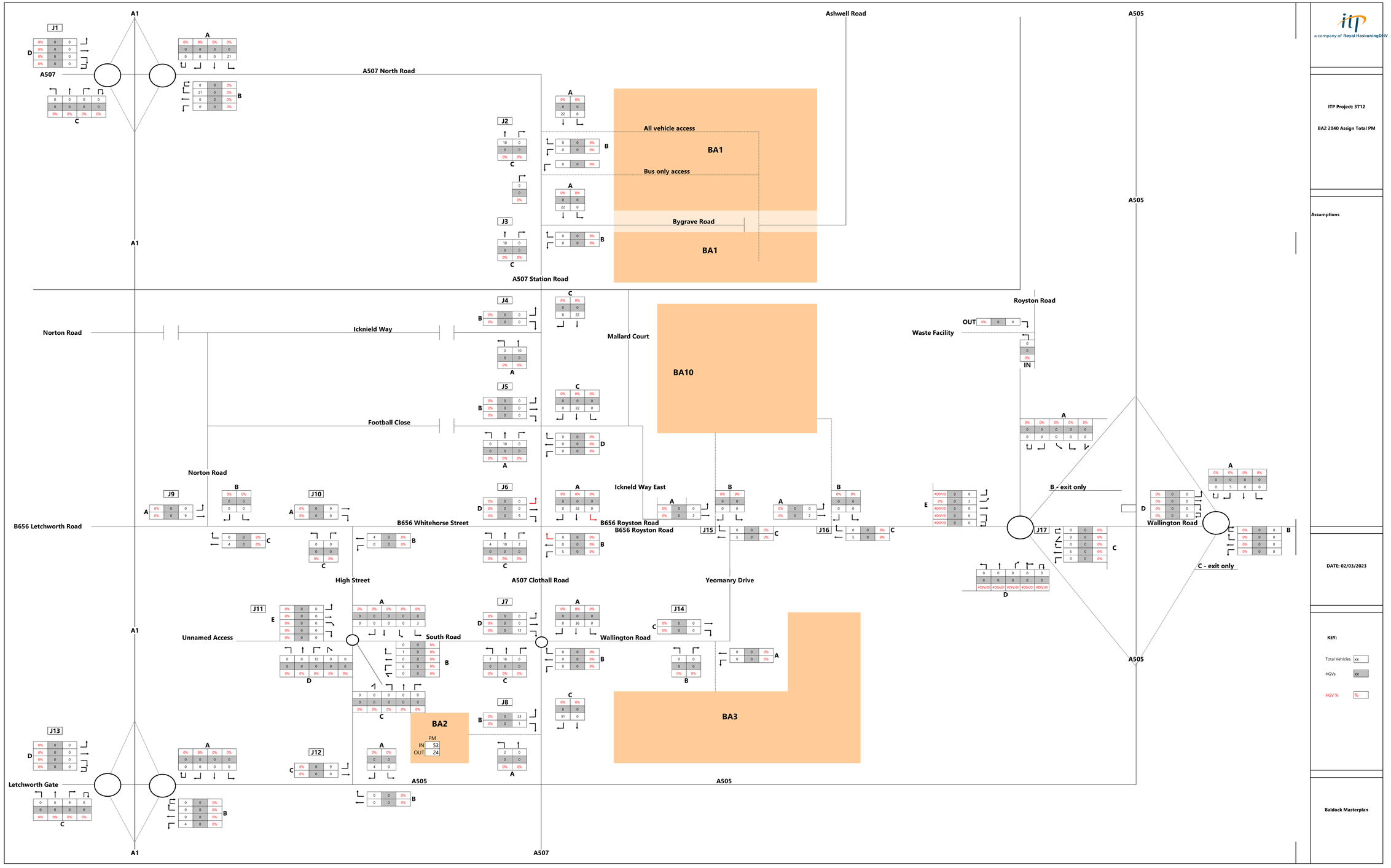
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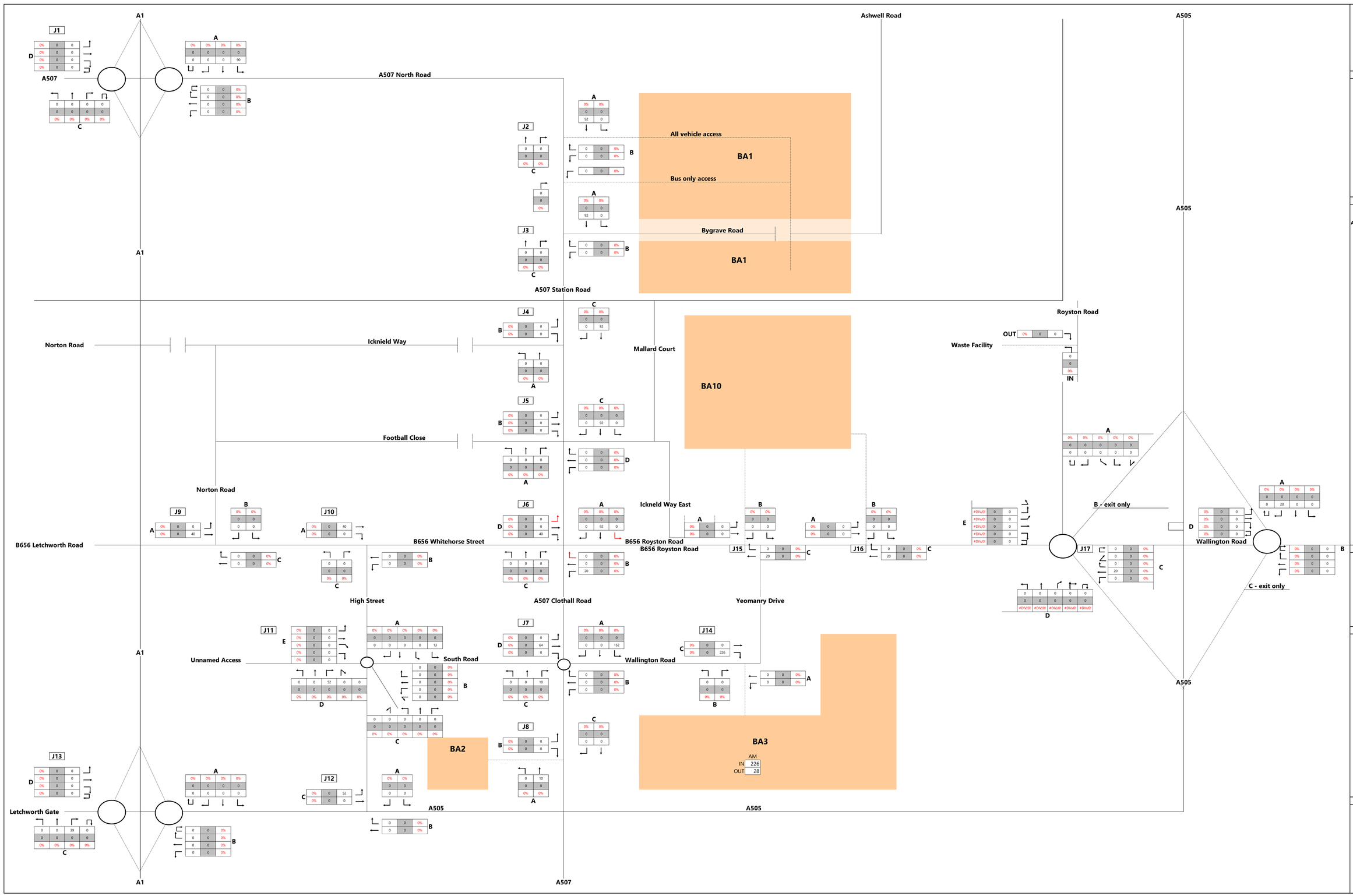
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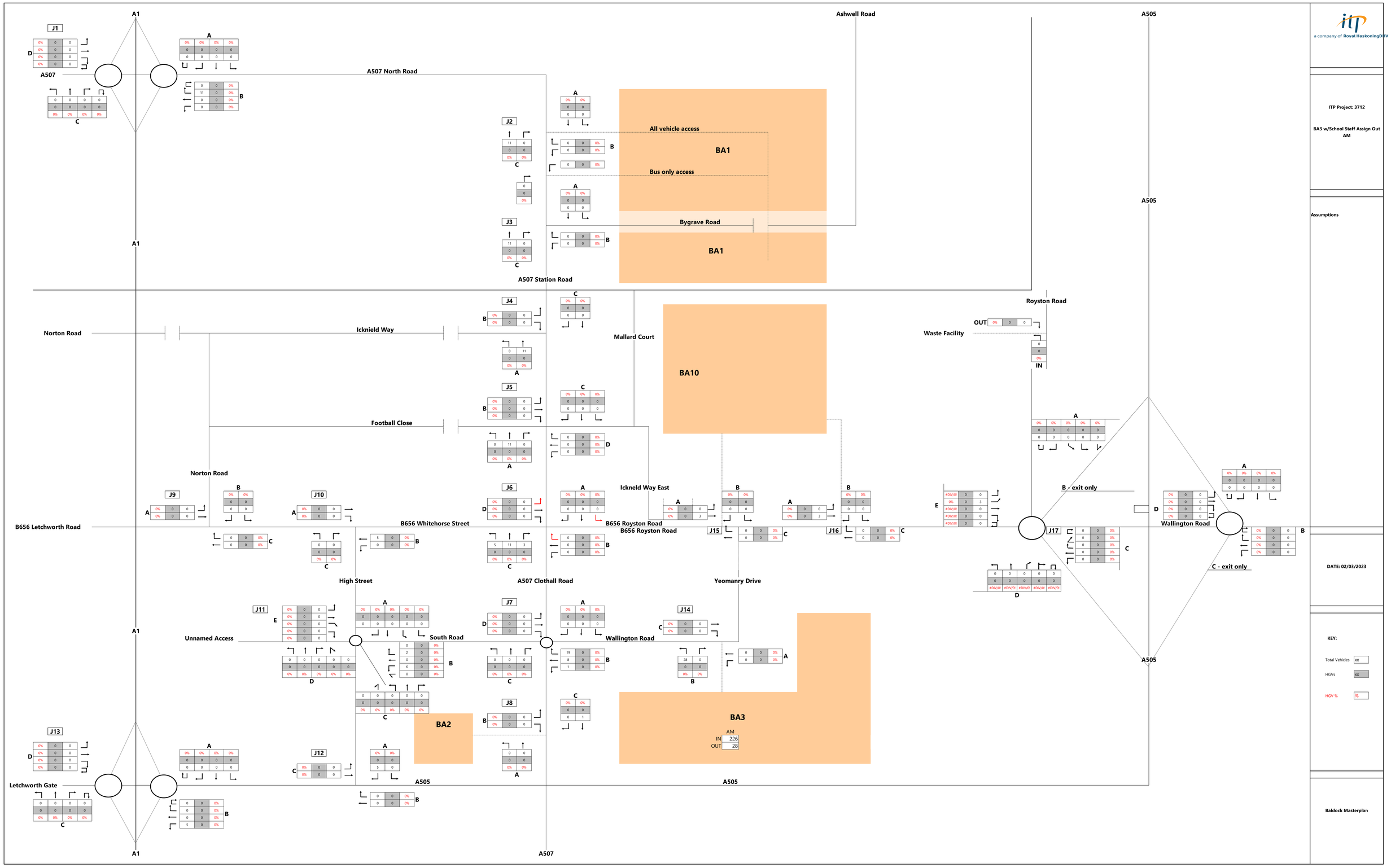
HGVs xx

HGV % %

Baldock Masterplan


A1
A507
A507 North Road
Ashwell Road
A505
J1
J2
J3
All vehicle access
Bus only access
BA1
Bygrave Road
A507 Station Road
Royston Road
Norton Road
Icknield Way
Mallard Court
BA10
OUT
Waste Facility
IN
J4
J5
Football Close
Norton Road
Ickneld Way East
B - exit only
J6
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
B656 Royston Road
J15
J16
J17
Wallington Road
C - exit only
High Street
A507 Clothall Road
Yeomanry Drive
J9
J10
J11
J7
J14
Unnamed Access
South Road
Wallington Road
BA2
PM
IN 53
OUT 24
BA3
J8
J12
J13
Letchworth Gate
A505
A507
A1
ITP Project: 3712
BA2 2040 Assign Total PM
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV % %
Baldock Masterplan


A1
A507
J1
D
A
A507 North Road
B
C
J2
All vehicle access
BA1
Bus only access
J3
Bygrave Road
A507 Station Road
Ashwell Road
A505
Royston Road
OUT
Waste Facility
IN
Norton Road
Icknield Way
J4
Mallard Court
BA10
Football Close
J5
Norton Road
J9
B656 Letchworth Road
J10
B656 Whitehorse Street
J6
Ickneld Way East
B656 Royston Road
J15
J16
J17
B - exit only
Wallington Road
C - exit only
High Street
A507 Clothall Road
Yeomanry Drive
J11
Unnamed Access
South Road
J7
J14
Wallington Road
BA2
J8
BA3
AM
IN 226
OUT 28
J13
Letchworth Gate
J12
A505
A507
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV % %
Baldock Masterplan
ITP Project: 3712
BA3 w/School Staff Assign In AM
Assumptions



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 w/School Staff Assign Out AM

Assumptions

DATE: 02/03/2023

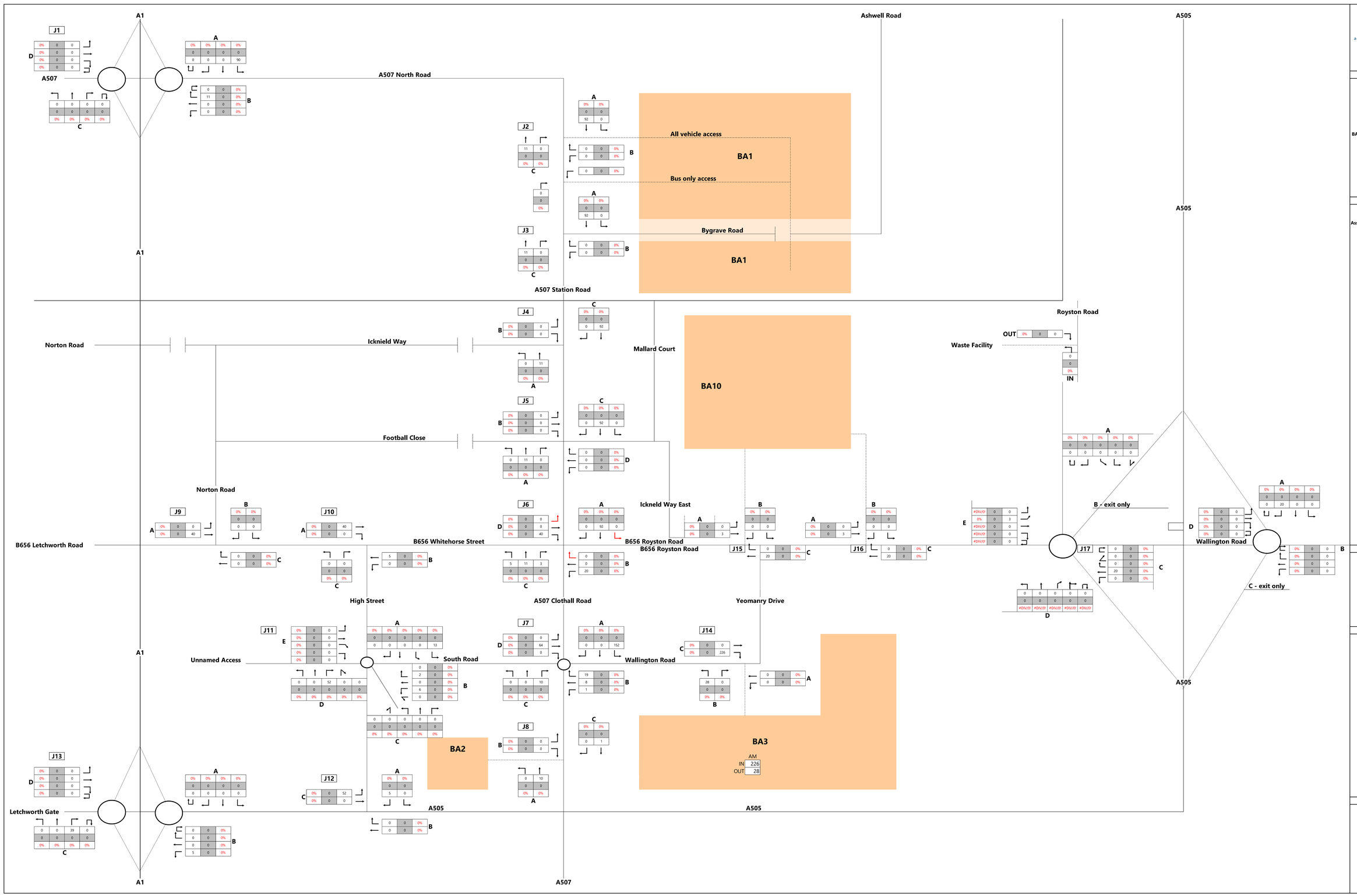
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 w/School Staff Assign Total AM

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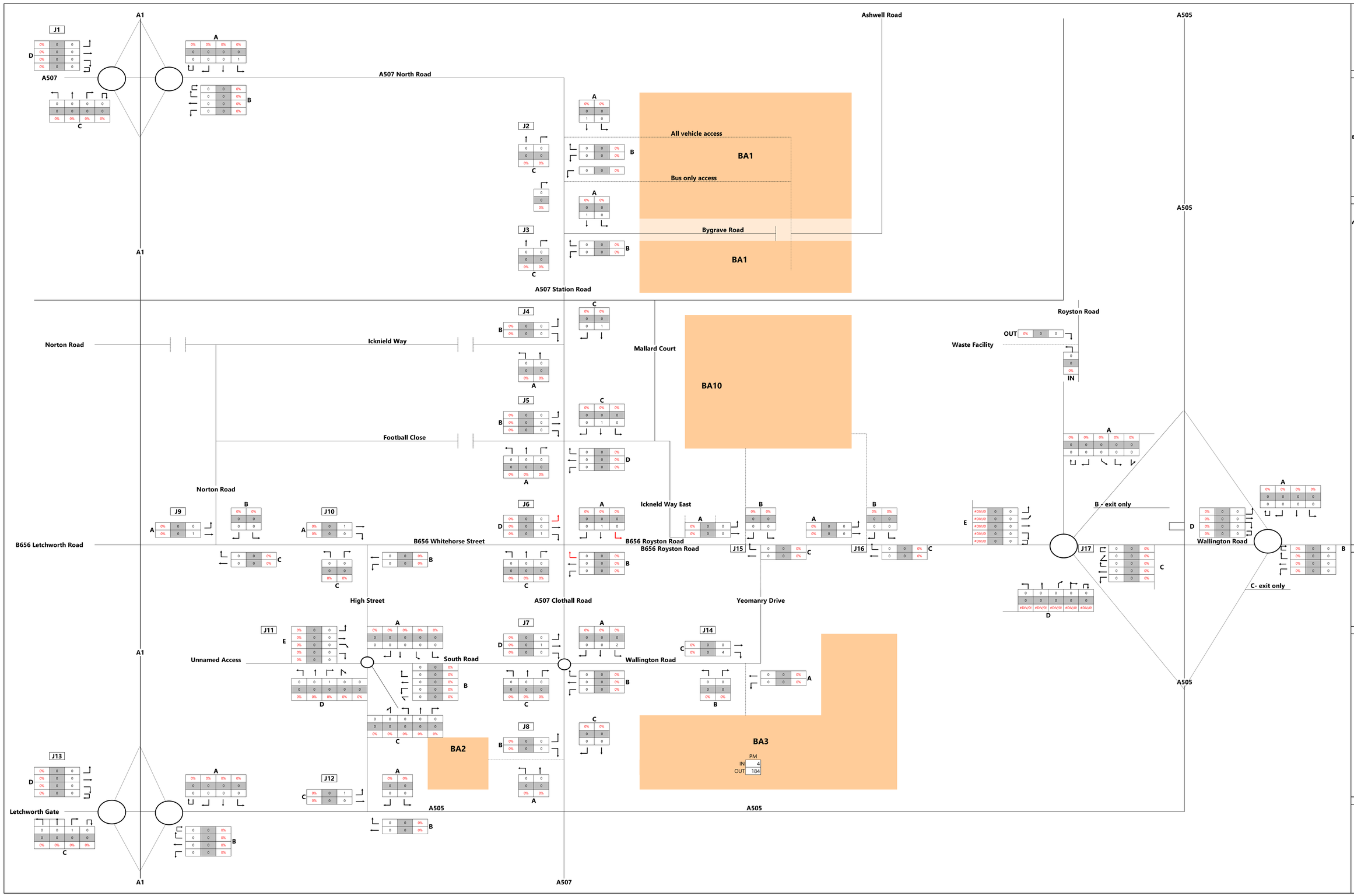
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 w/School Staff Assign In PM

Assumptions

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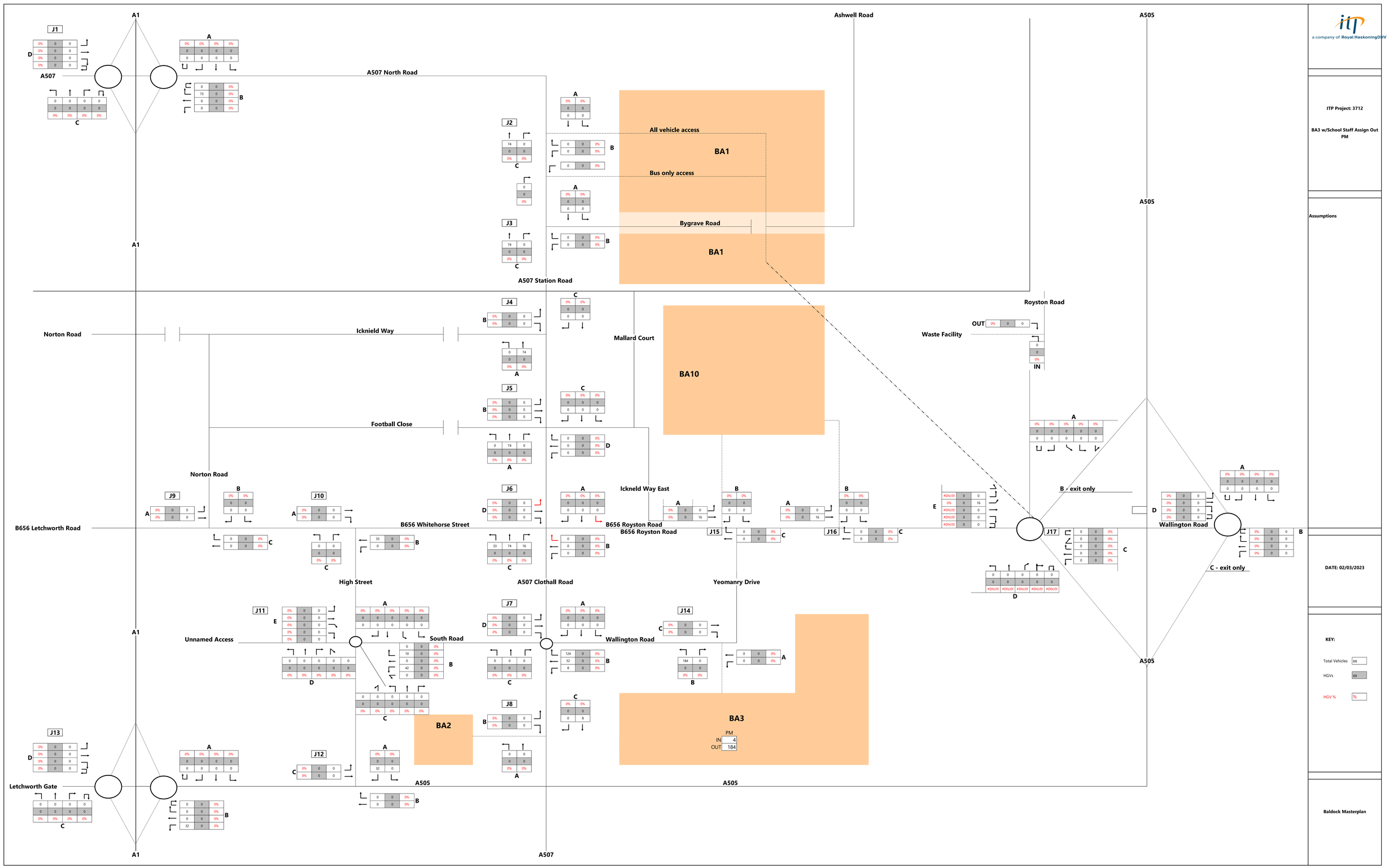
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HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

BA3 w/School Staff Assign Out PM

Assumptions

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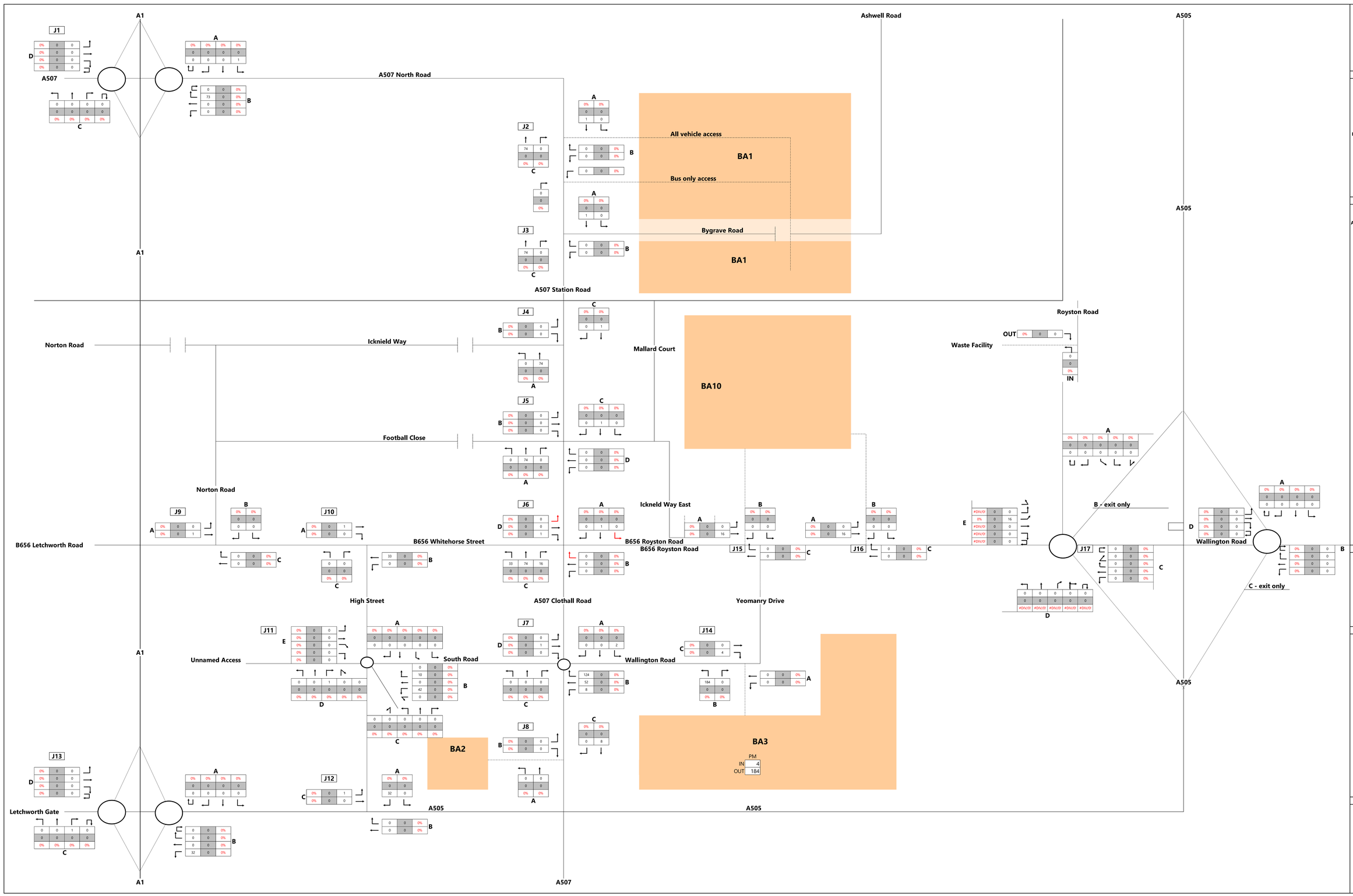
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 w/School Staff Assign Total PM

Assumptions

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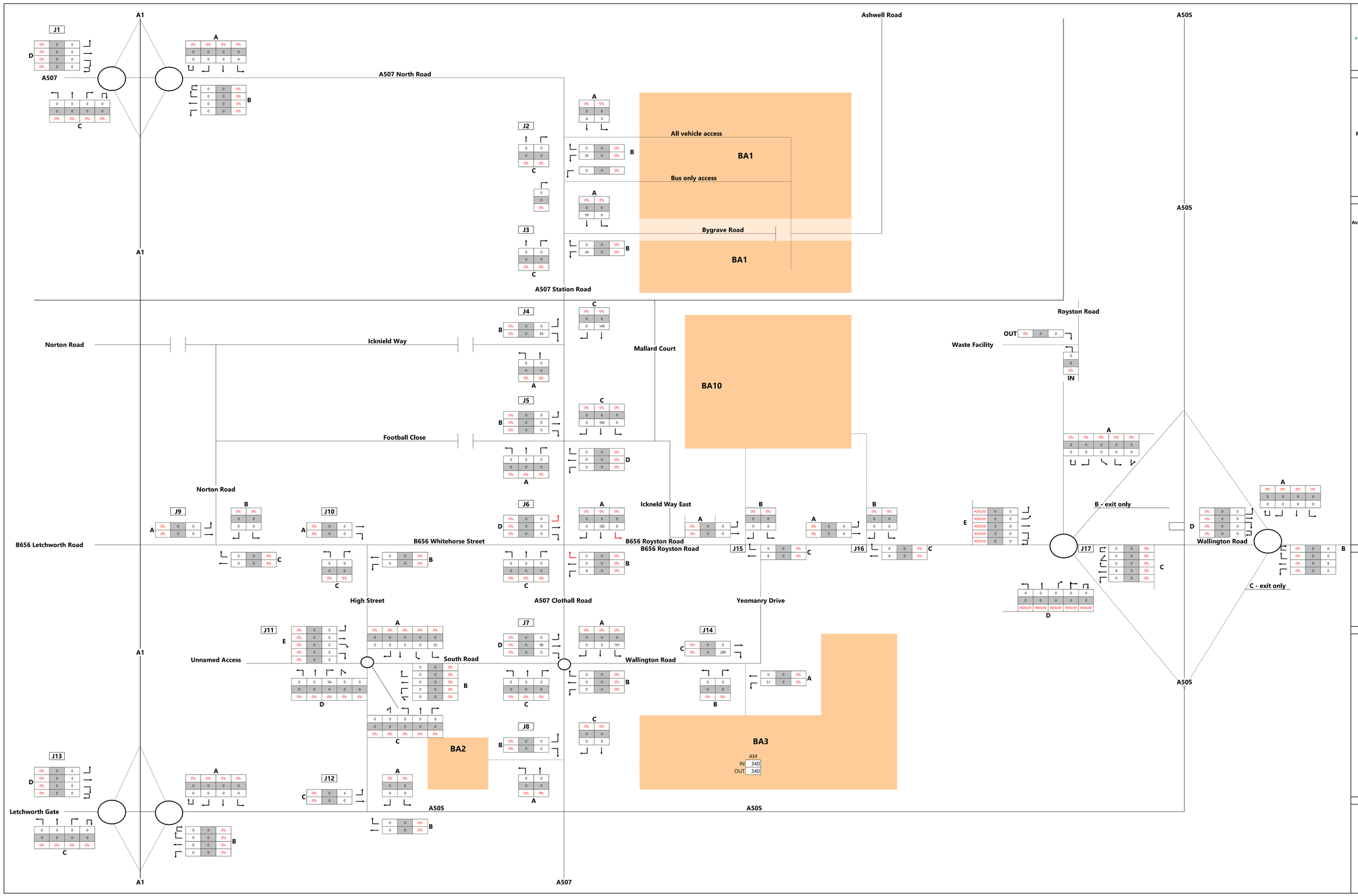
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 w/School Pupil Assign In AM

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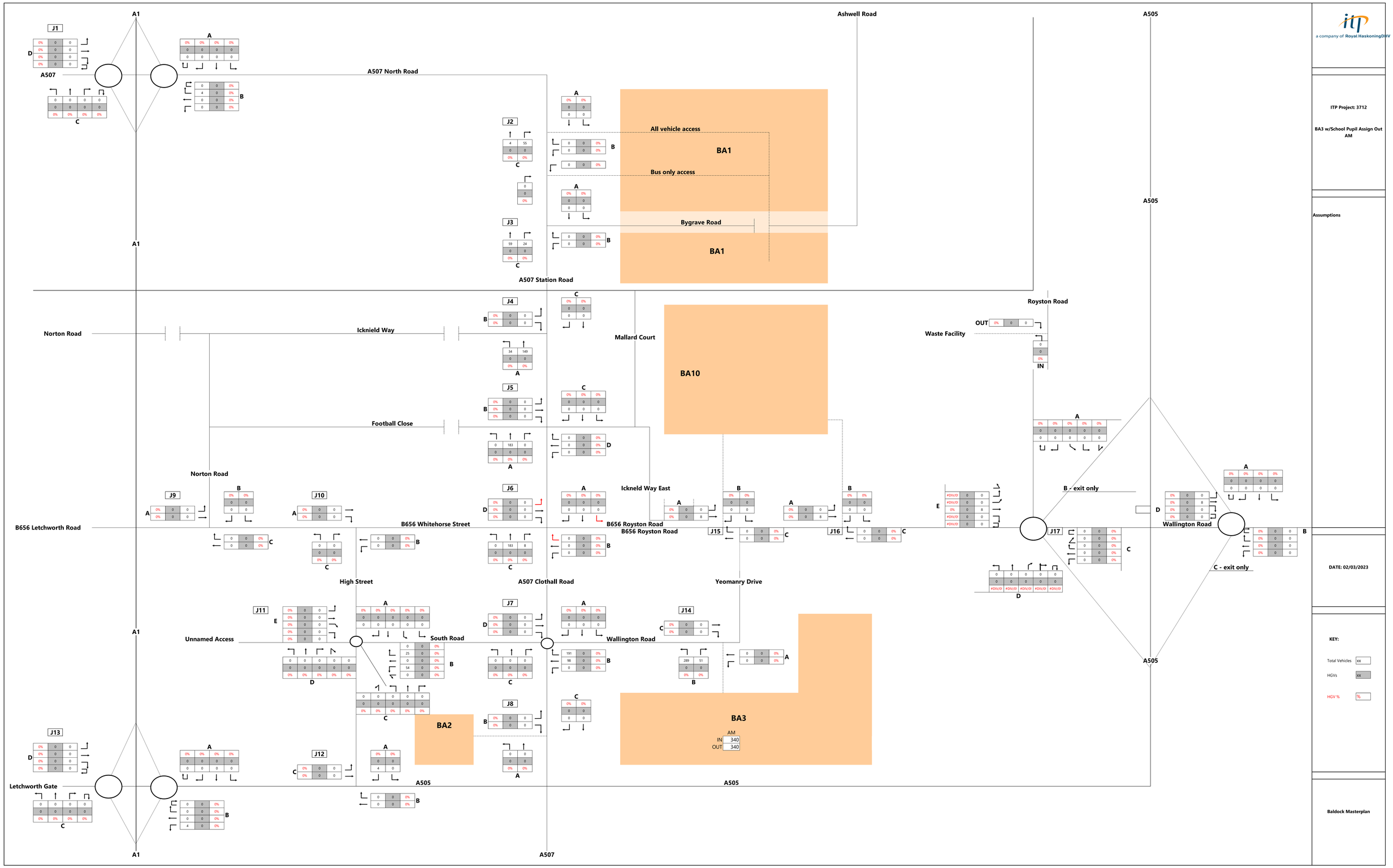
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 w/School Pupil Assign Out AM

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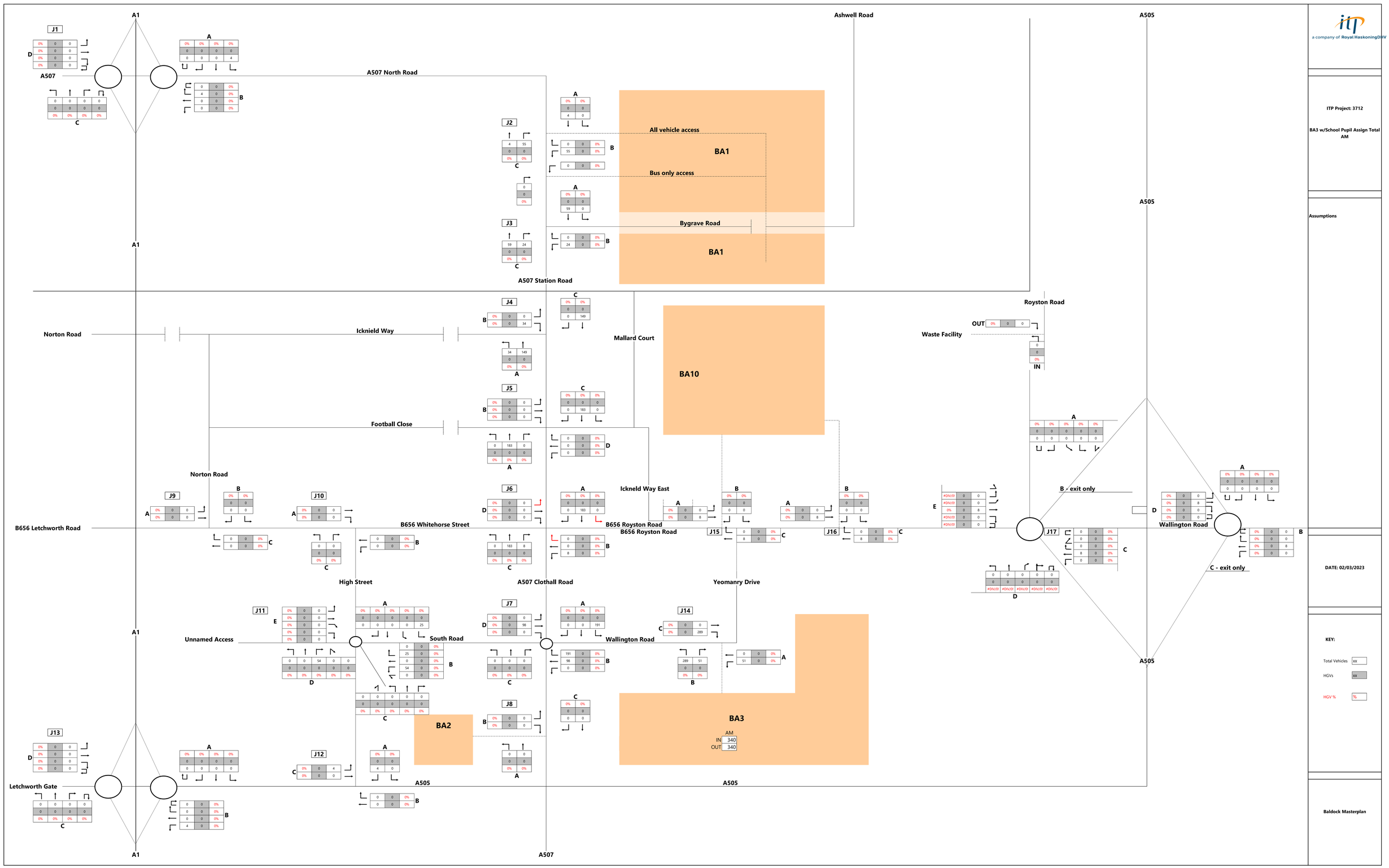
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

BA3 w/School Pupil Assign Total AM

Assumptions

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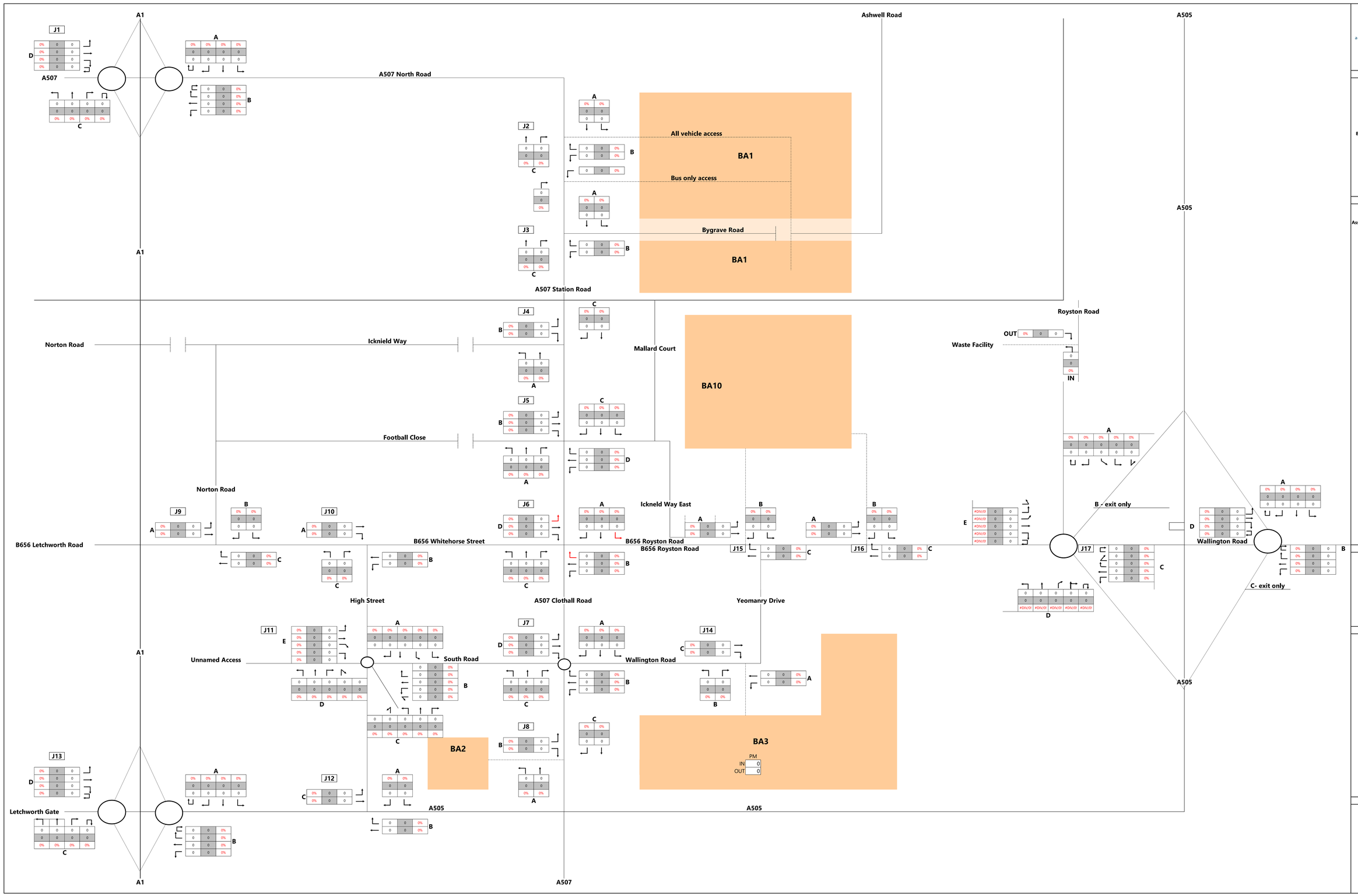
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Total Vehicles xx

HGVs xx

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Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 w/School Pupil Assign In PM

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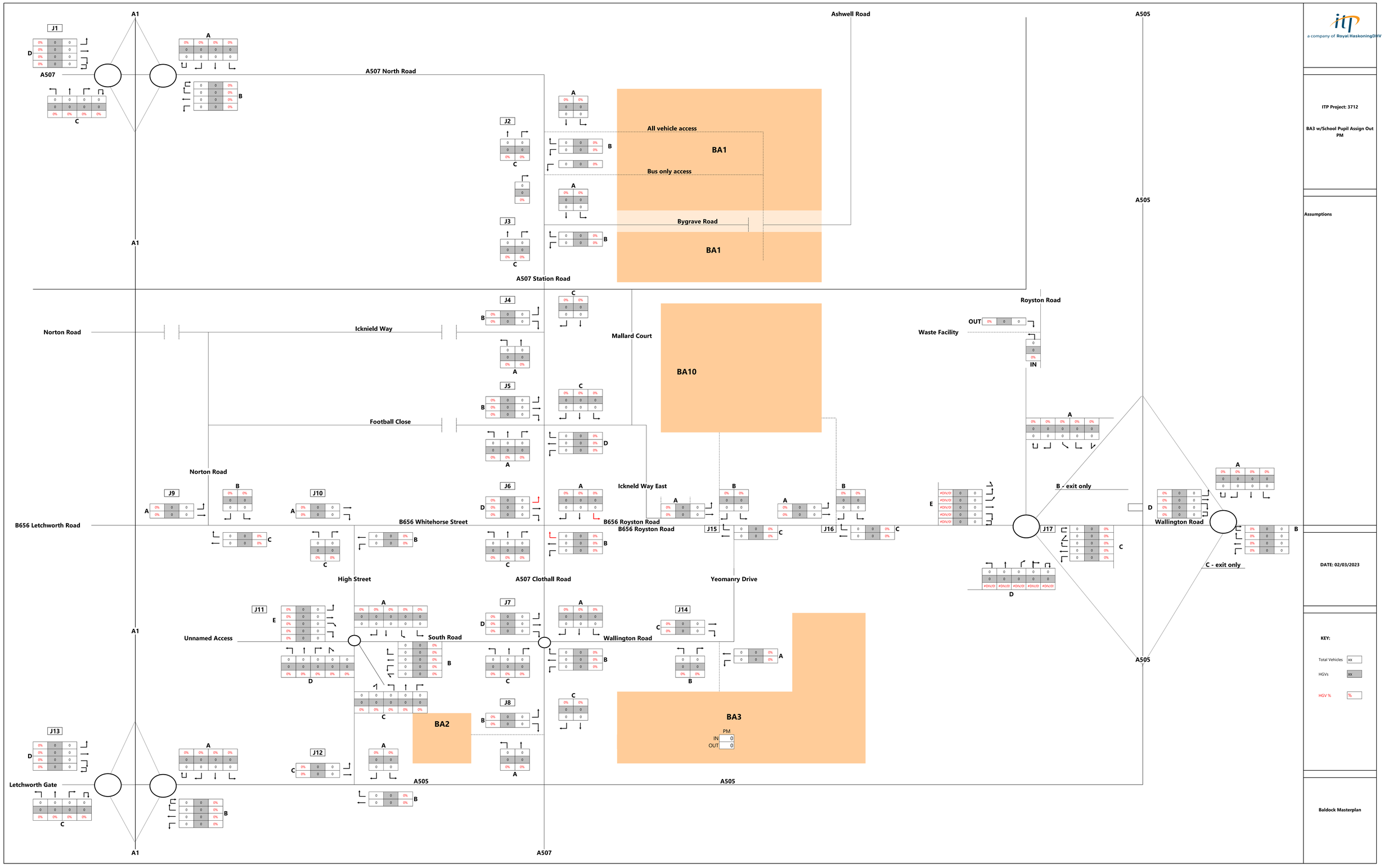
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 w/School Pupil Assign Out PM

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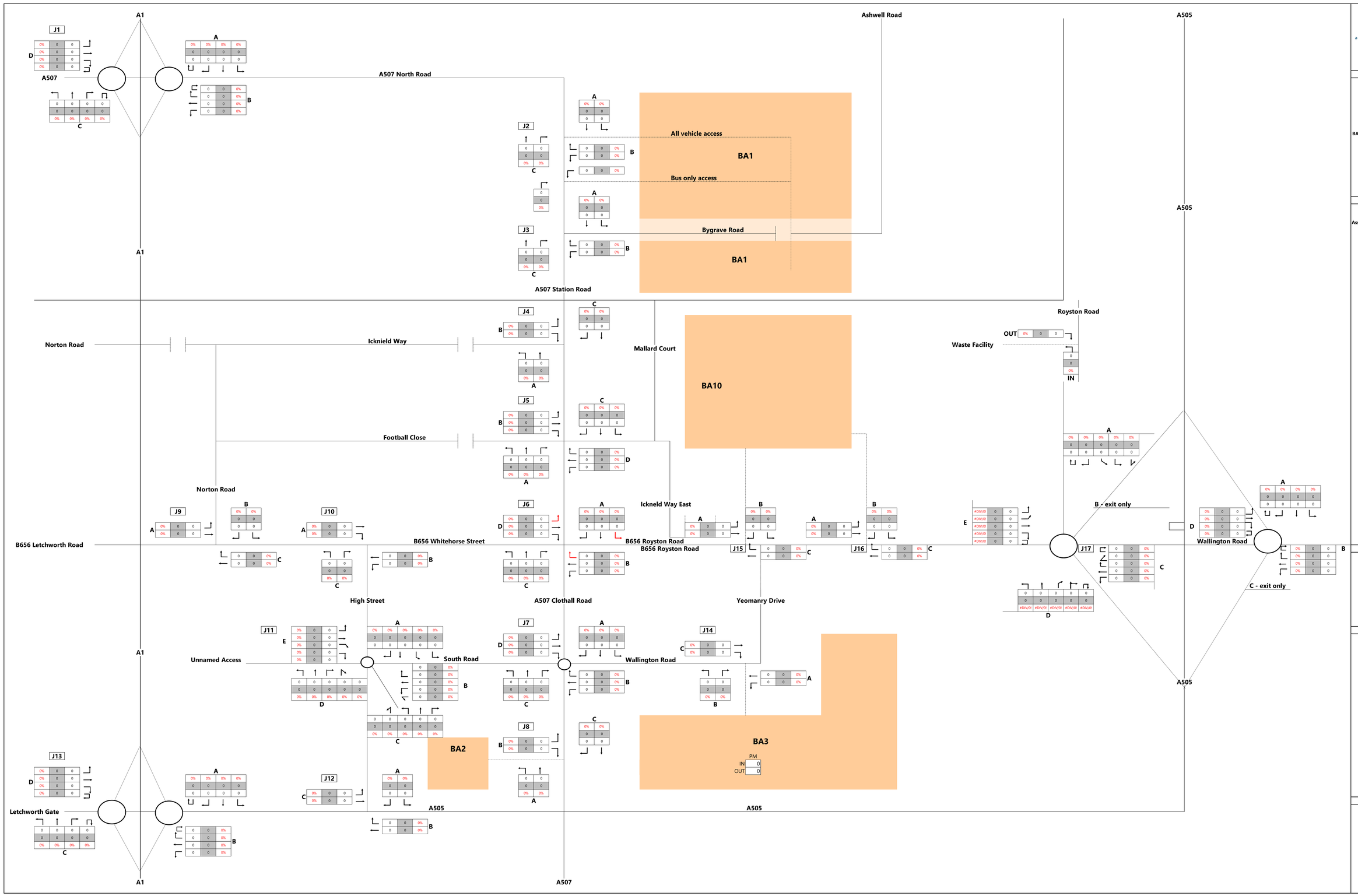
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 w/School Pupil Assign Total PM

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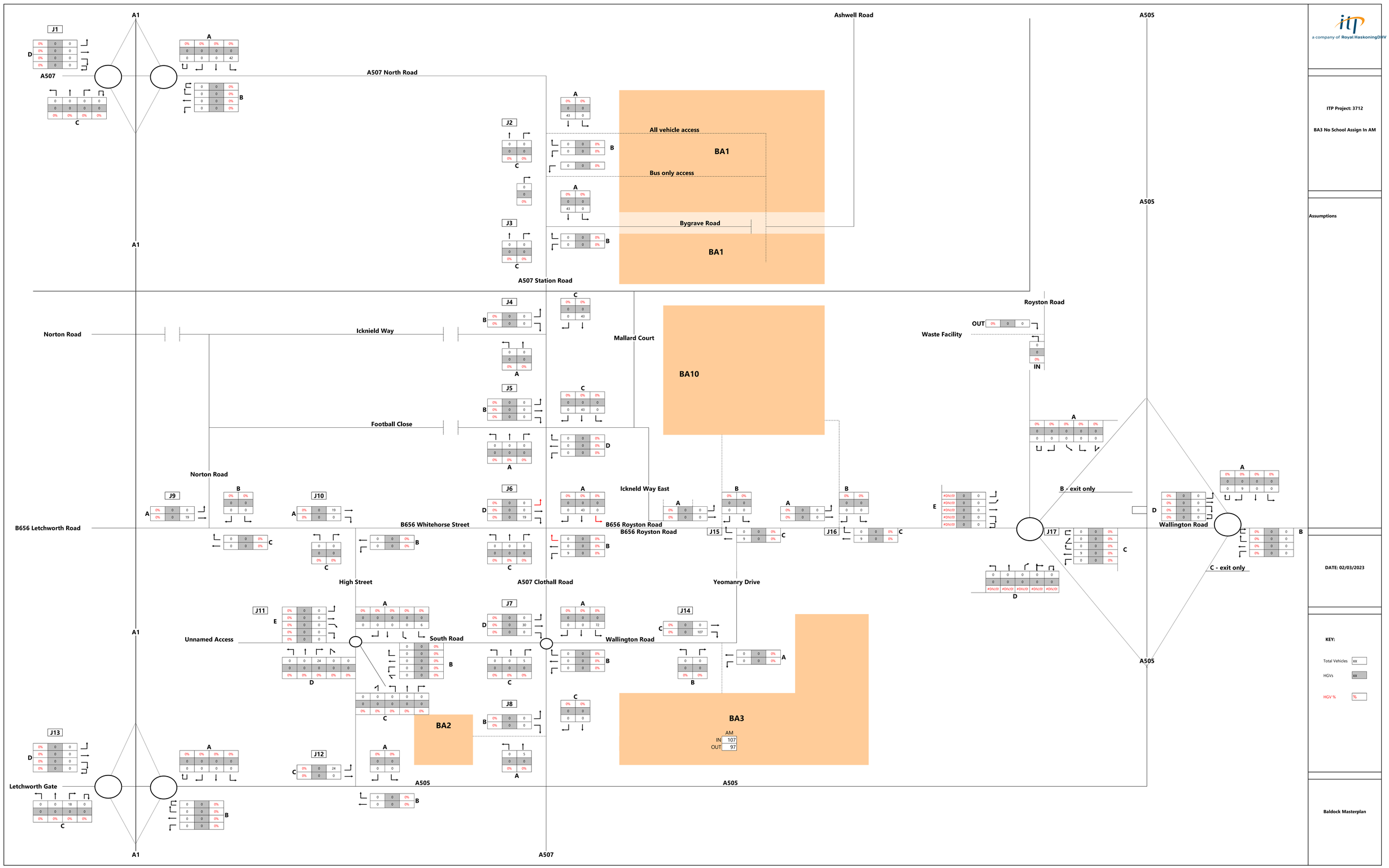
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 No School Assign In AM

Assumptions

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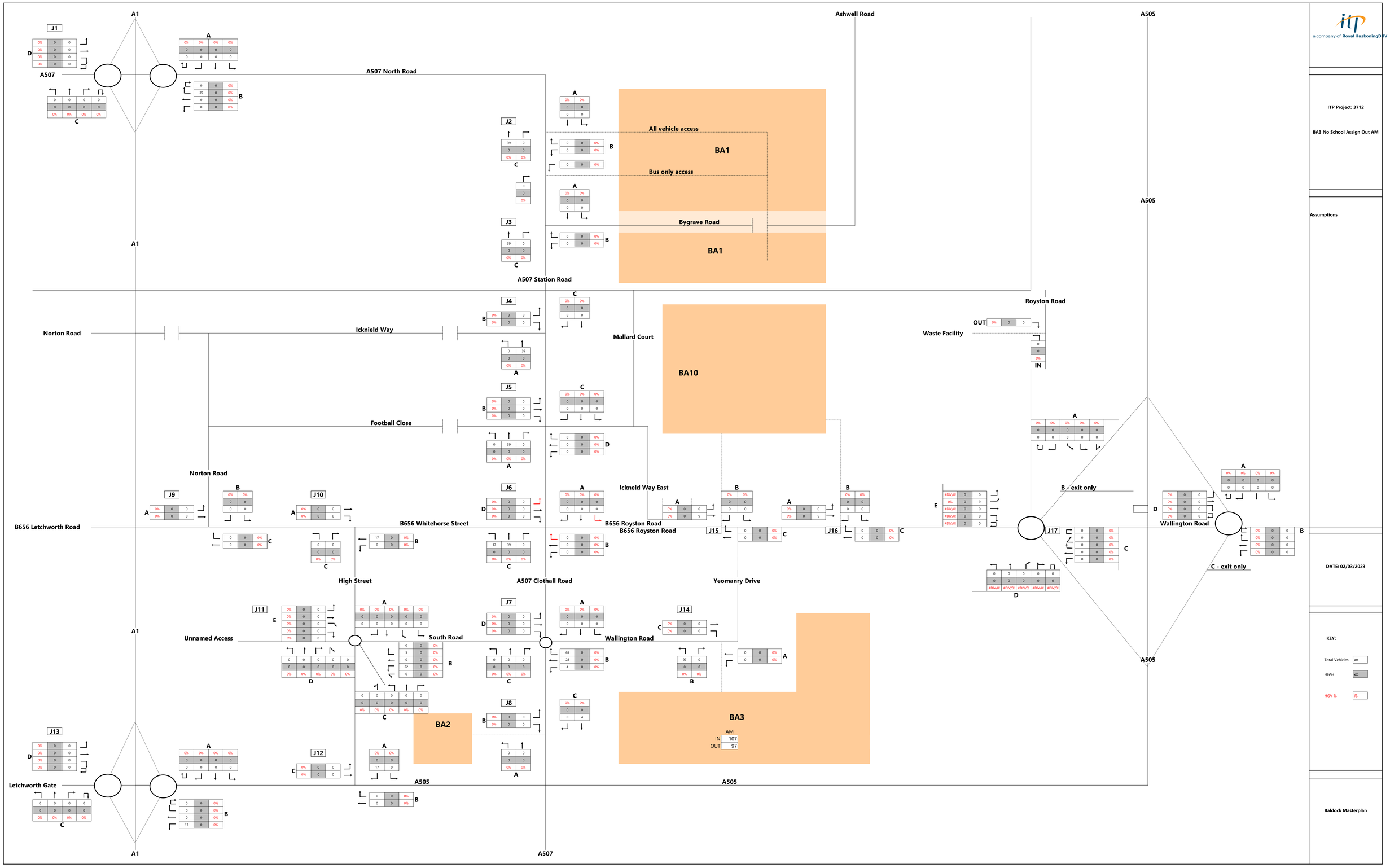
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 No School Assign Out AM

Assumptions

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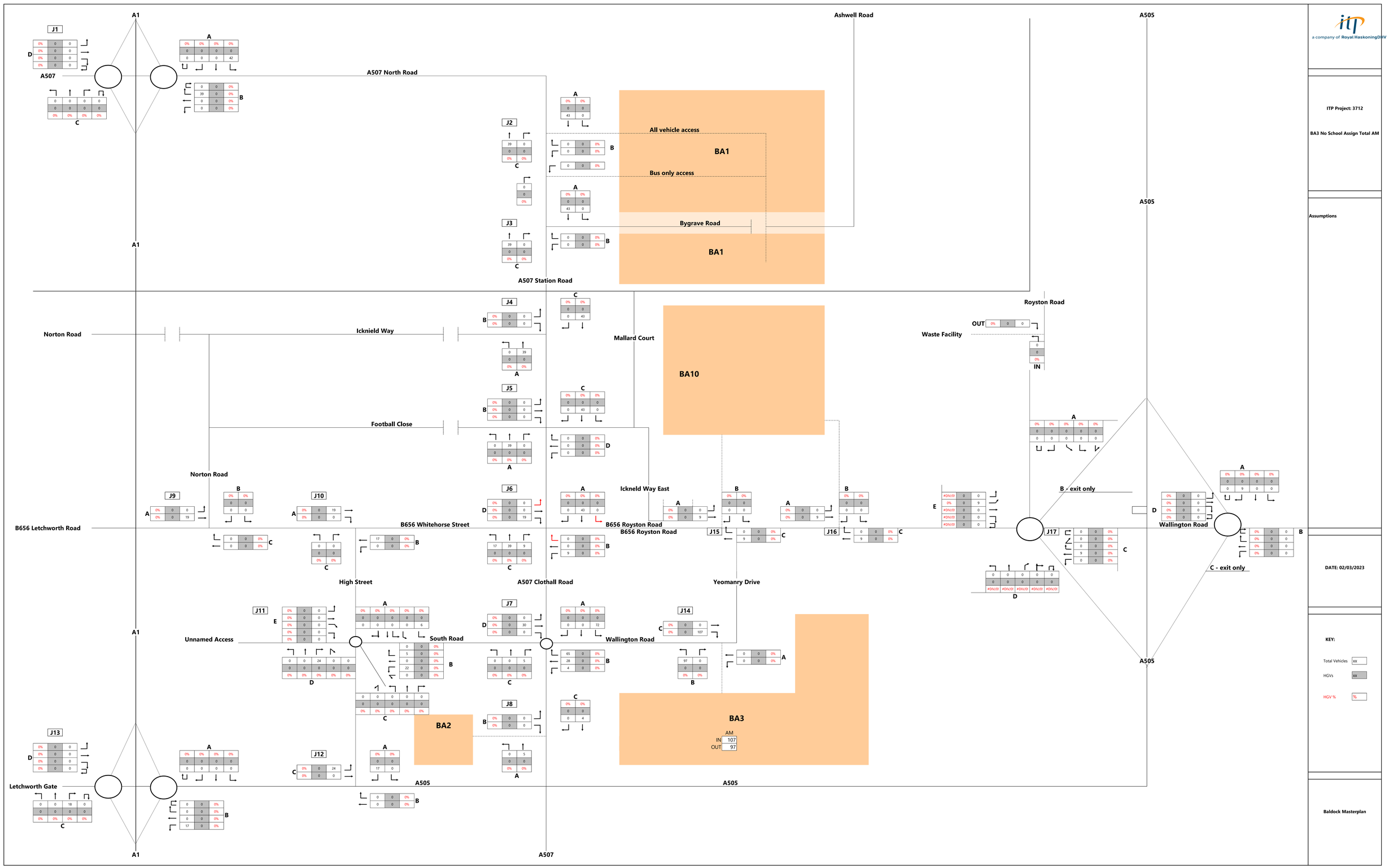
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 No School Assign Total AM

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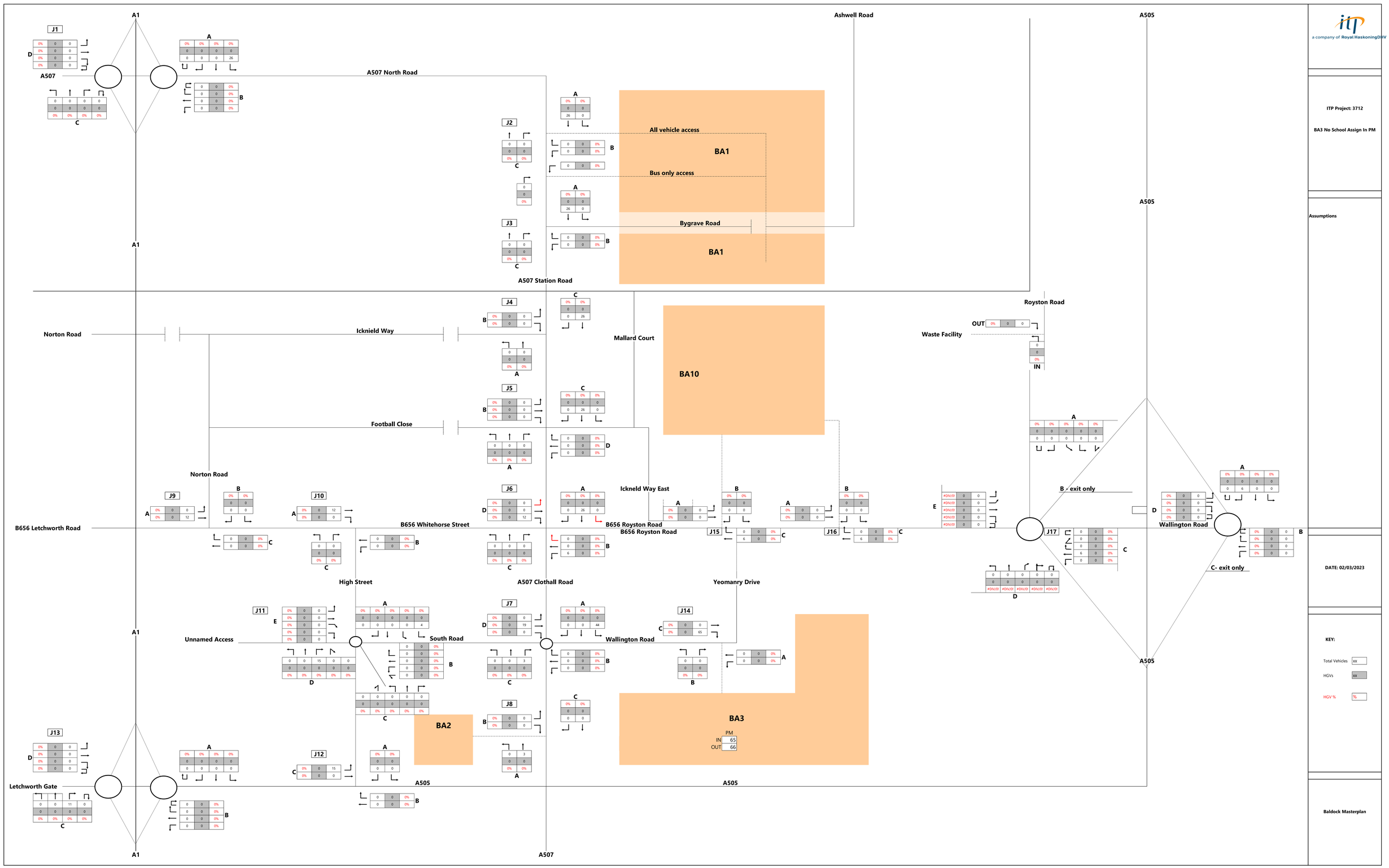
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 No School Assign In PM

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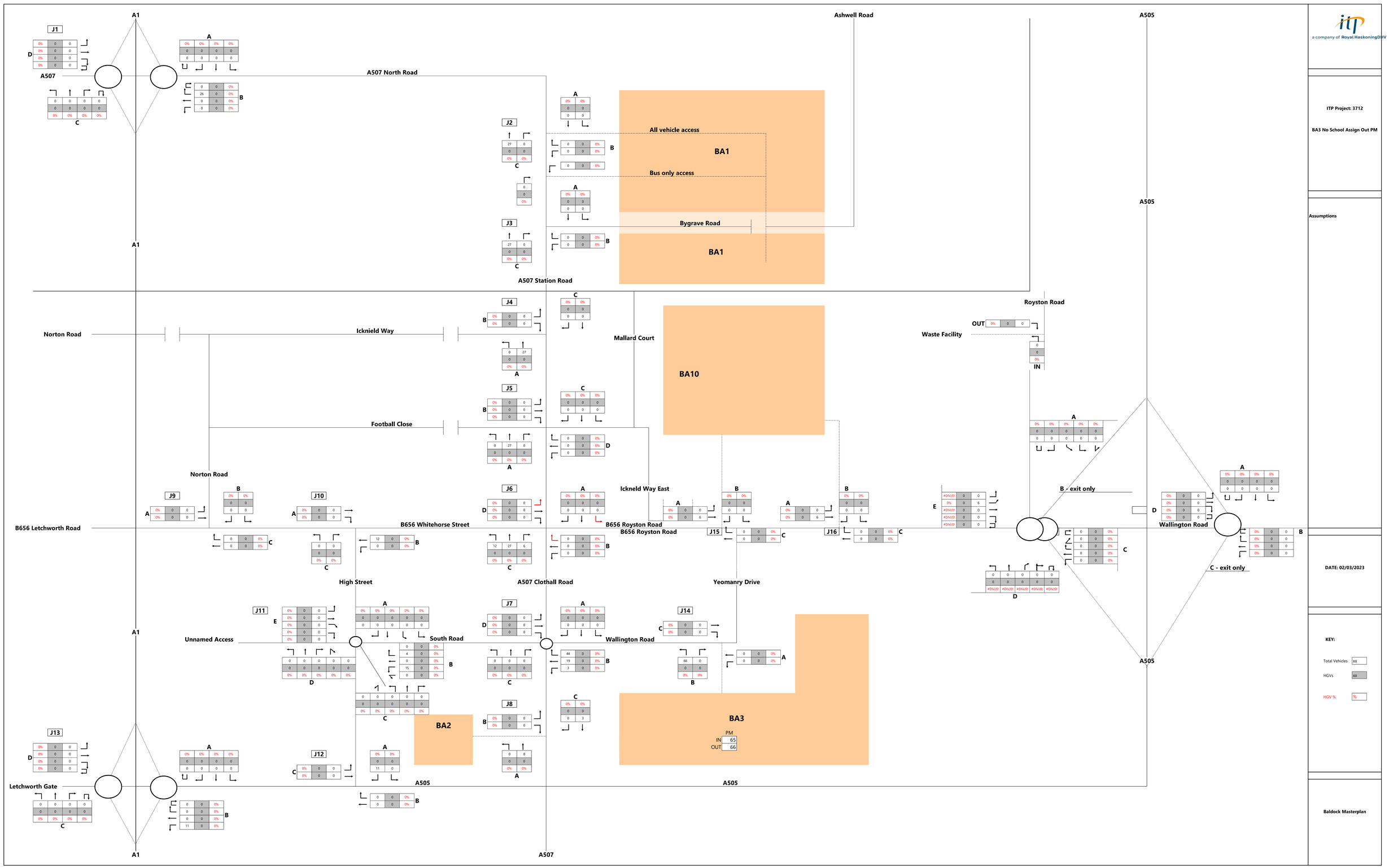
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HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

BA3 No School Assign Out PM

Assumptions

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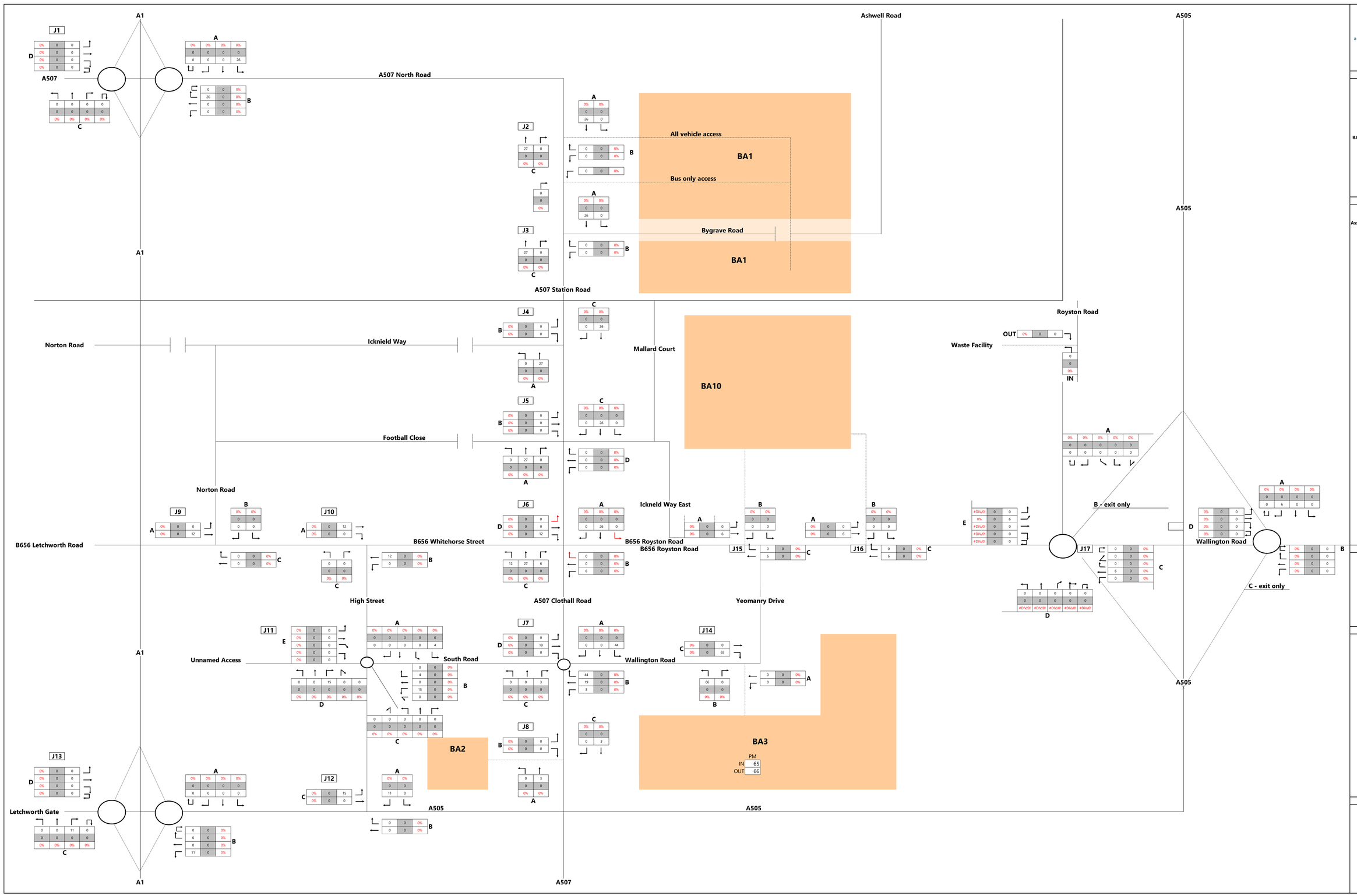
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA3 No School Assign Total PM

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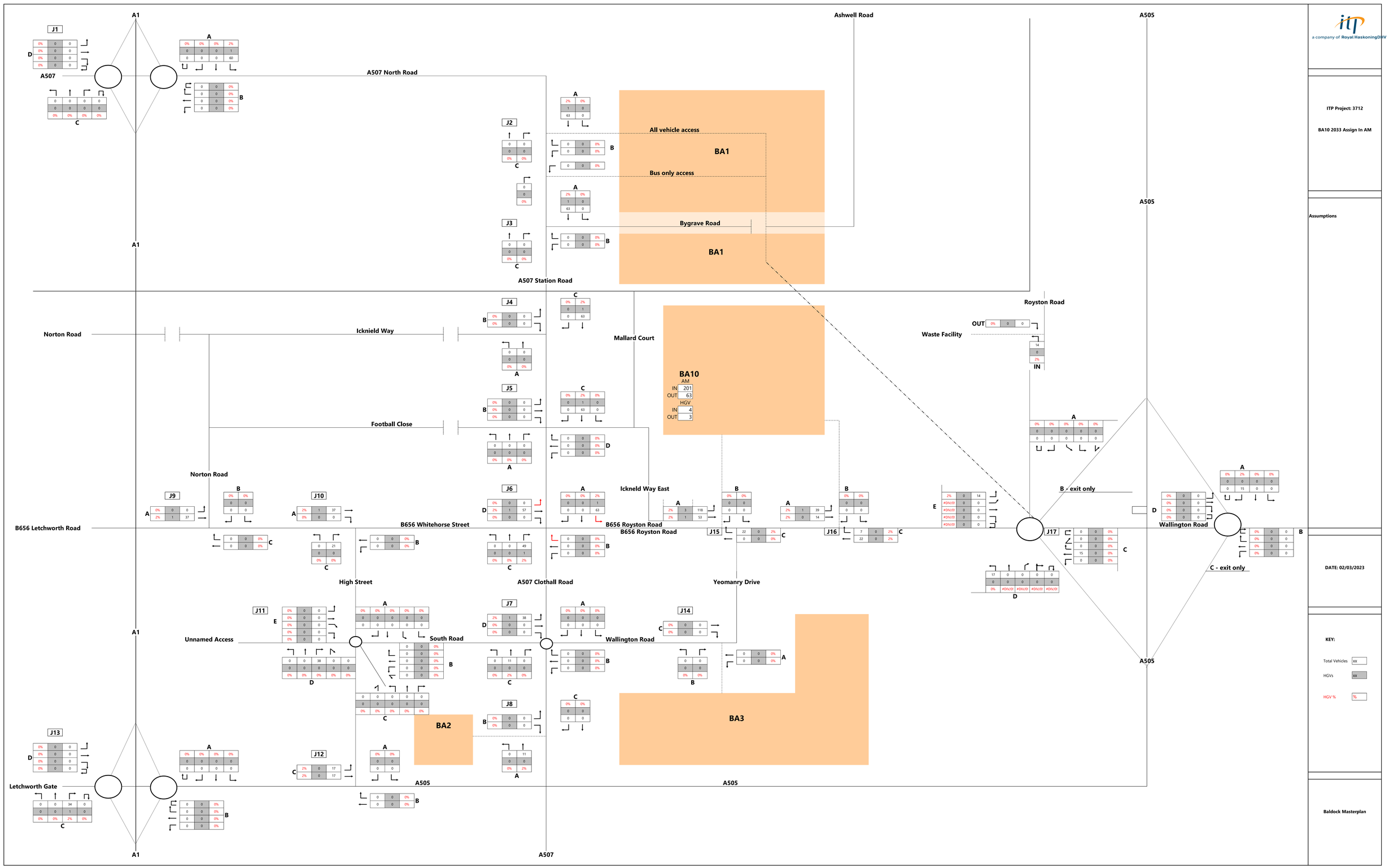
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2033 Assign In AM

Assumptions

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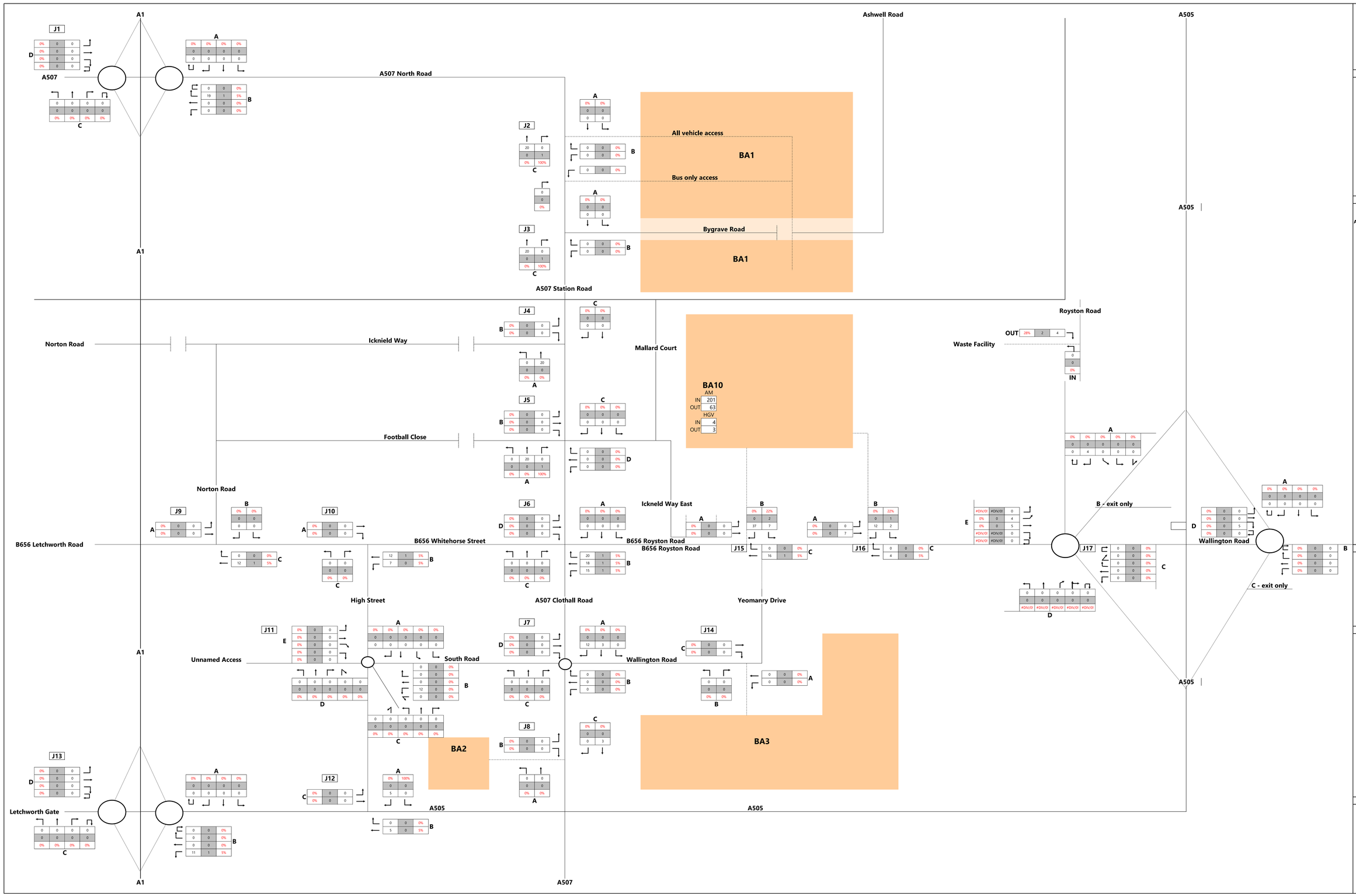
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2033 Assign Out AM

Assumptions

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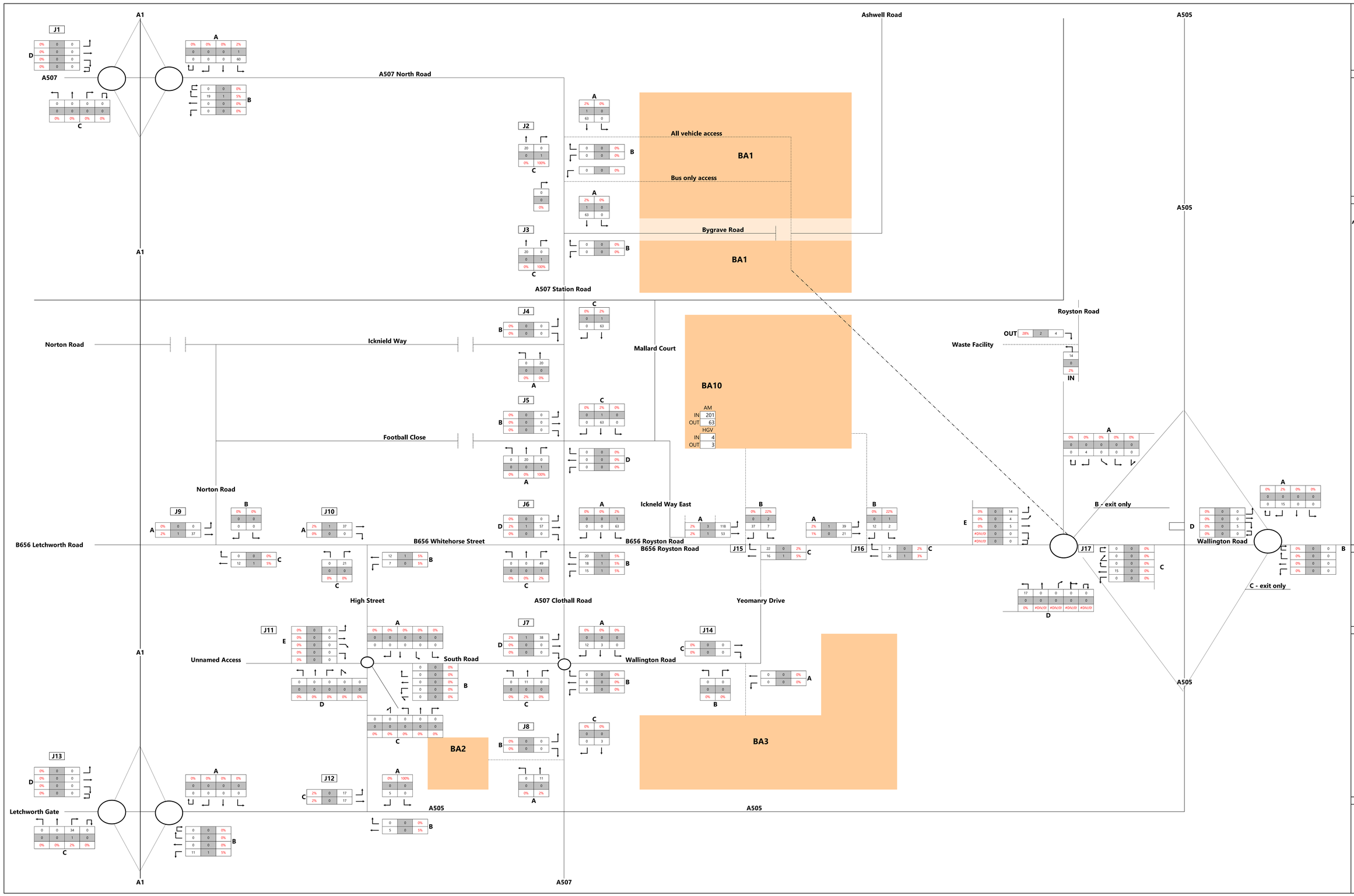
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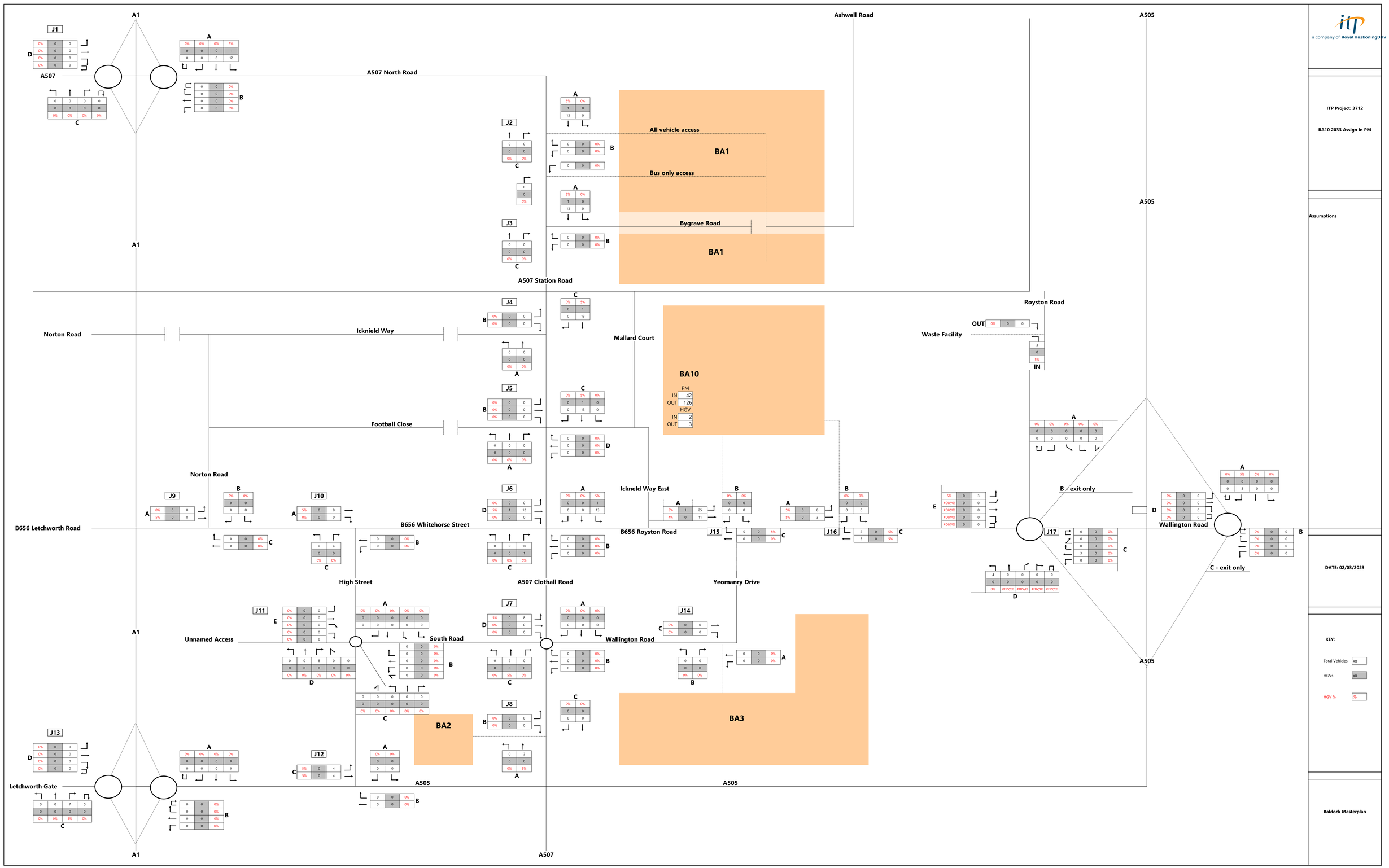
Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan


A1
A507
J1
A
B
C
D
A507 North Road
Ashwell Road
A505
J2
J3
All vehicle access
Bus only access
BA1
Bygrave Road
A507 Station Road
J4
J5
Norton Road
Icknield Way
Football Close
Mallard Court
BA10
AM
IN 201
OUT 63
HGV
IN 4
OUT 3
Royston Road
Waste Facility
OUT
IN
B - exit only
C - exit only
Wallington Road
J9
J10
J6
Ickneld Way East
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
J15
J16
J17
High Street
A507 Clothall Road
Yeomanry Drive
J11
J7
J14
Unnamed Access
South Road
BA2
BA3
J8
J13
J12
Letchworth Gate
A505
A507
ITP Project: 3712
BA10 2033 Assign Total AM
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV % %
Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2033 Assign In PM

Assumptions

DATE: 02/03/2023

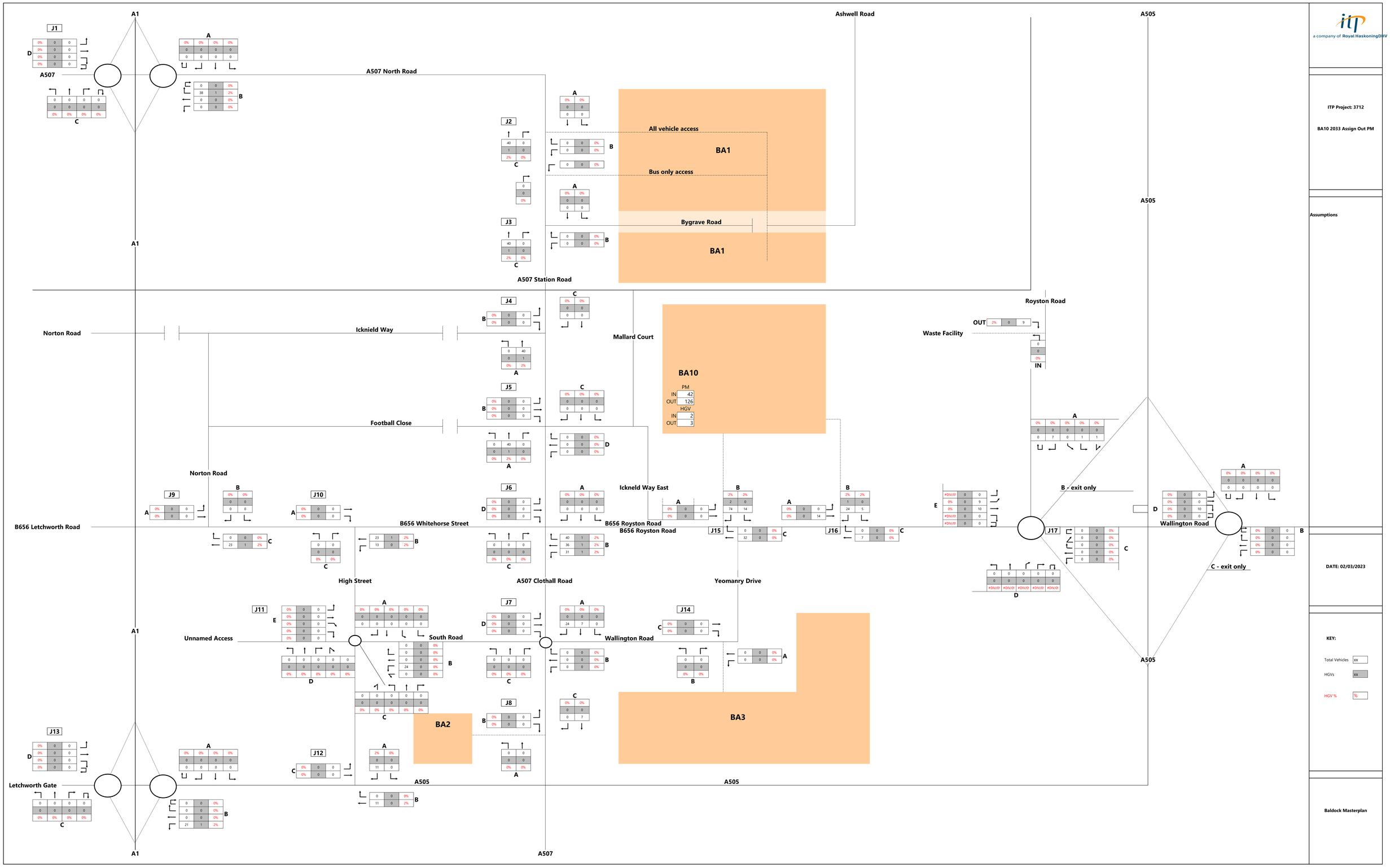
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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2033 Assign Out PM

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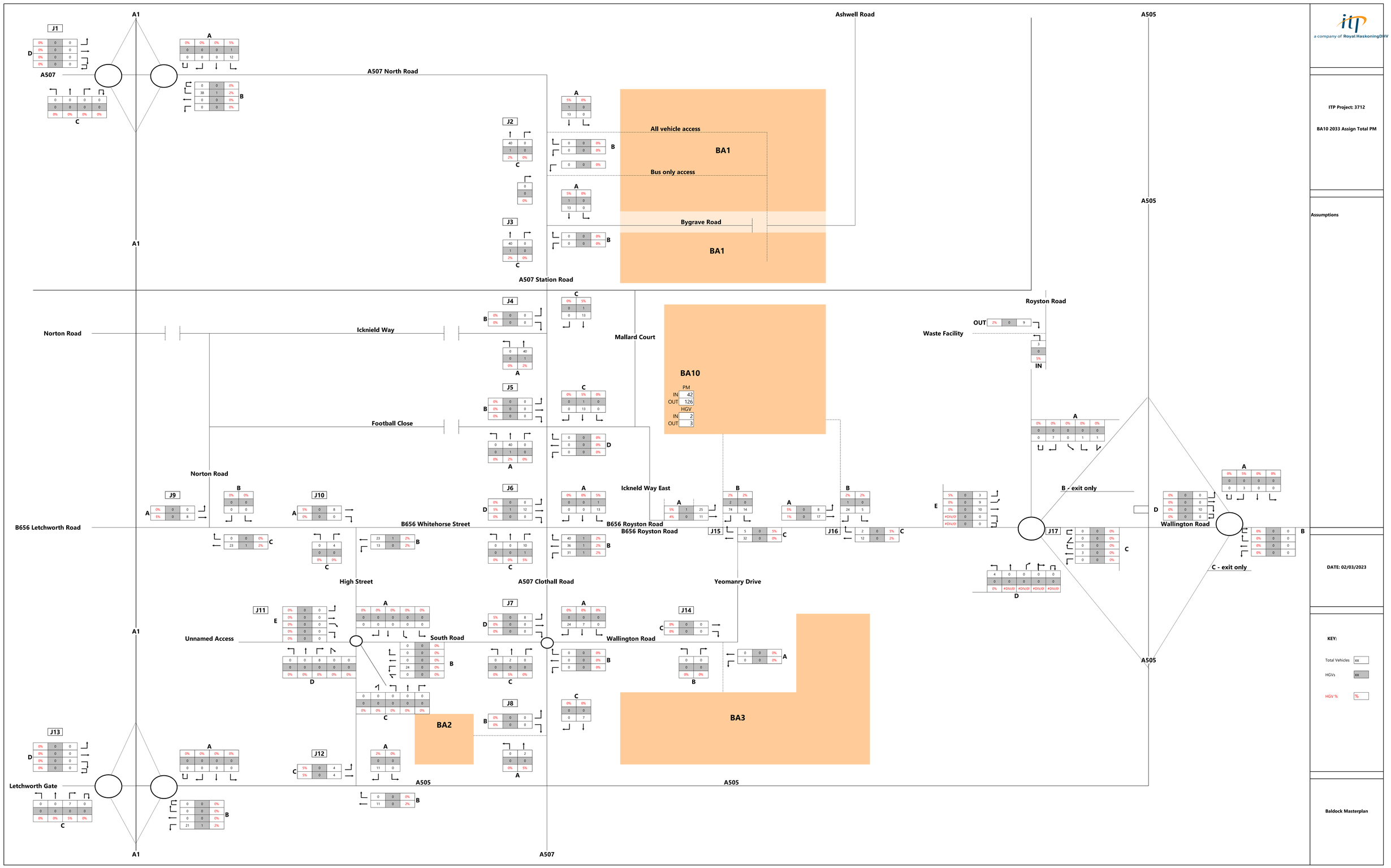
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HGVs xx

HGV % %

Baldock Masterplan



ITP Project: 3712

BA10 2033 Assign Total PM

Assumptions

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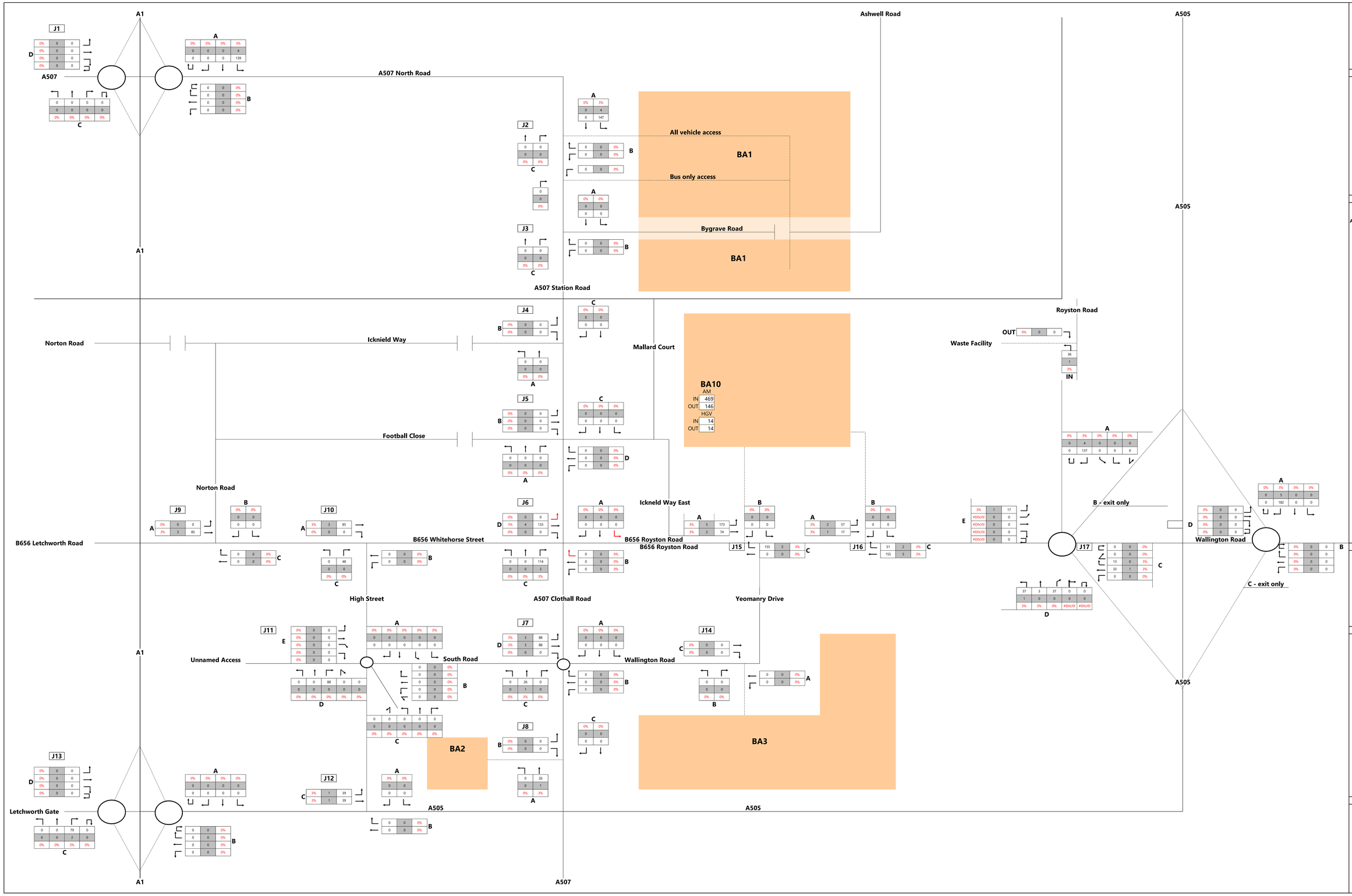
KEY:

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HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2040 Assign In AM

Assumptions

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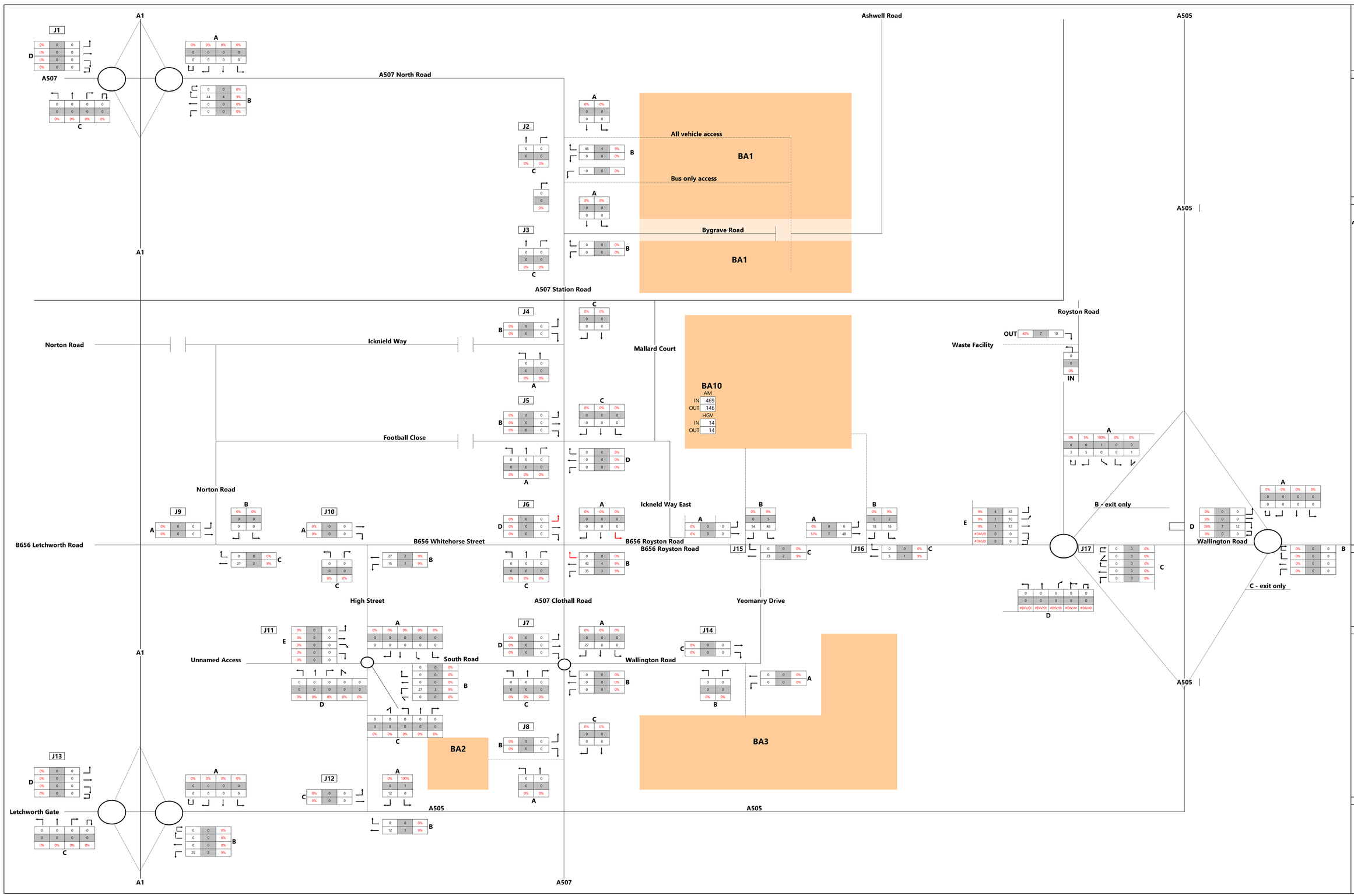
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2040 Assign Out AM

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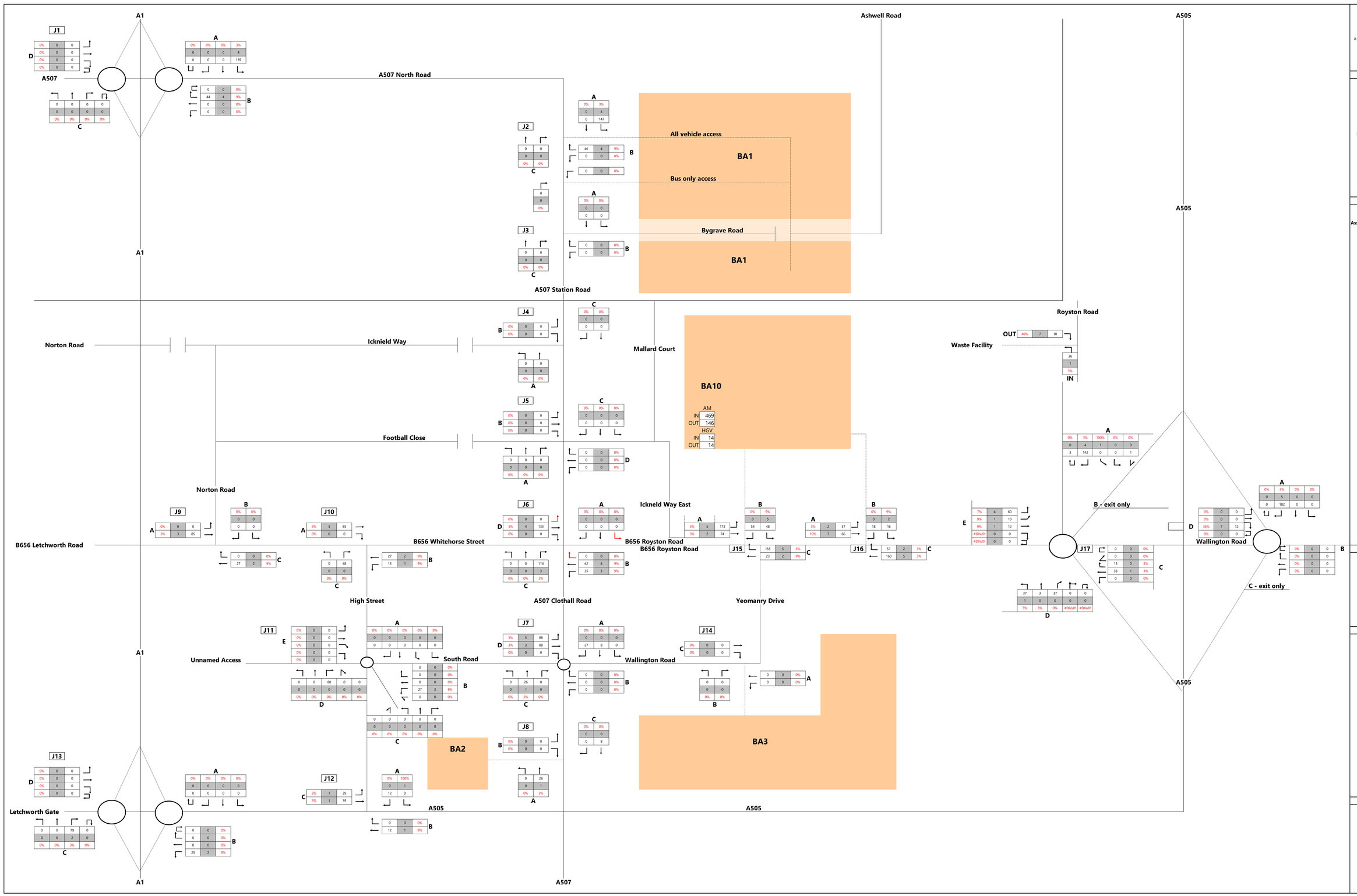
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Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2040 Assign Total AM

Assumptions

DATE: 02/03/2023

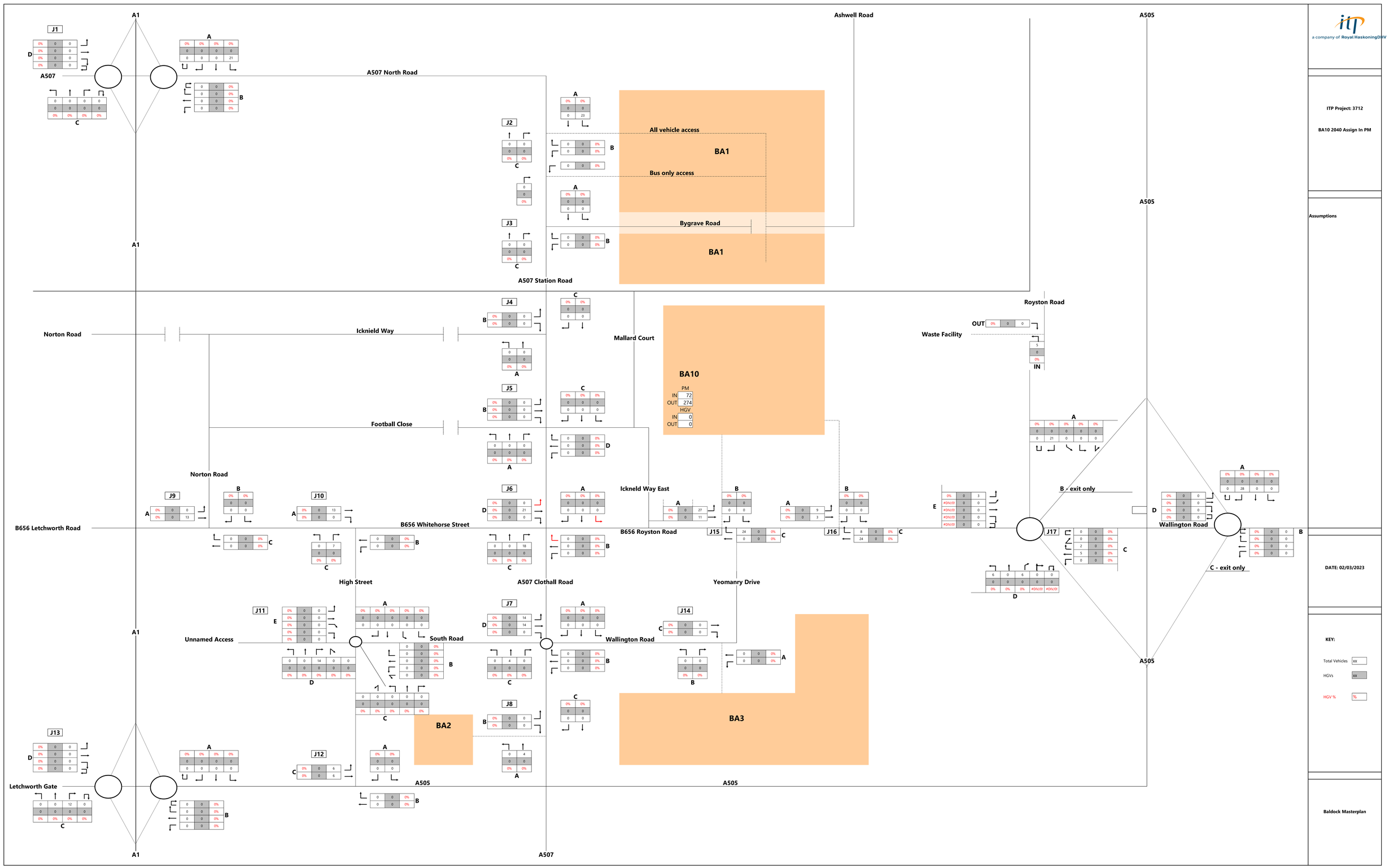
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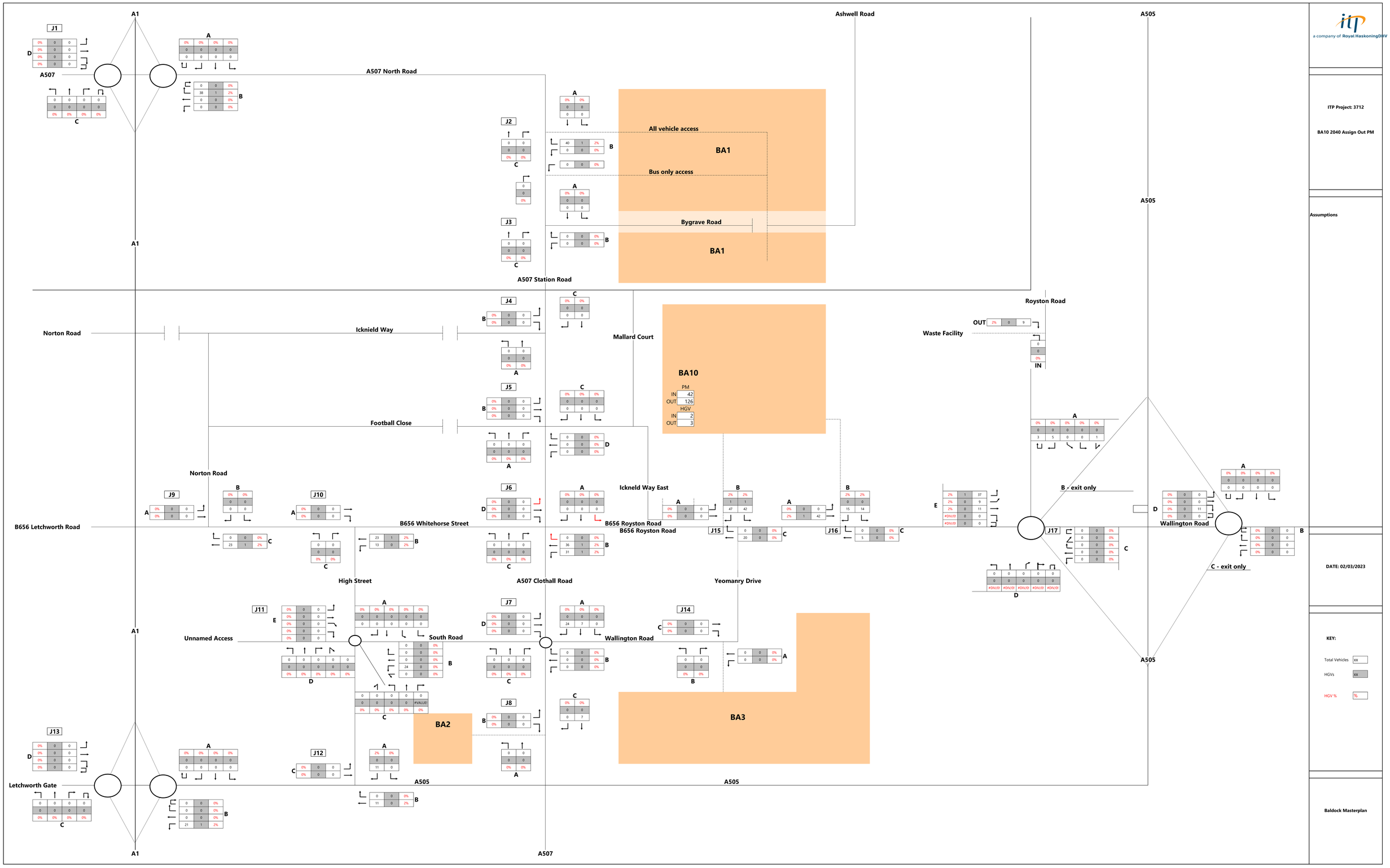
Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan


A1
A507
J1
A
A507 North Road
B
C
D
J2
J3
A507 Station Road
All vehicle access
BA1
Bus only access
Bygrave Road
BA1
Ashwell Road
A505
A505
Royston Road
OUT
Waste Facility
IN
J4
Norton Road
Icknield Way
Mallard Court
BA10
PM
IN 72
OUT 274
HGV
IN 0
OUT 0
J5
Football Close
Norton Road
J9
J10
B656 Letchworth Road
B656 Whitehorse Street
J6
Ickneld Way East
B656 Royston Road
J15
J16
J17
B - exit only
Wallington Road
C - exit only
High Street
A507 Clothall Road
Yeomanry Drive
J11
J7
J14
Unnamed Access
South Road
Wallington Road
BA2
J8
BA3
J13
Letchworth Gate
J12
A505
A505
A1
A507
ITP Project: 3712
BA10 2040 Assign In PM
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV % %
Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2040 Assign Out PM

Assumptions

DATE: 02/03/2023

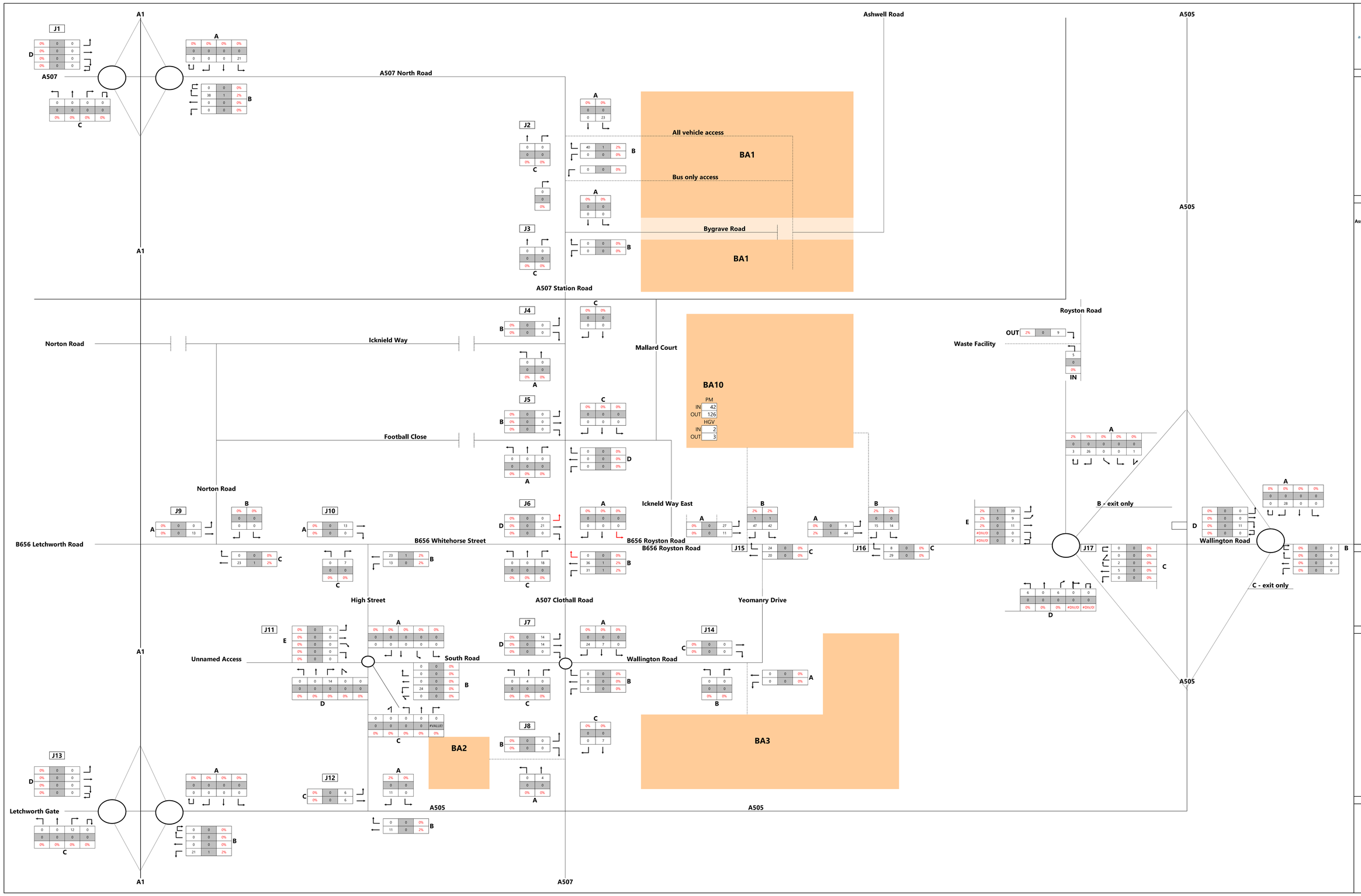
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

BA10 2040 Assign Total PM

Assumptions

DATE: 02/03/2023

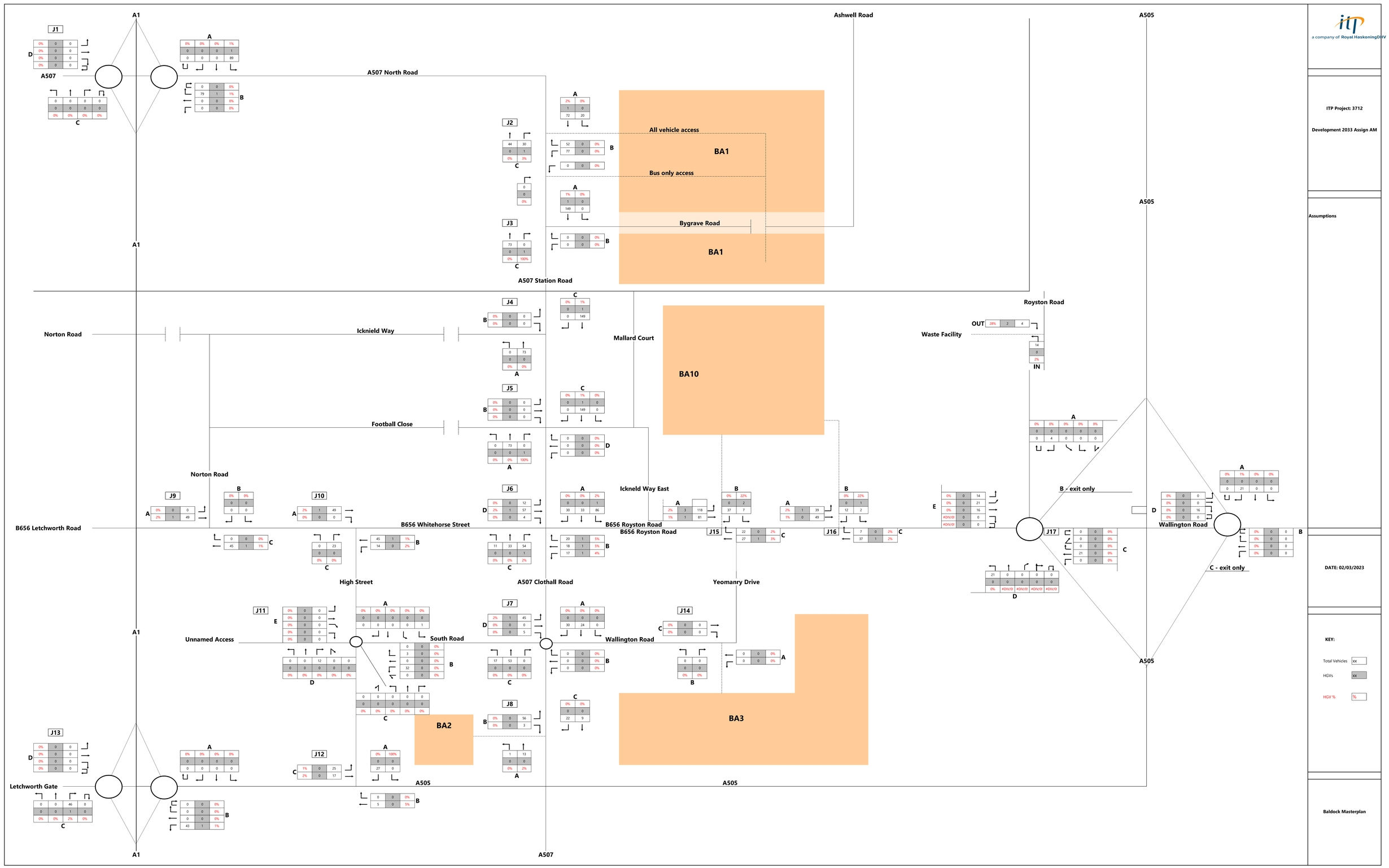
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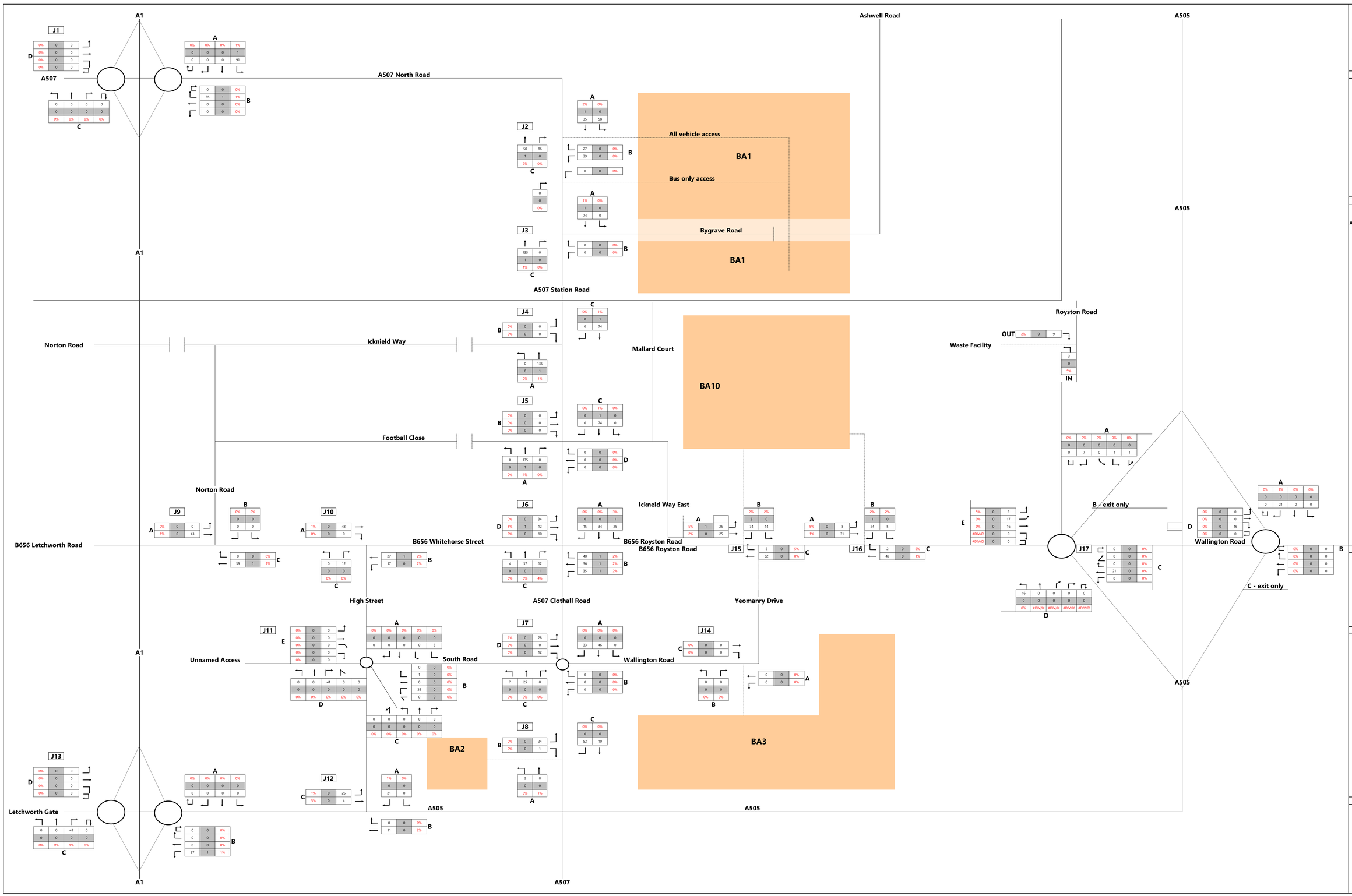
Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan


A1
A507
J1
A
A507 North Road
B
C
D
J2
J3
A507 Station Road
All vehicle access
BA1
Bus only access
Bygrave Road
BA1
Ashwell Road
A505
A505
Royston Road
OUT
IN
Waste Facility
J4
J5
Norton Road
Icknield Way
Football Close
Mallard Court
BA10
Norton Road
J9
J10
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
B656 Royston Road
Ickneld Way East
J6
J15
J16
J17
B - exit only
C - exit only
Wallington Road
High Street
A507 Clothall Road
Yeomanry Drive
J11
J7
J14
Unnamed Access
South Road
Wallington Road
BA2
BA3
J8
J13
J12
Letchworth Gate
A505
A505
A1
A507
A1
ITP Project: 3712
Development 2033 Assign AM
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles
HGVs
HGV %
Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

Development 2033 Assign PM

Assumptions

DATE: 02/03/2023

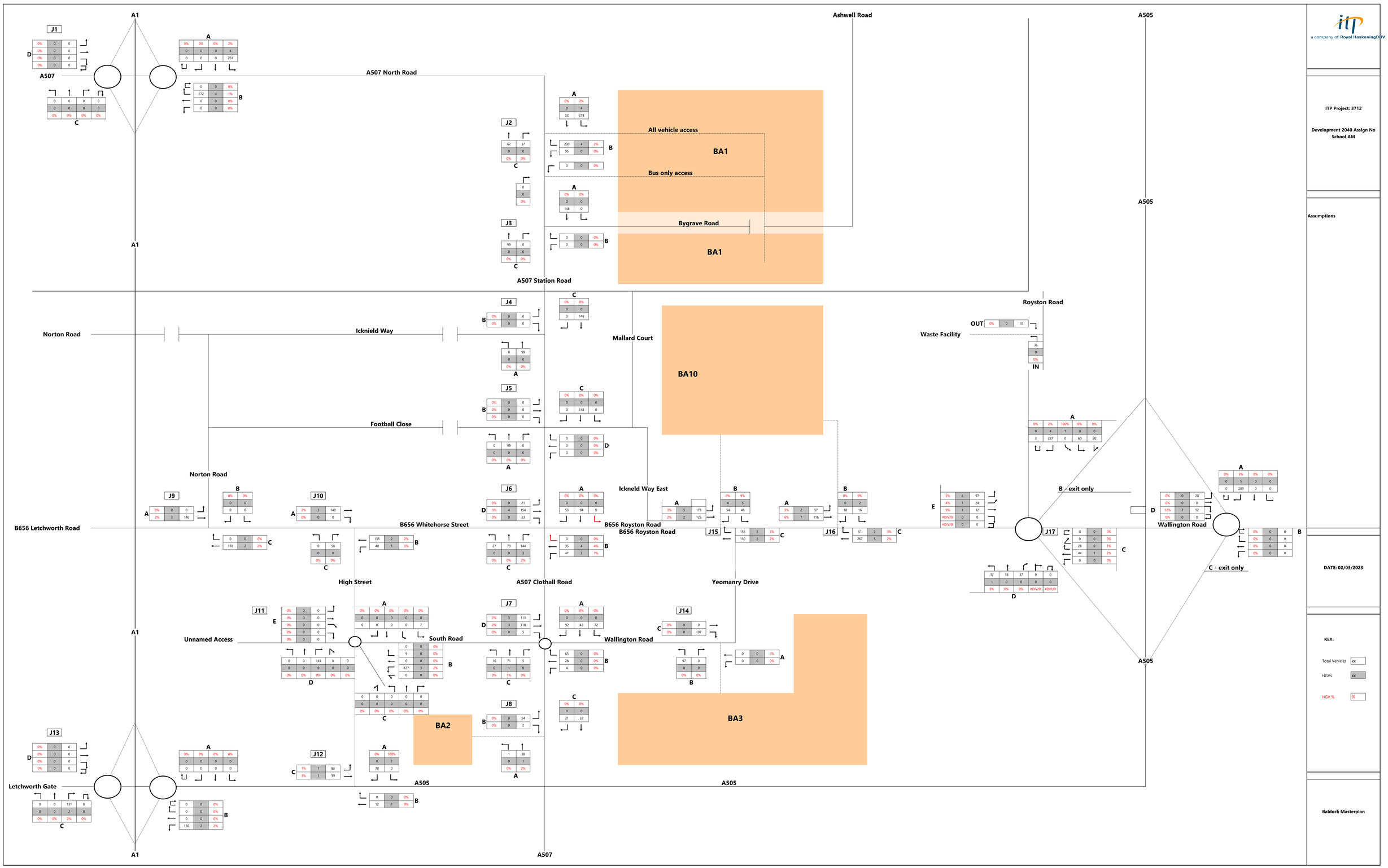
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

Development 2040 Assign No School AM

Assumptions

DATE: 02/03/2023

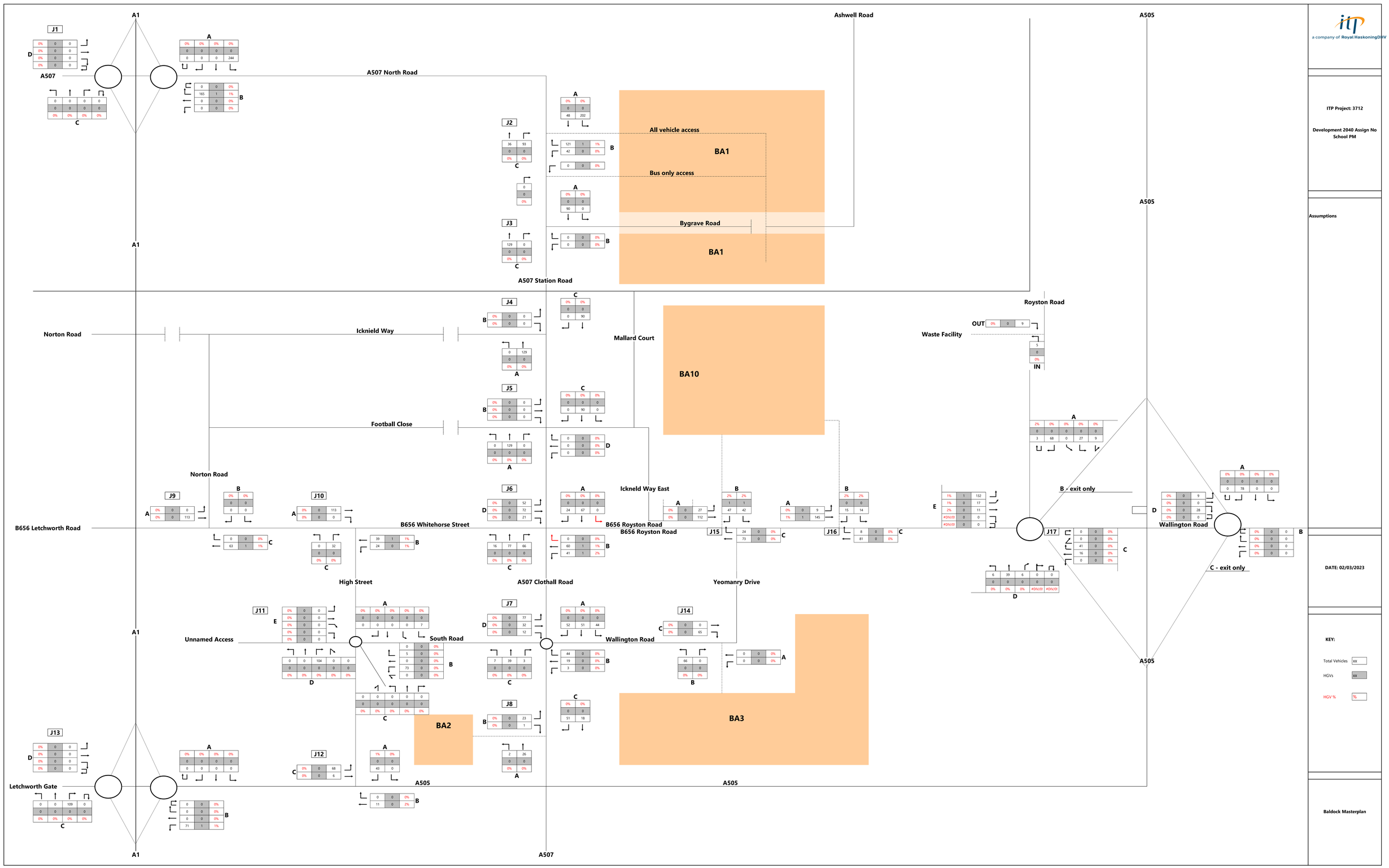
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

Development 2040 Assign No School PM

Assumptions

DATE: 02/03/2023

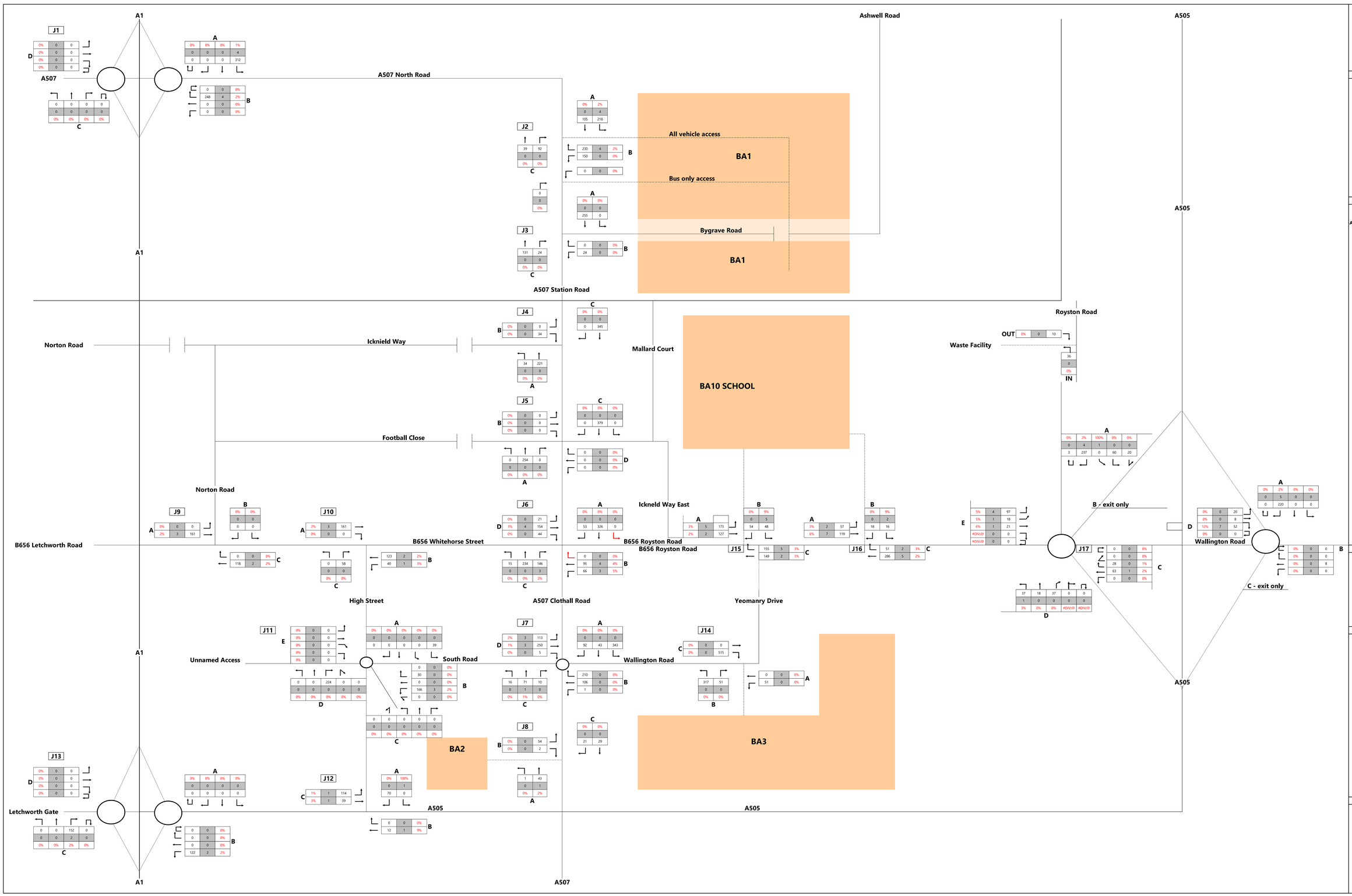
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

Development 2040 Assign w/School AM

Assumptions

DATE: 02/03/2023

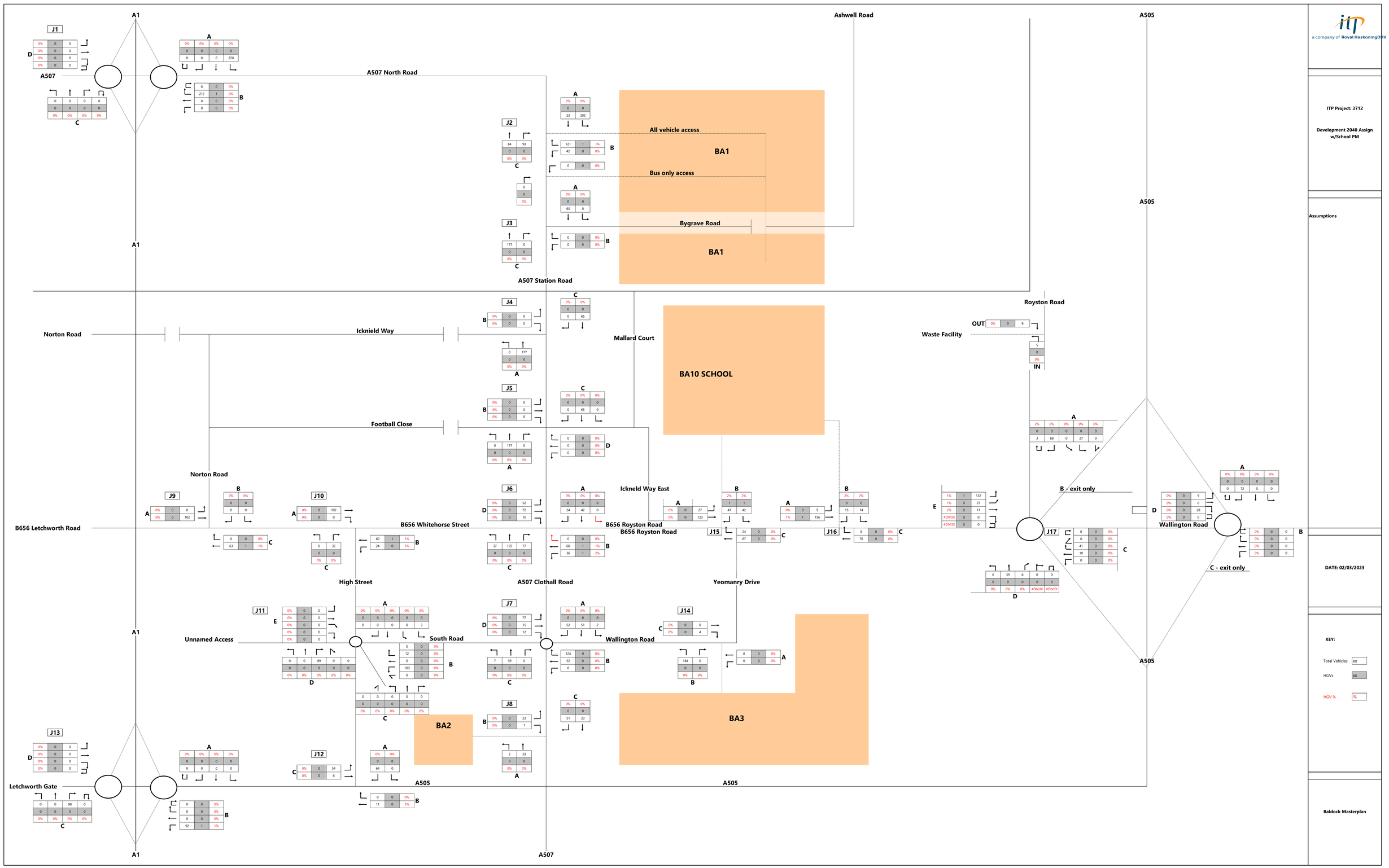
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

Development 2040 Assign w/School PM

Assumptions

DATE: 02/03/2023

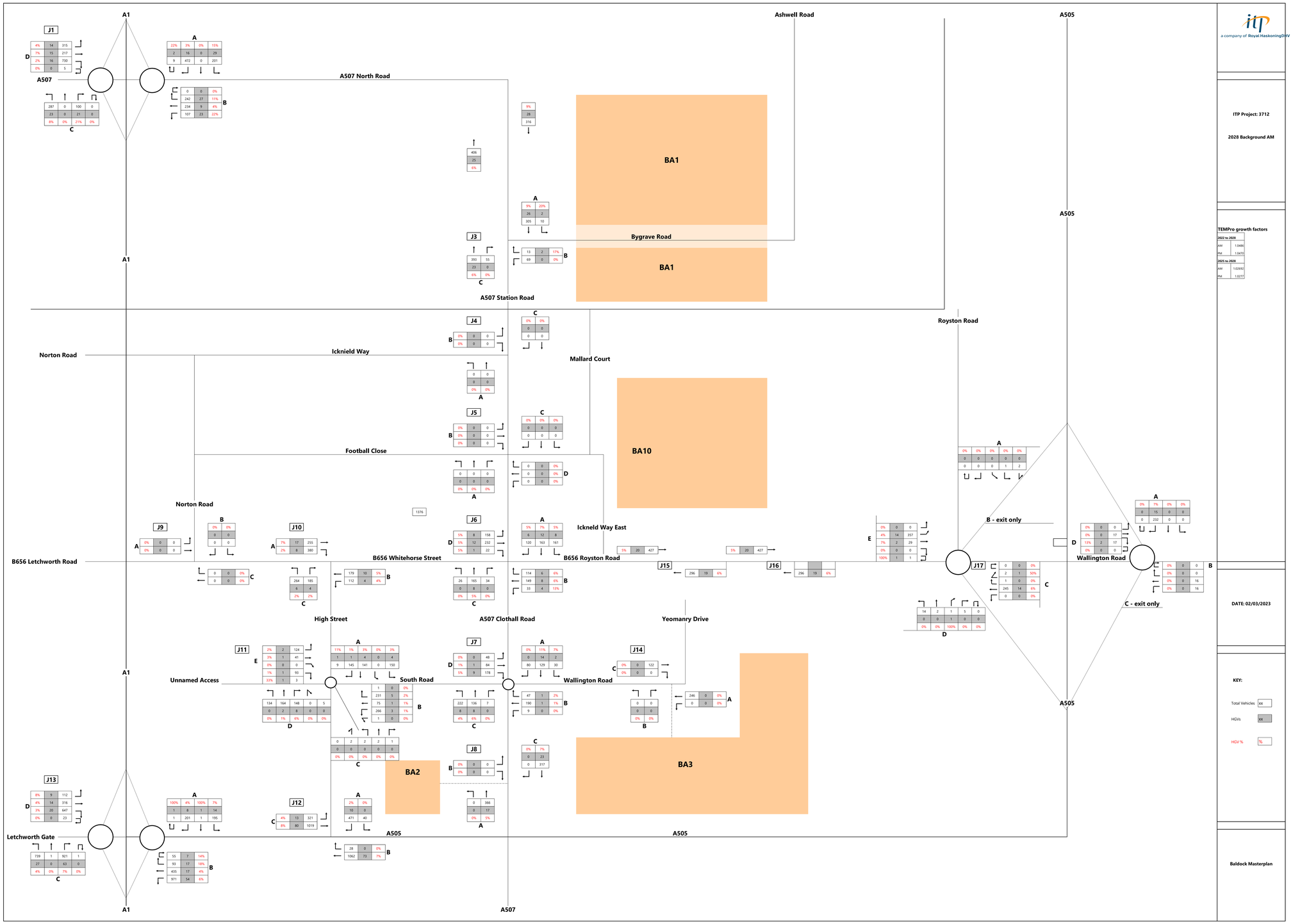
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
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ITP Project: 3712

2028 Background AM

TEMPro growth factors

2022 to 2028	
AM	1.0486
PM	1.0470
2025 to 2028	
AM	1.02692
PM	1.02272

DATE: 02/03/2023

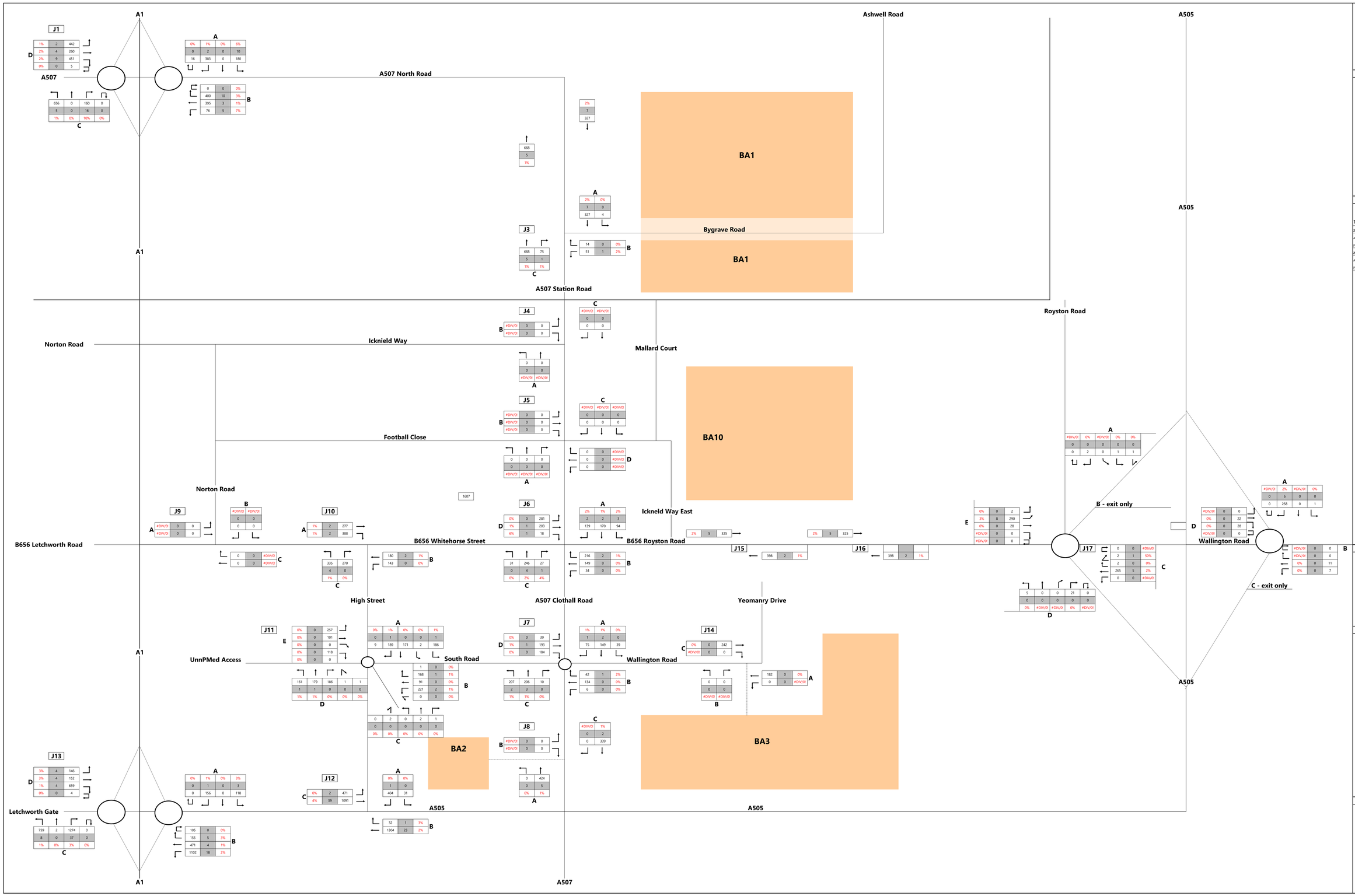
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan


A1
A507
A507 North Road
Ashwell Road
A505
BA1
Bygrave Road
A507 Station Road
Royston Road
Norton Road
Icknield Way
Mallard Court
BA10
Football Close
Norton Road
Ickneld Way East
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
B - exit only
Wallington Road
C - exit only
High Street
A507 Clothall Road
Yeomanry Drive
UnnPMed Access
South Road
Wallington Road
BA2
BA3
Letchworth Gate
A505
A507
J1
J3
J4
J5
J6
J7
J8
J9
J10
J11
J12
J13
J14
J15
J16
J17
TEMPro growth factors
2022 to 2028
AM 1.0486
PM 1.0470
2025 to 2028
AM 1.026916
PM 1.0277
ITP Project: 3712
2028 Background PM
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV %
Baldock Masterplan

A1

Ashwell Road

A505

A507

A507 North Road

BA1

Bygrave Road

BA1

A505

A1

A507 Station Road

Royston Road

Norton Road

Icknield Way

Mallard Court

Football Close

BA10

Norton Road

Ickneild Way East

B656 Letchworth Road

B656 Whitehorse Street

B656 Royston Road

B - exit only

Wallington Road

C - exit only

High Street

A507 Clothall Road

Yeomanry Drive

A1

Unnamed Access

South Road

Wallington Road

BA2

BA3

A505

A505

Letchworth Gate

A1

A507

itp
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ITP Project: 3712

2033 Background AM

TEMPro growth factors

2020 to 2033	
AM	1.022
PM	1.0217

DATE: 02/03/2023

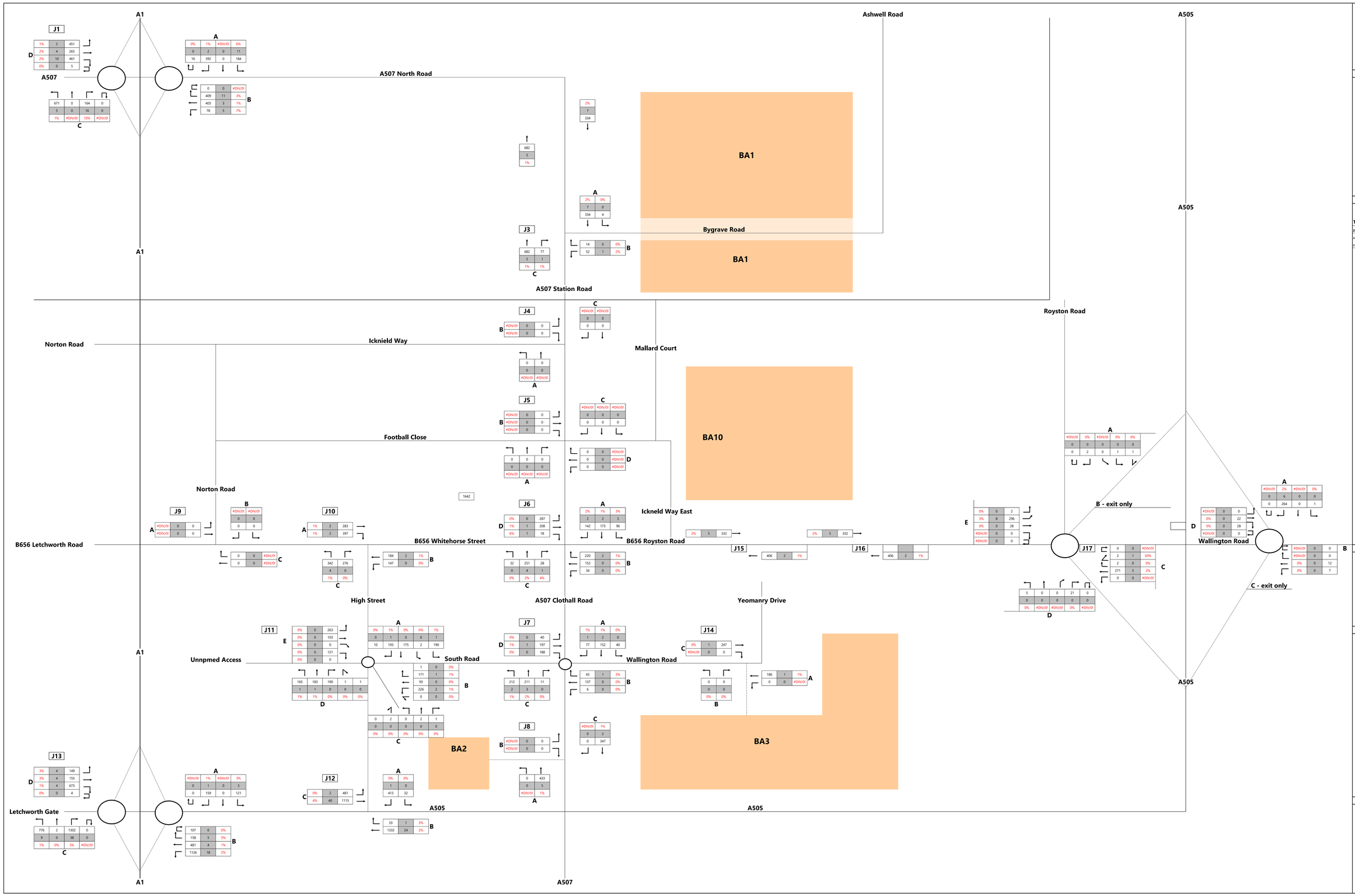
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2033 Background PM

TEMPro growth factors

2028 to 2033	
AM	1.022
PM	1.0217

DATE: 02/03/2023

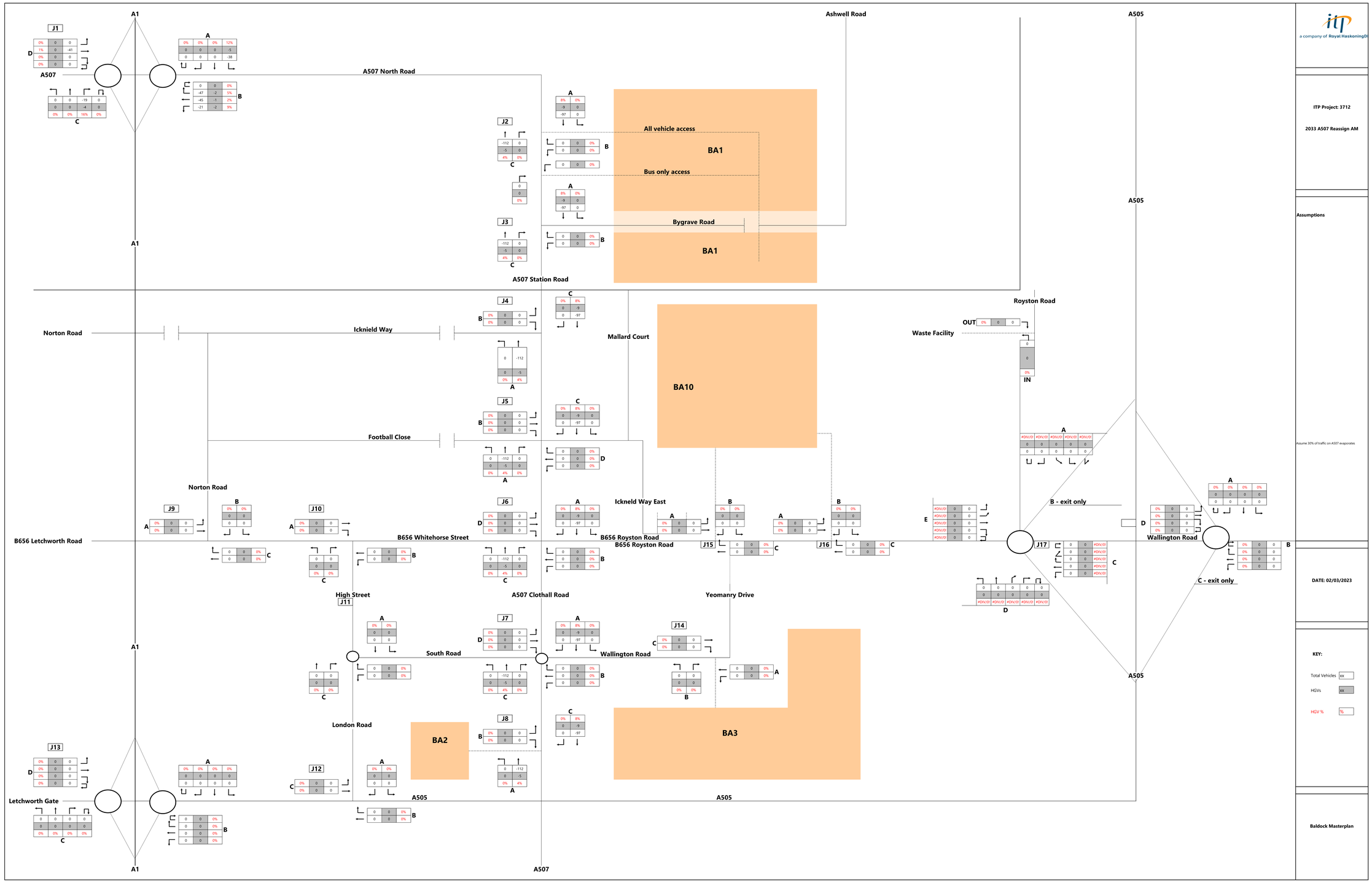
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2033 A507 Reassign AM

Assumptions

Assume 30% of traffic on A507 evaporates

DATE: 02/03/2023

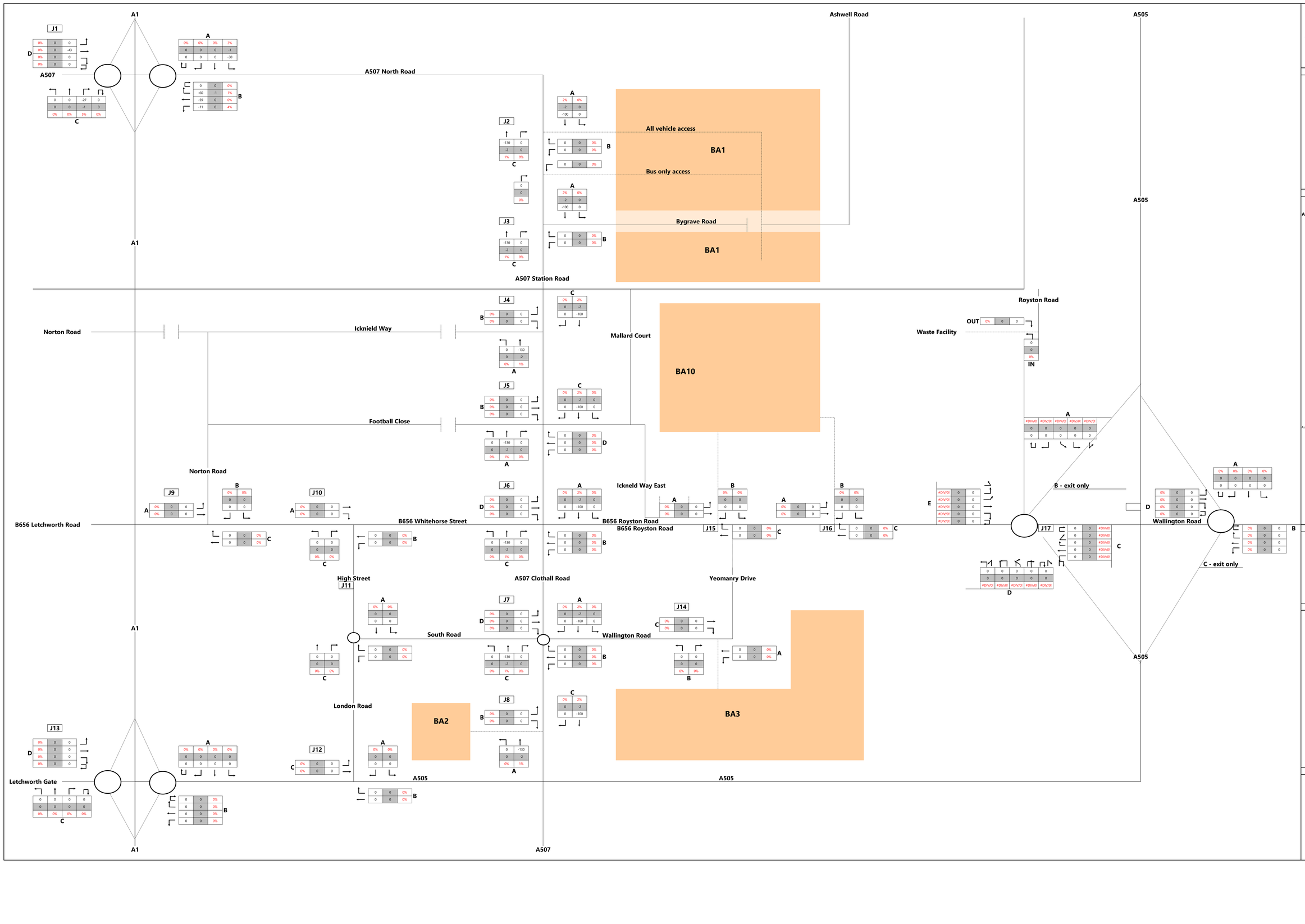
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

2033 A507 Reassign PM

Assumptions

Assume 30% of traffic on A507 evaporates

DATE: 02/03/2023

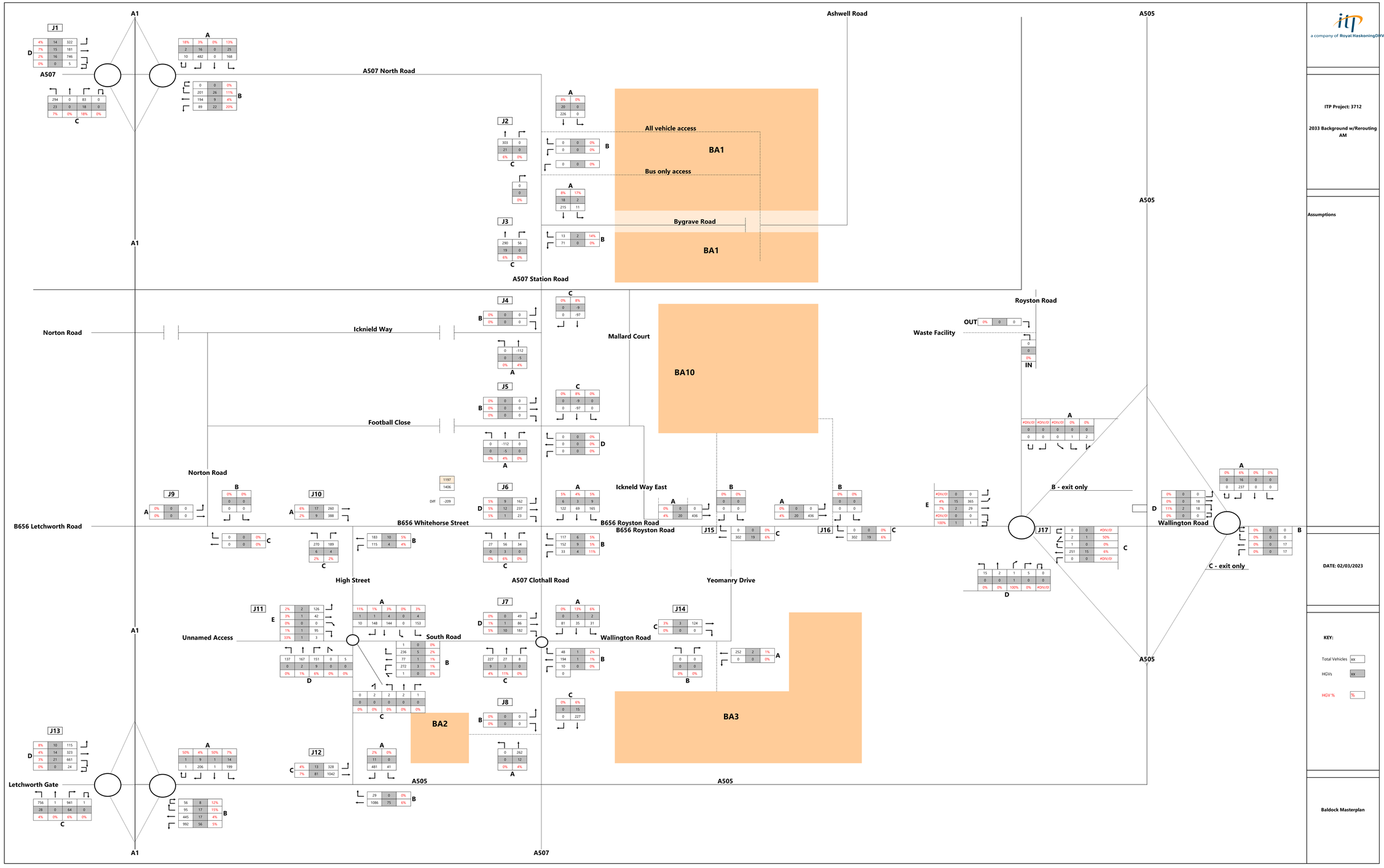
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

2033 Background w/Rerouting AM

Assumptions

DATE: 02/03/2023

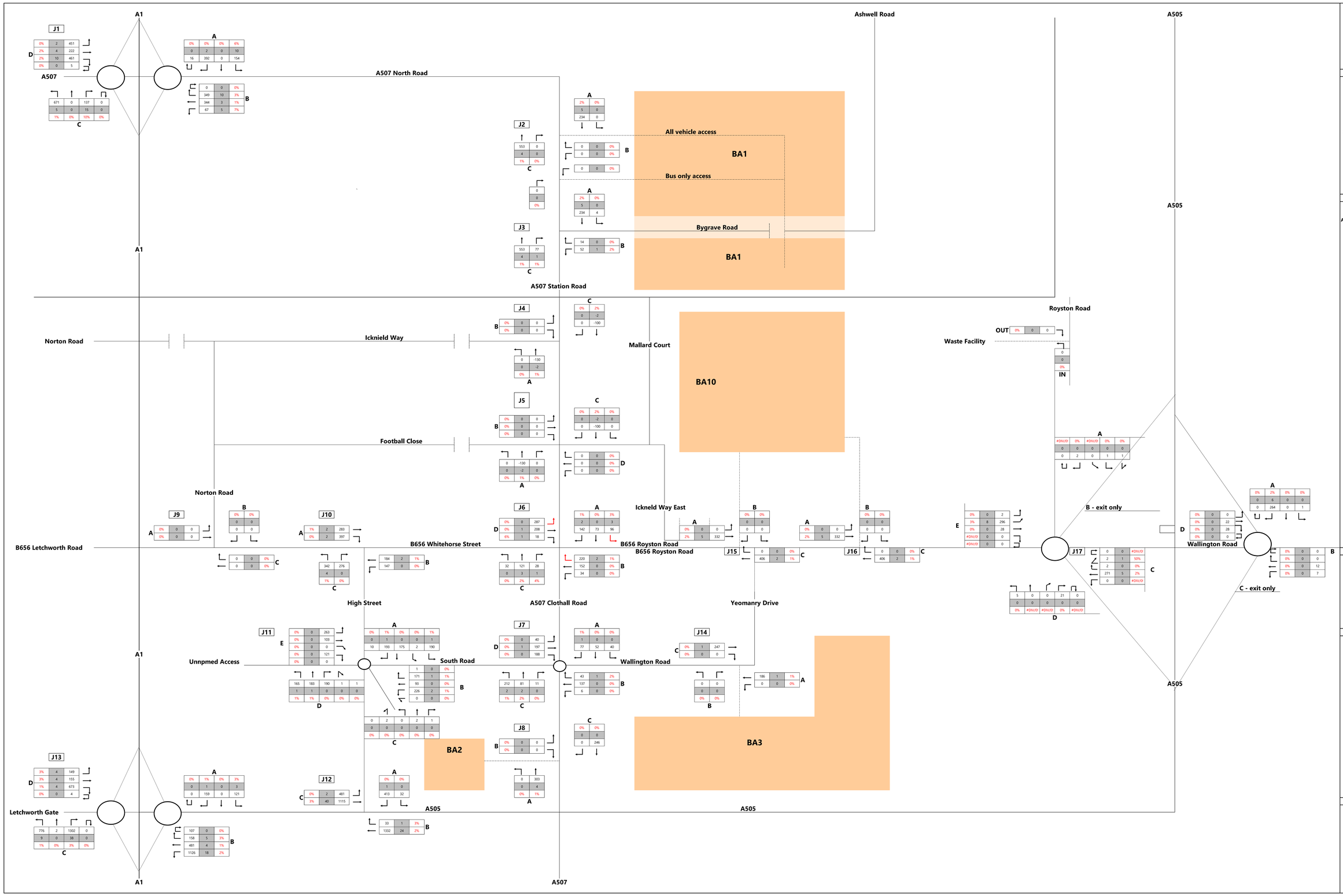
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

2033 Background w/Rerouting PM

Assumptions

DATE: 02/03/2023

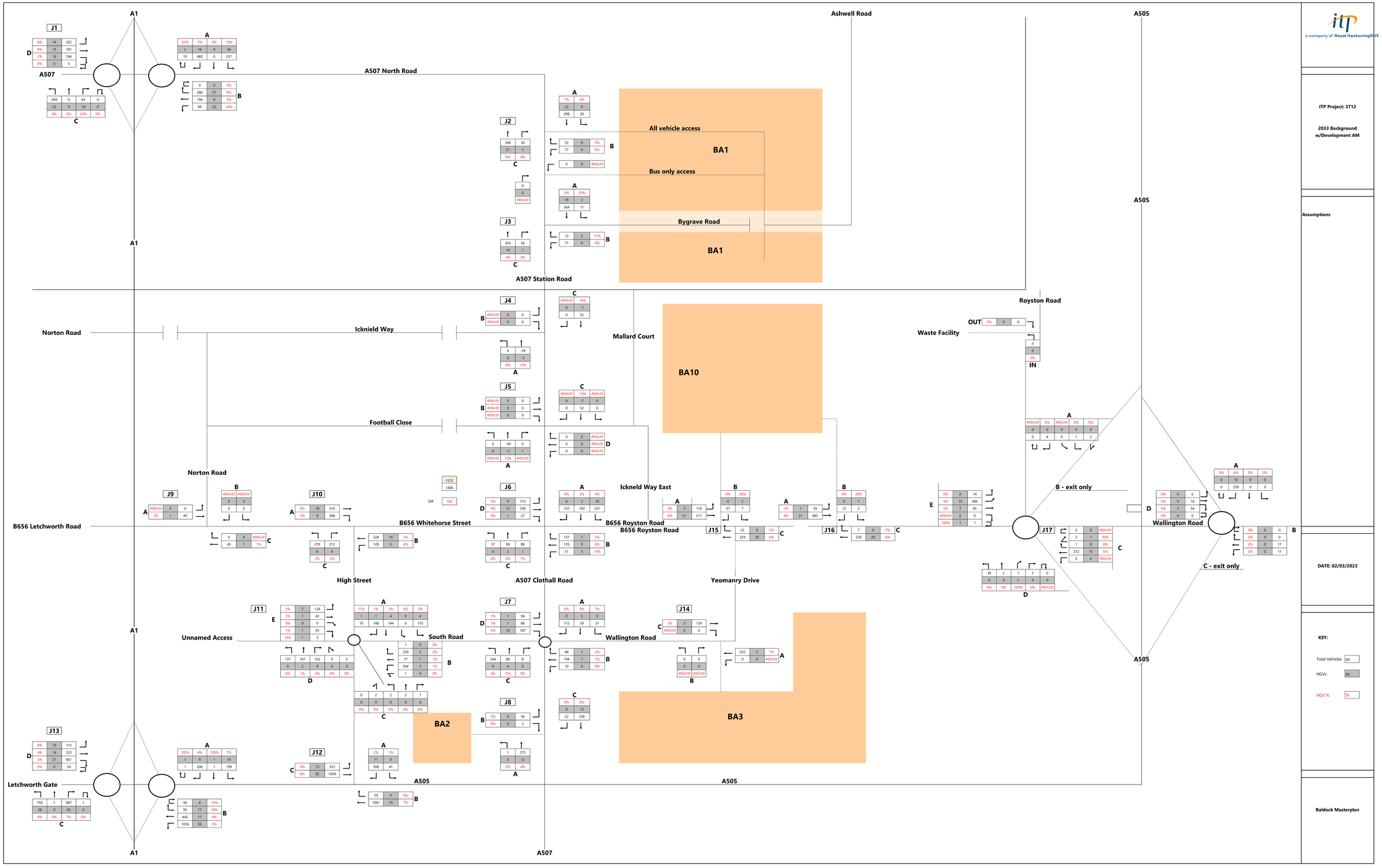
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

2033 Background w/Development AM

Assumptions

DATE: 02/03/2023

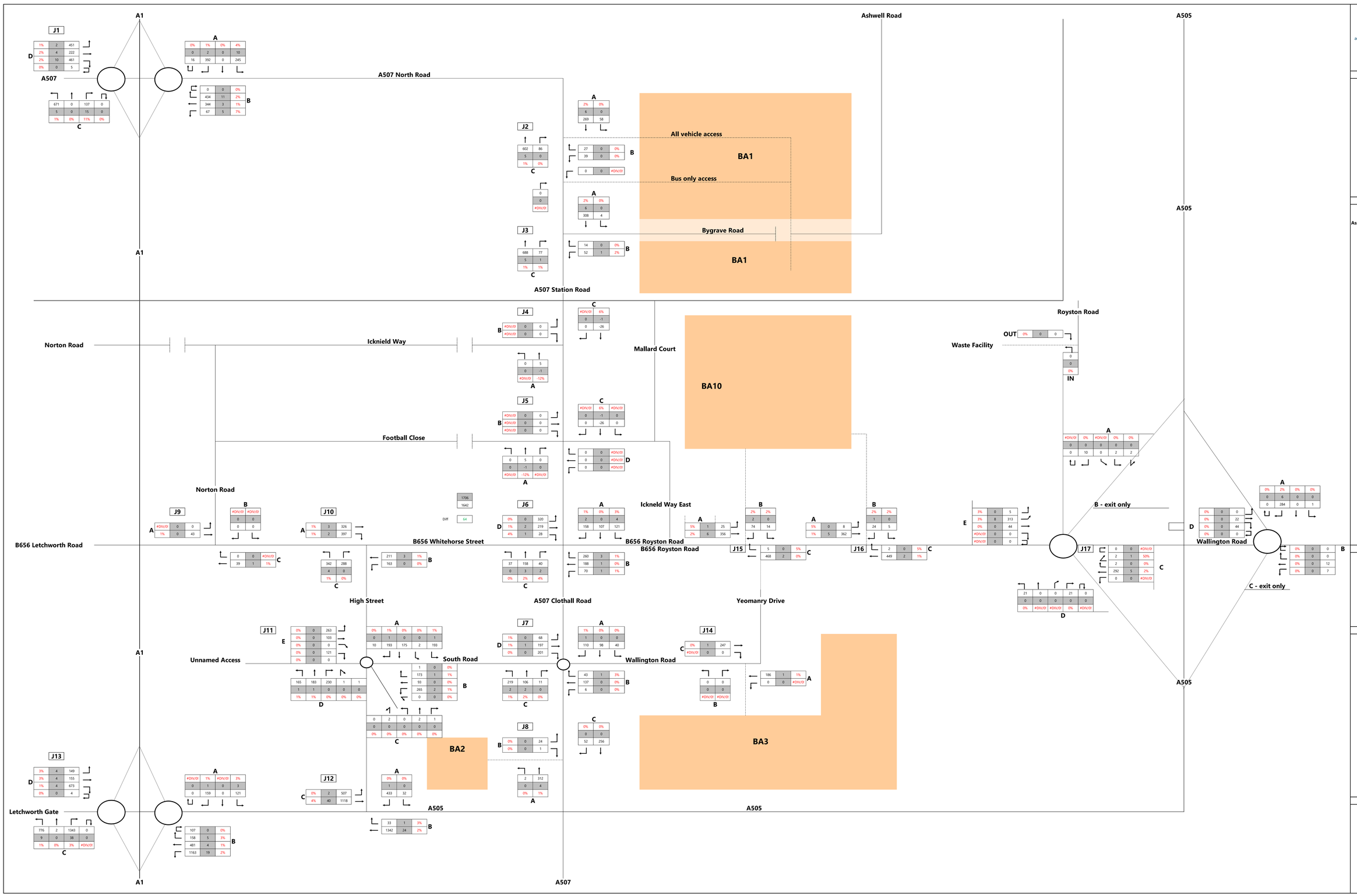
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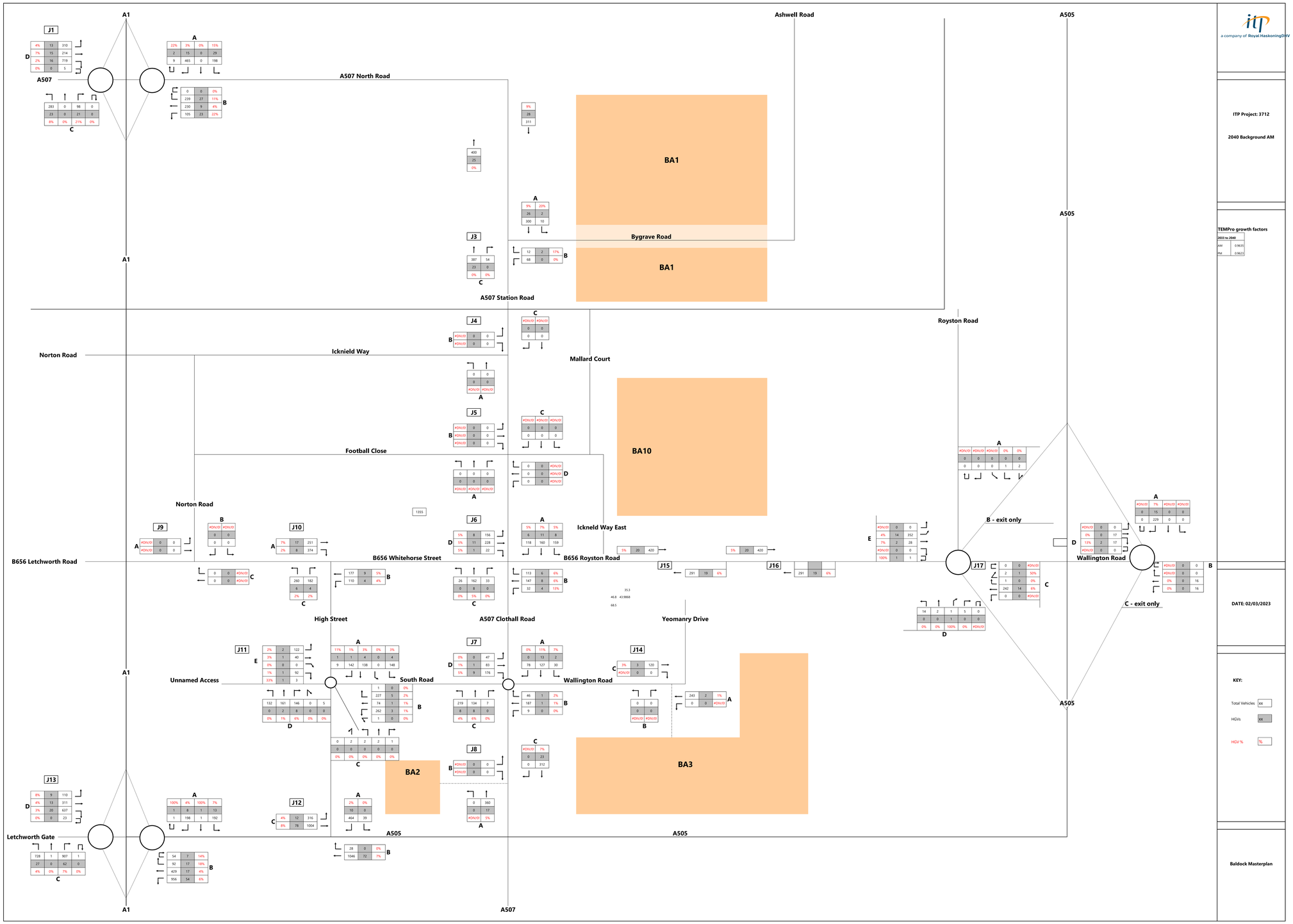
Total Vehicles xx

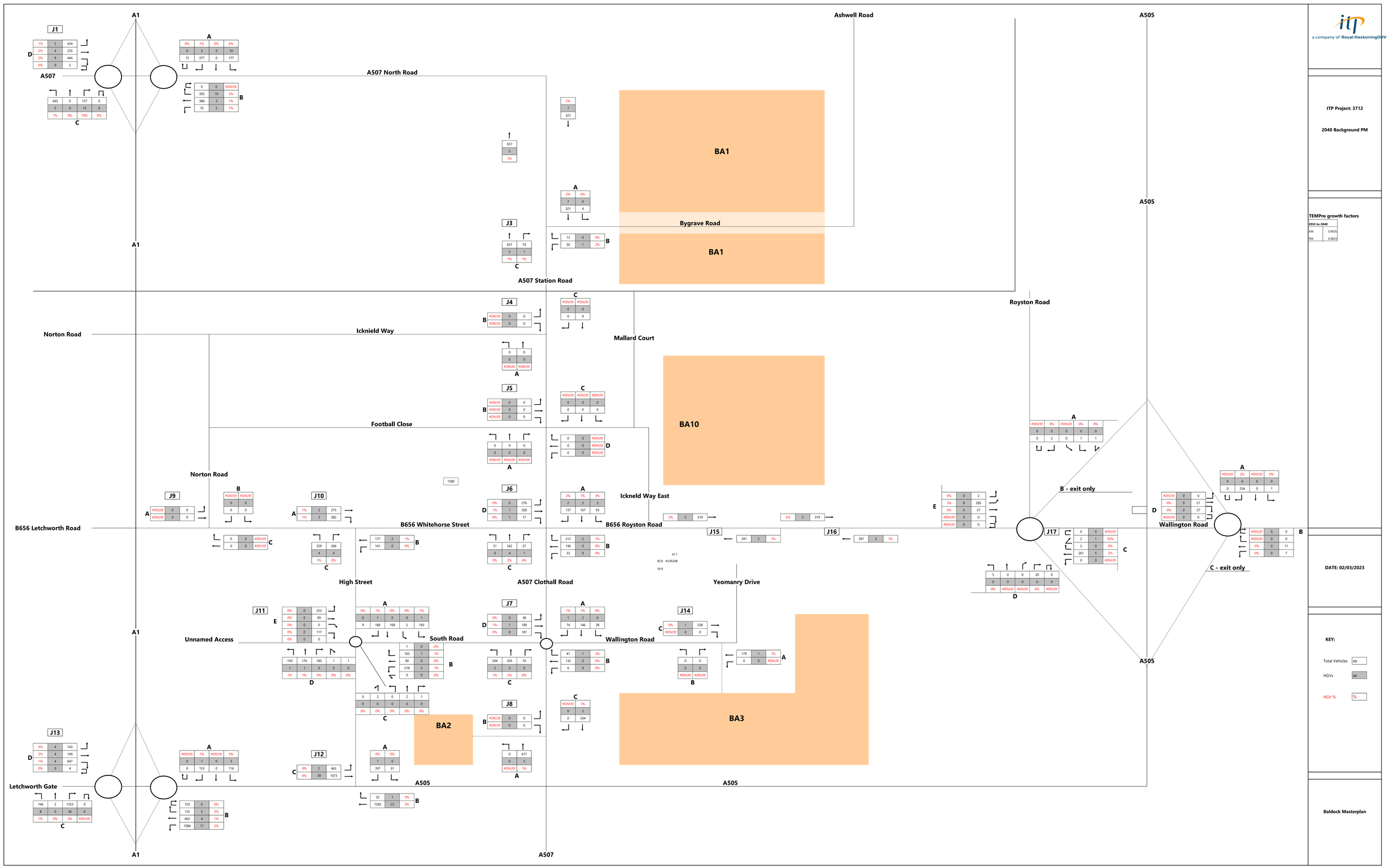
HGVs xx

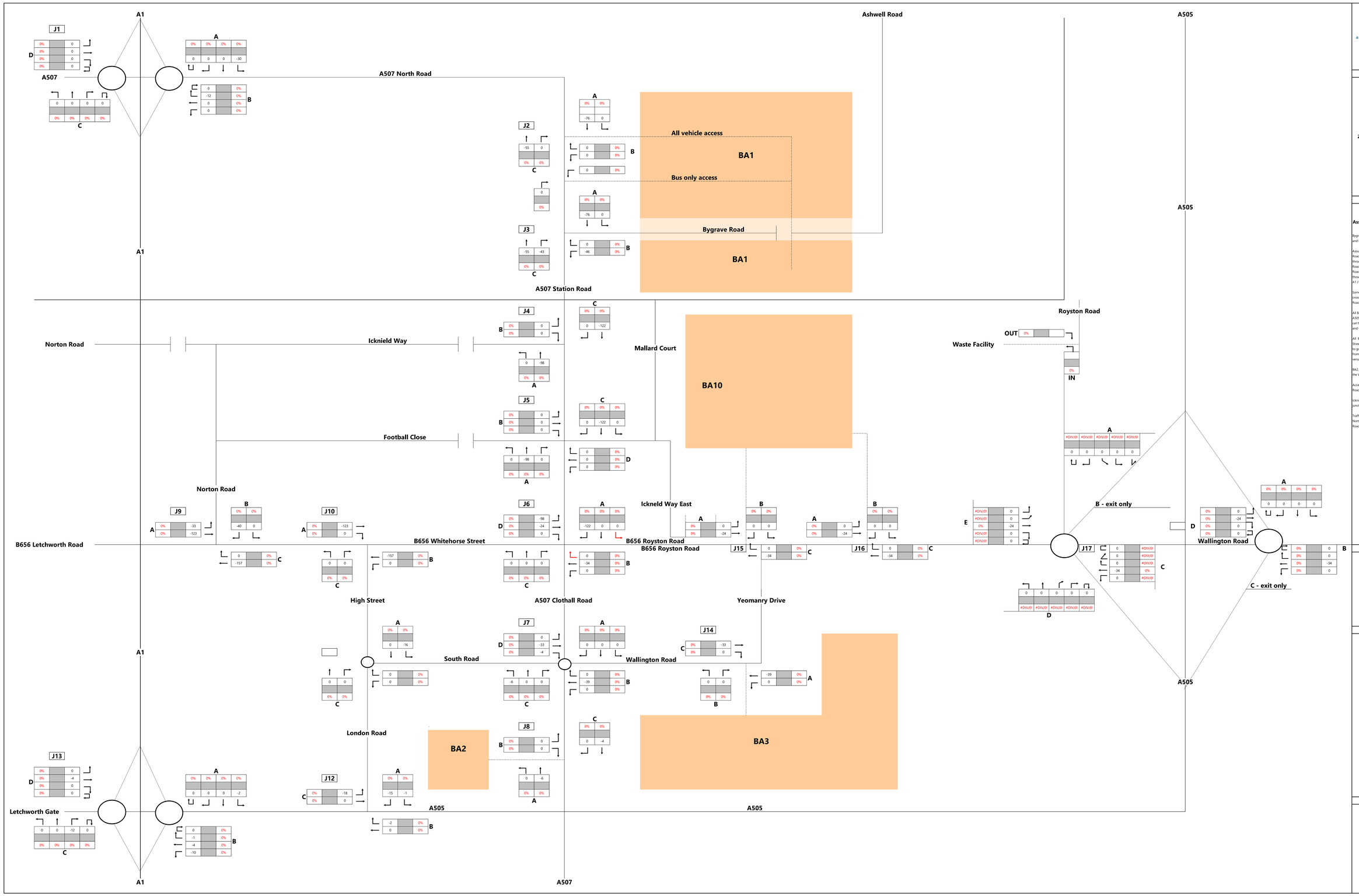
HGV % %

Baldock Masterplan


A1
A507
A507 North Road
J1
A
B
C
D
J2
J3
All vehicle access
BA1
Bus only access
Bygrave Road
BA1
A507 Station Road
Ashwell Road
A505
A505
Royston Road
OUT
Waste Facility
IN
Norton Road
Icknield Way
Mallard Court
BA10
J4
J5
Football Close
Norton Road
J9
J10
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
B656 Royston Road
Ickneld Way East
J15
J16
J17
B - exit only
C - exit only
Wallington Road
High Street
A507 Clothall Road
Yeomanry Drive
J11
J7
J14
Unnamed Access
South Road
Wallington Road
BA2
BA3
J8
J12
J13
Letchworth Gate
A505
A505
A1
A507
1706
1642
Diff
64
ITP Project: 3712
2033 Background w/Development PM
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles
HGVs
HGV %
Baldock Masterplan


A1
A507
A507 North Road
Ashwell Road
A505
Bygrave Road
BA1
BA1
A507 Station Road
Royston Road
A1
Norton Road
Icknield Way
Mallard Court
BA10
Football Close
Norton Road
Ickneld Way East
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
B - exit only
Wallington Road
C - exit only
High Street
A507 Clothall Road
Yeomanry Drive
A1
Unnamed Access
South Road
Wallington Road
A505
BA2
BA3
Letchworth Gate
A505
A505
A1
A507
J1
J3
J4
J5
J6
J7
J8
J9
J10
J11
J12
J13
J14
J15
J16
J17
TEMPro growth factors
2033 to 2040
AM 0.9635
PM 0.9623
ITP Project: 3712
2040 Background AM
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV % %
Baldock Masterplan


A1
A507
A507 North Road
Ashwell Road
A505
Bygrave Road
BA1
A507 Station Road
Royston Road
Norton Road
Icknield Way
Mallard Court
BA10
Football Close
Norton Road
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
Ickneld Way East
B - exit only
Wallington Road
C - exit only
High Street
A507 Clothall Road
Yeomanry Drive
Unnamed Access
South Road
Wallington Road
BA2
BA3
Letchworth Gate
A505
A507
A1
J1
J3
J4
J5
J6
J7
J8
J9
J10
J11
J12
J13
J14
J15
J16
J17
ITP Project: 3712
2040 Background PM
TEMPro growth factors
2033 to 2040
AM 0.9635
PM 0.9623
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV % %
Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

2040 KT School Reassign AM

Assumptions

Bygrave Road is closed allowing only Salisbury Road and Larkins Close to access North Road

Assume 50% of trips originating / ending on Bygrave Road from Bygrave and Ashwell are instead rerouted through the site on the link road, then onto Royston Road. Assume 50% of those coming to/from Station Road are going to/from Letchworth/High Street, and those going to/from North Road are going to/from A1 J10

Some turns are banned at the Whitehorse Street crossroads. Assume left turns from B656 to Station Road reroute via Letchworth towards A1 J10

All BA1 traffic heading east on Royston Road to the A505 will use the eastern development access (as it can't turn left at the Whitehorse Street crossroad) and vice versa

All BA1 traffic coming from the B656 Whitehorse Street west and accesing the development will need to go straight ahead at the junction and access BA1 from the eastern development access (and vice versa)

BA2, BA3 and BA10 traffic shouldn't be affected by the Whitehorse Street crossroads intervention.

Access from BA3 northwards is only via Wallington Road - the northern access is a bus gate

Icknield Way and Football Close are closed at their junctions with Station Road

Traffic using Icknield Way or Football Close to access Norton Road would reroute to the south of Norton Road via Whitehorse Street

DATE: 02/03/2023

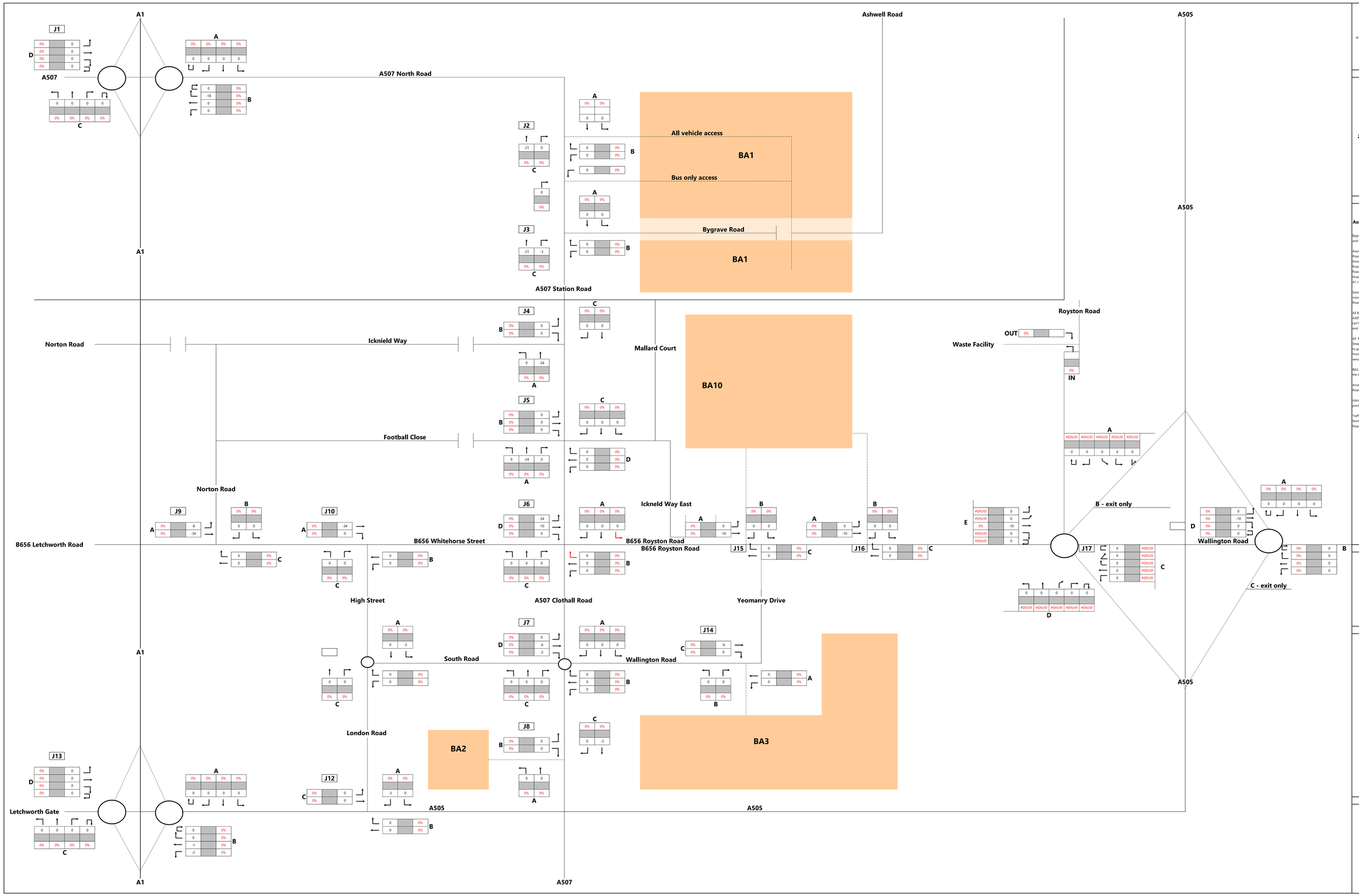
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



a company of Royal HaskoningDHV

ITP Project: 3712

2040 KT School Reassign PM

Assumptions

Bygrave Road is closed allowing only Salisbury Road and Larkins Close to access North Road

Assume 50% of trips originating / ending on Bygrave Road from Bygrave and Ashwell are instead rerouted through the site on the link road, then onto Royston Road. Assume 50% of those coming to/from Station Road are going to/from Letchworth/High Street, and those going to/from North Road are going to/from A1 J10

Some turns are banned at the Whitehorse Street crossroads. Assume left turns from B656 to Station Road reroute via Letchworth towards A1 J10

All BA1 traffic heading east on Royston Road to the A505 will use the eastern development access (as it can't turn left at the Whitehorse Street crossroad) and vice versa

All BA1 traffic coming from the B656 Whitehorse Street west and accessing the development will need to go straight ahead at the junction and access BA1 from the eastern development access (and vice versa)

BA2, BA3 and BA10 traffic shouldn't be affected by the Whitehorse Street crossroads intervention.

Access from BA3 northwards is only via Wallington Road - the northern access is a bus gate

Icknield Way and Football Close are closed at their junctions with Station Road

Traffic using Icknield Way or Football Close to access Norton Road would reroute to the south of Norton Road via Whitehorse Street

DATE: 02/03/2023

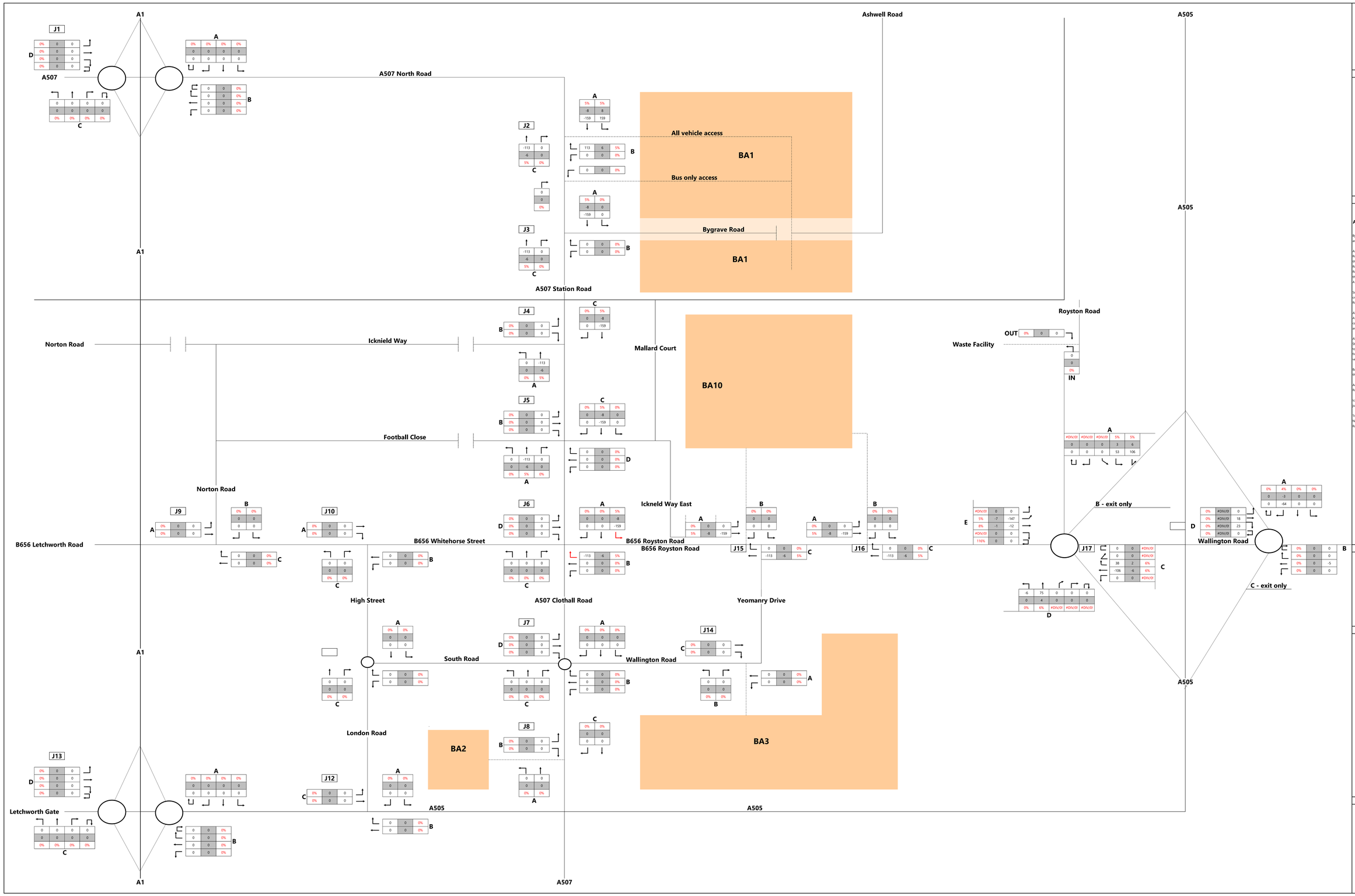
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
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ITP Project: 3712

2040 Whitehorse Crossroad Reassign AM

Assumptions

Bygrave Road is closed allowing only Salisbury Road and Larkins Close to access North Road

Assume 50% of trips originating / ending on Bygrave Road from Bygrave and Ashwell are instead rerouted through the site on the link road, then onto Royston Road. Assume 50% of those coming to/from Station Road are going to/from Letchworth/High Street, and those going to/from North Road are going to/from A1 J10

Some turns are banned at the Whitehorse Street crossroads. Assume left turns from B656 to Station Road reroute via Letchworth towards A1 J10

All BA1 traffic heading east on Royston Road to the A505 will use the eastern development access (as it can't turn left at the Whitehorse Street crossroad) and vice versa

All BA1 traffic coming from the B656 Whitehorse Street west and accesing the development will need to go straight ahead at the junction and access BA1 from the eastern development access (and vice versa)

BA2, BA3 and BA10 traffic shouldn't be affected by the Whitehorse Street crossroads intervention.

Access from BA3 northwards is only via Wallington Road - the northern access is a bus gate

Icknield Way and Football Close are closed at their junctions with Station Road

Traffic using Icknield Way or Football Close to access Norton Road would reroute to the south of Norton Road via Whitehorse Street

DATE: 02/03/2023

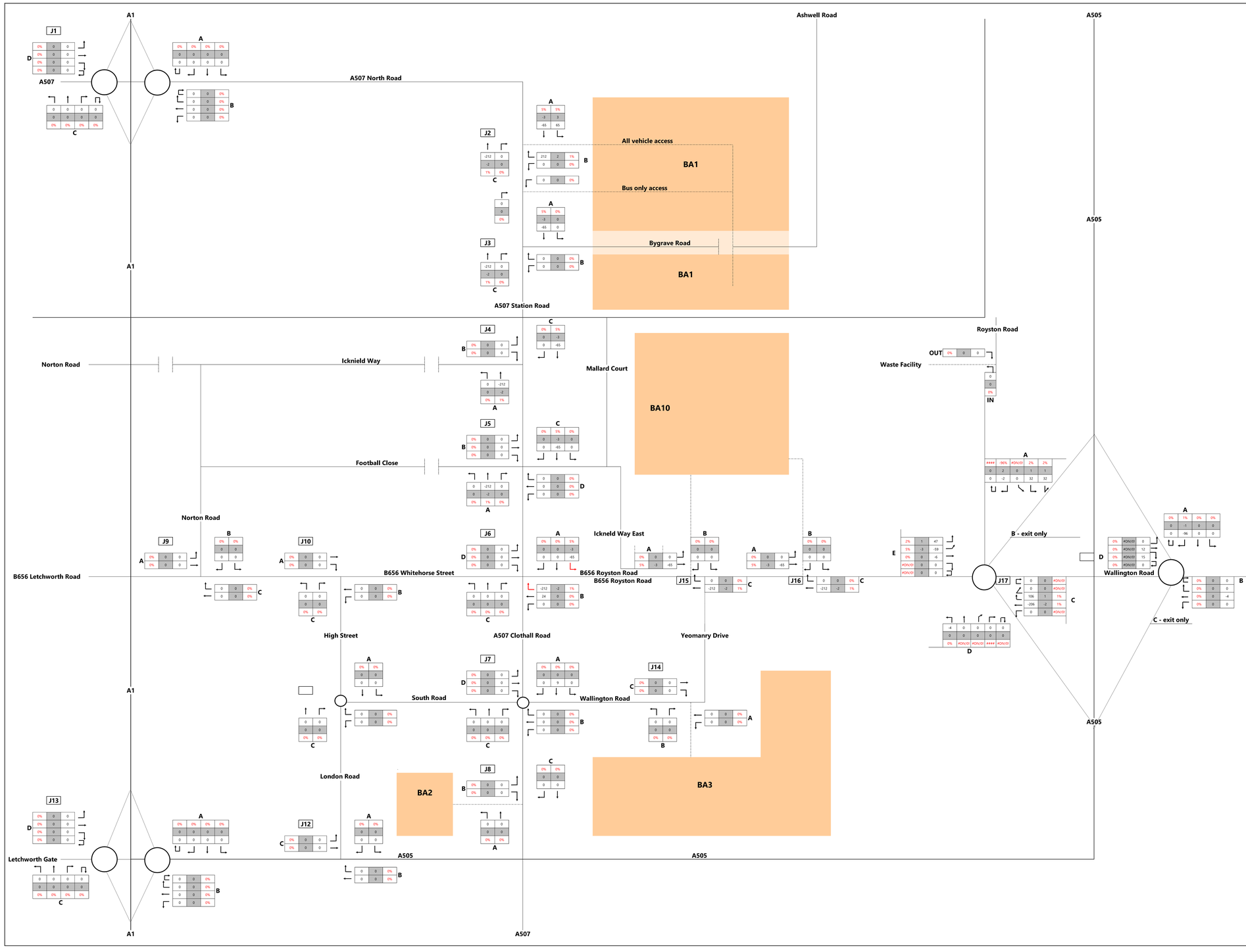
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
a company of Royal HaskoningDHV

ITP Project: 3712

2040 Whitehorse Crossroad Reassign PM

Assumptions

Bygrave Road is closed allowing only Salisbury Road and Larkins Close to access North Road

Assume 50% of trips originating / ending on Bygrave Road from Bygrave and Ashwell are instead rerouted through the site on the link road, then onto Royston Road. Assume 50% of those coming to/from Station Road are going to/from Letchworth/High Street, and those going to/from North Road are going to/from A1 /10

Some turns are banned at the Whitehorse Street crossroads. Assume left turns from B656 to Station Road reroute via Letchworth towards A1 /10

All BA1 traffic heading east on Royston Road to the A505 will use the eastern development access (as it can't turn left at the Whitehorse Street crossroad) and vice versa

All BA1 traffic coming from the B656 Whitehorse Street west and accesing the development will need to go straight ahead at the junction and access BA1 from the eastern development access and vice versa)

BA2, BA3 and BA10 traffic shouldn't be affected by the Whitehorse Street crossroads intervention.

Acess from BA3 northwards is only via Wallington Road - the northern access is a Bus gate

Icknield Way and Football Close are closed at their junctions with Station Road

Traffic using Icknield Way or Football Close to access Norton Road would reroute to the south of Norton Road via Whitehorse Street

Assume 50% of BA1 traffic uses each access junction

Assume 30% of traffic diverted onto the link road decides not to use it altogether

Assume 20% of traffic unable to turn left at Whitehorse Street crossroads no longer passes through the junction

DATE: 02/03/2023

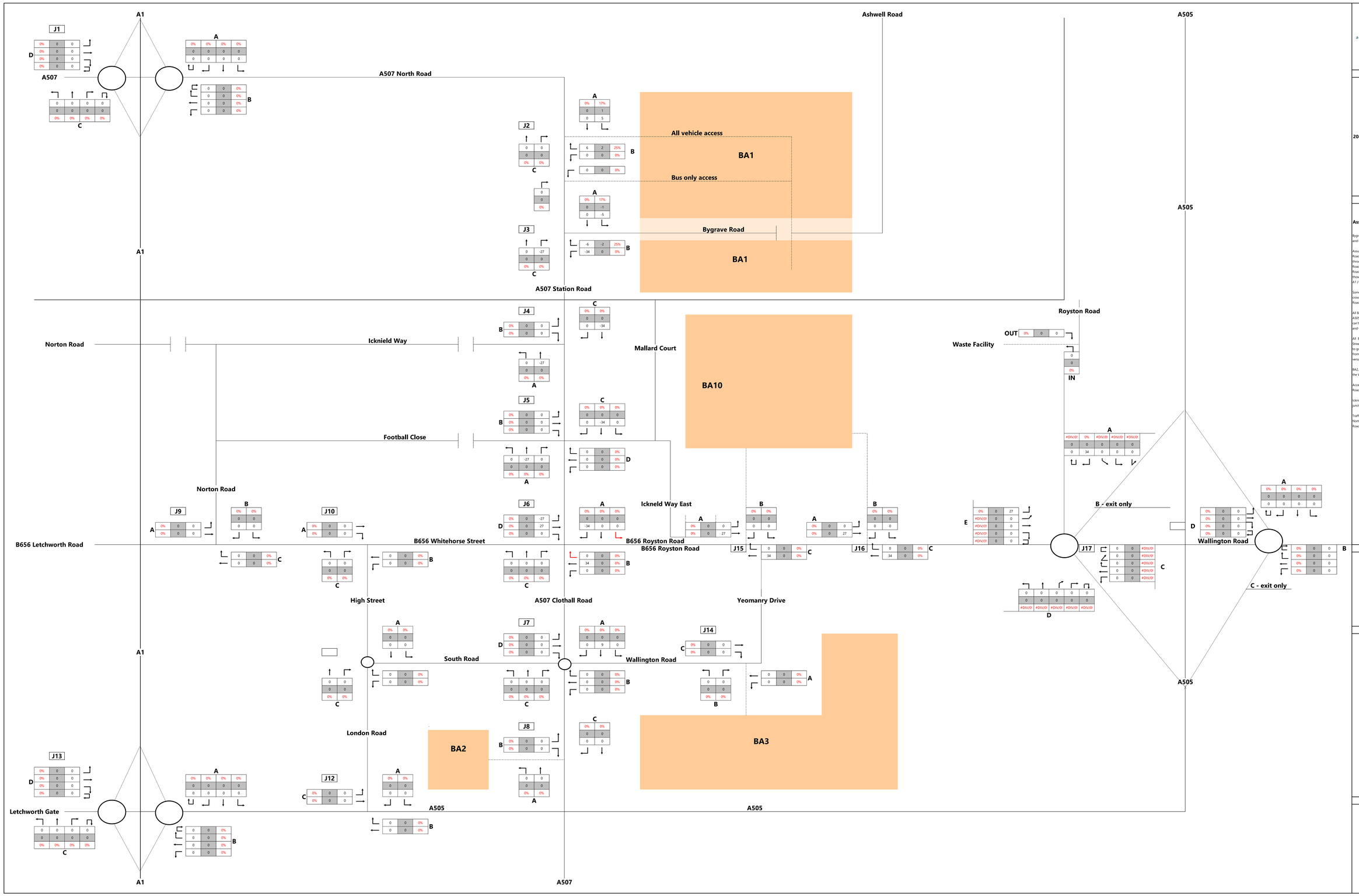
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



itp
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ITP Project: 3712

2040 Bygrave Road Reassign AM

Assumptions

Bygrave Road is closed allowing only Salisbury Road and Larkins Close to access North Road

Assume 50% of trips originating / ending on Bygrave Road from Bygrave and Ashwell are instead rerouted through the site on the link road, then onto Royston Road. Assume 50% of those coming to/from Station Road are going to/from Letchworth/High Street, and those going to/from North Road are going to/from A1 J10

Some turns are banned at the Whitehorse Street crossroads. Assume left turns from B656 to Station Road reroute via Letchworth towards A1 J10

All BA1 traffic heading east on Royston Road to the A505 will use the eastern development access (as it can't turn left at the Whitehorse Street crossroad) and vice versa

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Icknield Way and Football Close are closed at their junctions with Station Road

Traffic using Icknield Way or Football Close to access Norton Road would reroute to the south of Norton Road via Whitehorse Street

DATE: 02/03/2023

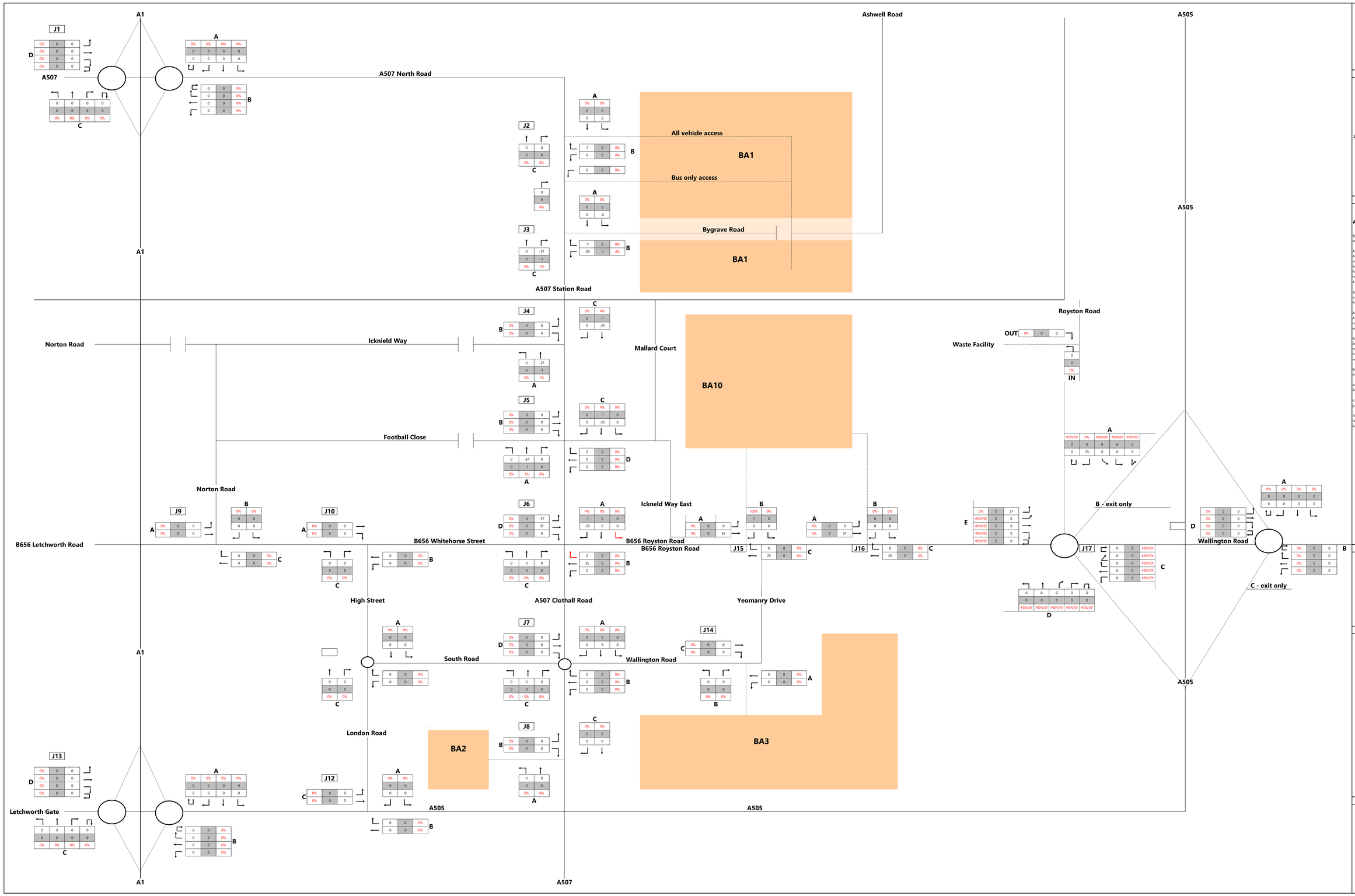
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2040 Bygrave Road Reassign PM

Assumptions

Bygrave Road is closed allowing only Salisbury Road and Larkins Close to access North Road

Assume 50% of trips originating / ending on Bygrave Road from Bygrave and Ashwell are instead rerouted through the site on the link road, then onto Royston Road. Assume 50% of those coming to/from Station Road are going to/from Letchworth/High Street, and those going to/from North Road are going to/from A1 J10

Some turns are banned at the Whitehorse Street crossroads. Assume left turns from B656 to Station Road reroute via Letchworth towards A1 J10

All BA1 traffic heading east on Royston Road to the A505 will use the eastern development access (as it can't turn left at the Whitehorse Street crossroad) and vice versa

All BA1 traffic coming from the B656 Whitehorse Street west and accessing the development will need to go straight ahead at the junction and access BA1 from the eastern development access (and vice versa)

BA2, BA3 and BA10 traffic shouldn't be affected by the Whitehorse Street crossroads intervention.

Access from BA3 northwards is only via Wallington Road - the northern access is a bus gate

Icknield Way and Football Close are closed at their junctions with Station Road

Traffic using Icknield Way or Football Close to access Norton Road would reroute to the south of Norton Road via Whitehorse Street

DATE: 02/03/2023

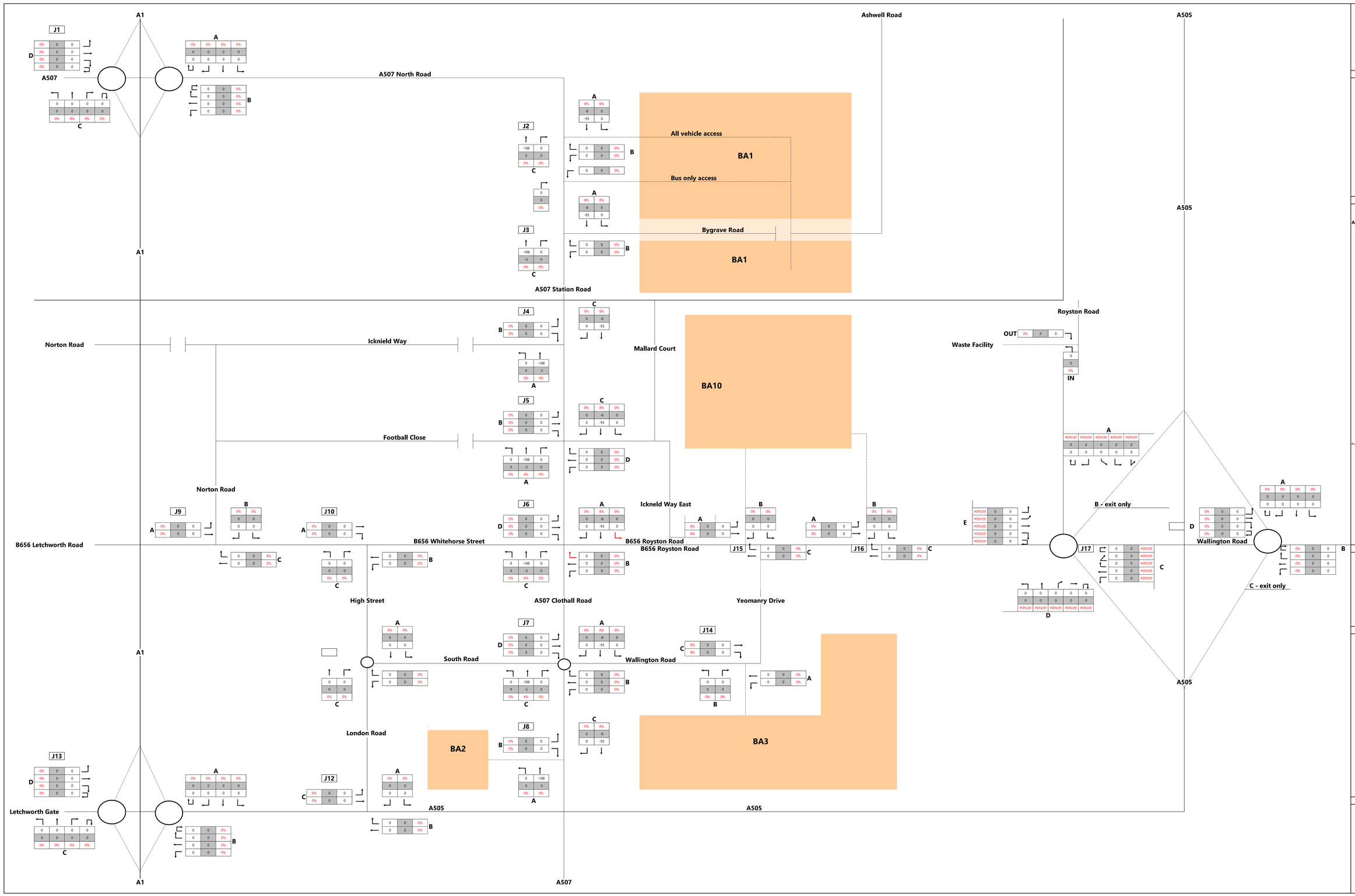
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2040 A507 Reassign AM

Assumptions

Assume 30% of traffic on A507 evaporates

DATE: 02/03/2023

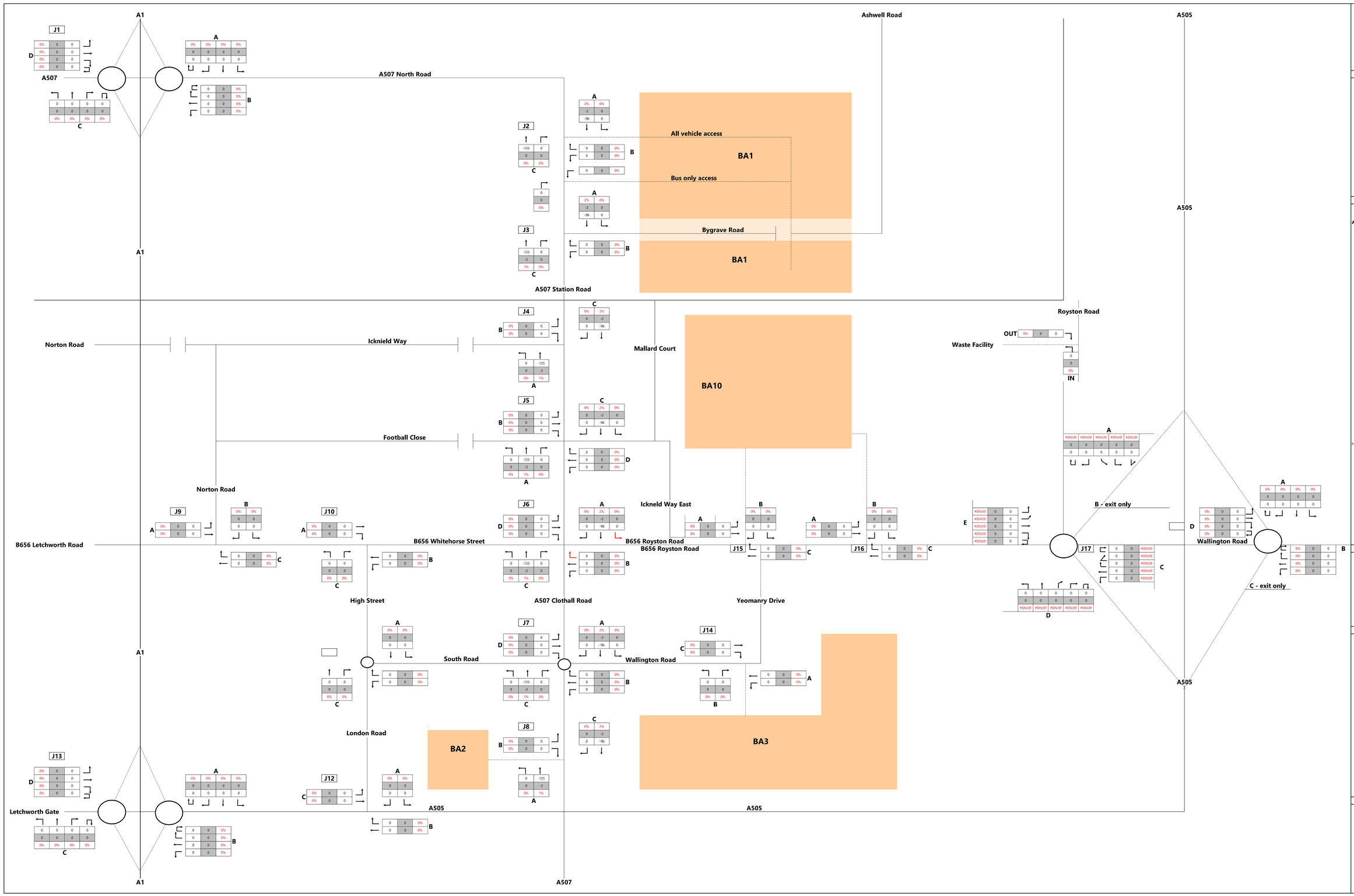
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2040 A507 Reassign PM

Assumptions

Assume 30% of traffic on A507 evaporates 0.3

DATE: 02/03/2023

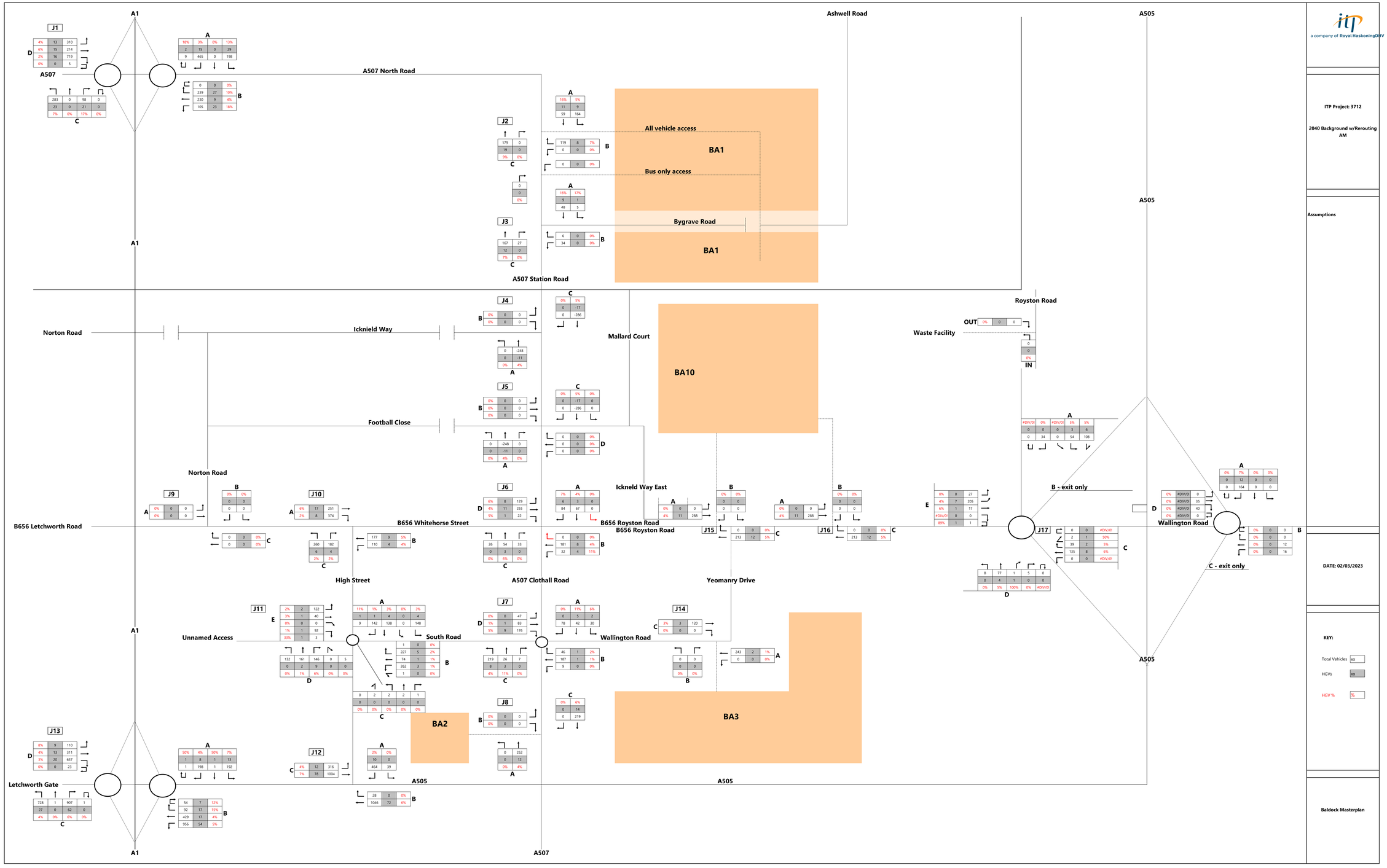
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2040 Background w/Rerouting AM

Assumptions

DATE: 02/03/2023

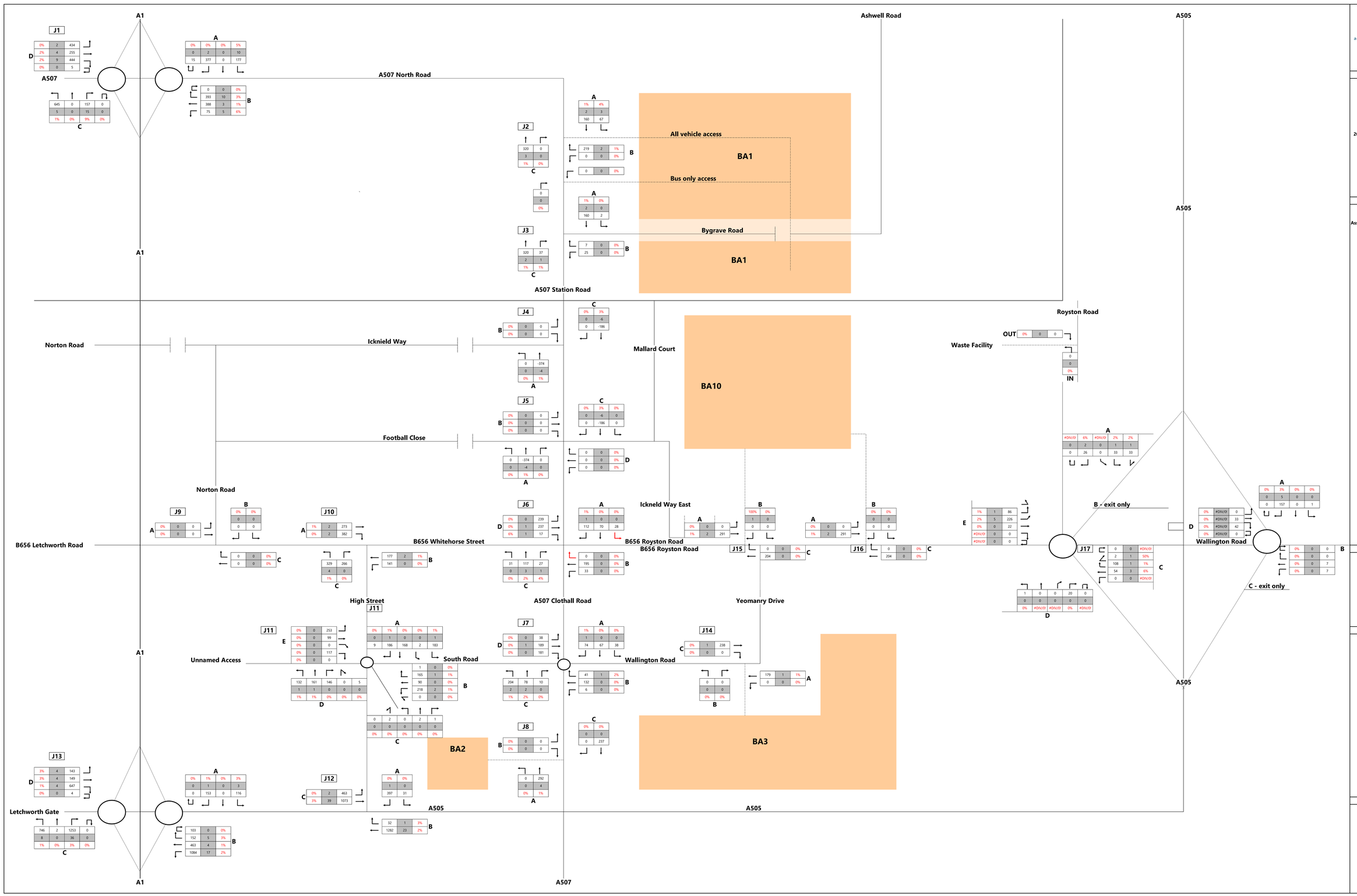
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2040 Background w/Rerouting PM

Assumptions

DATE: 02/03/2023

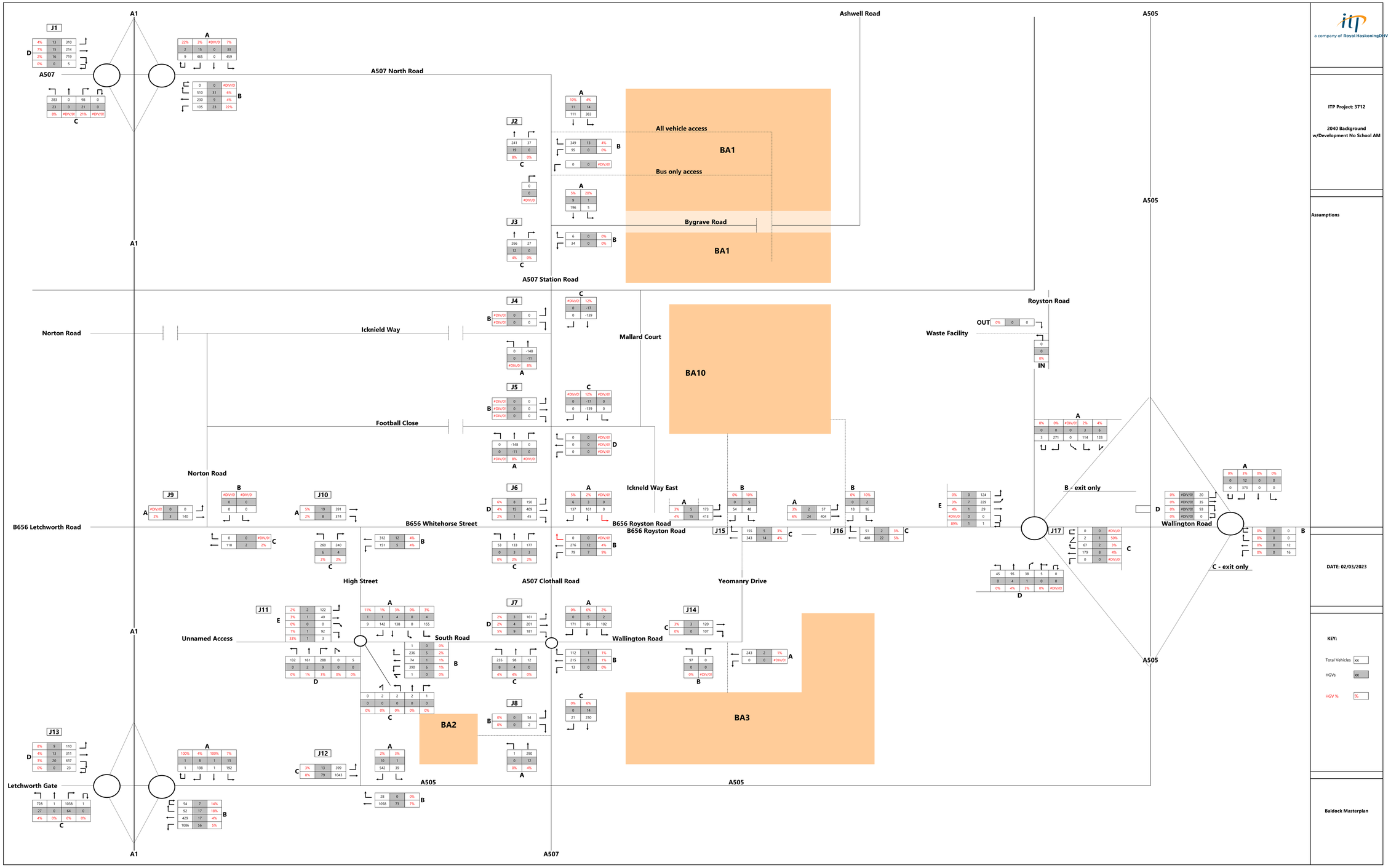
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2040 Background w/Development No School AM

Assumptions

DATE: 02/03/2023

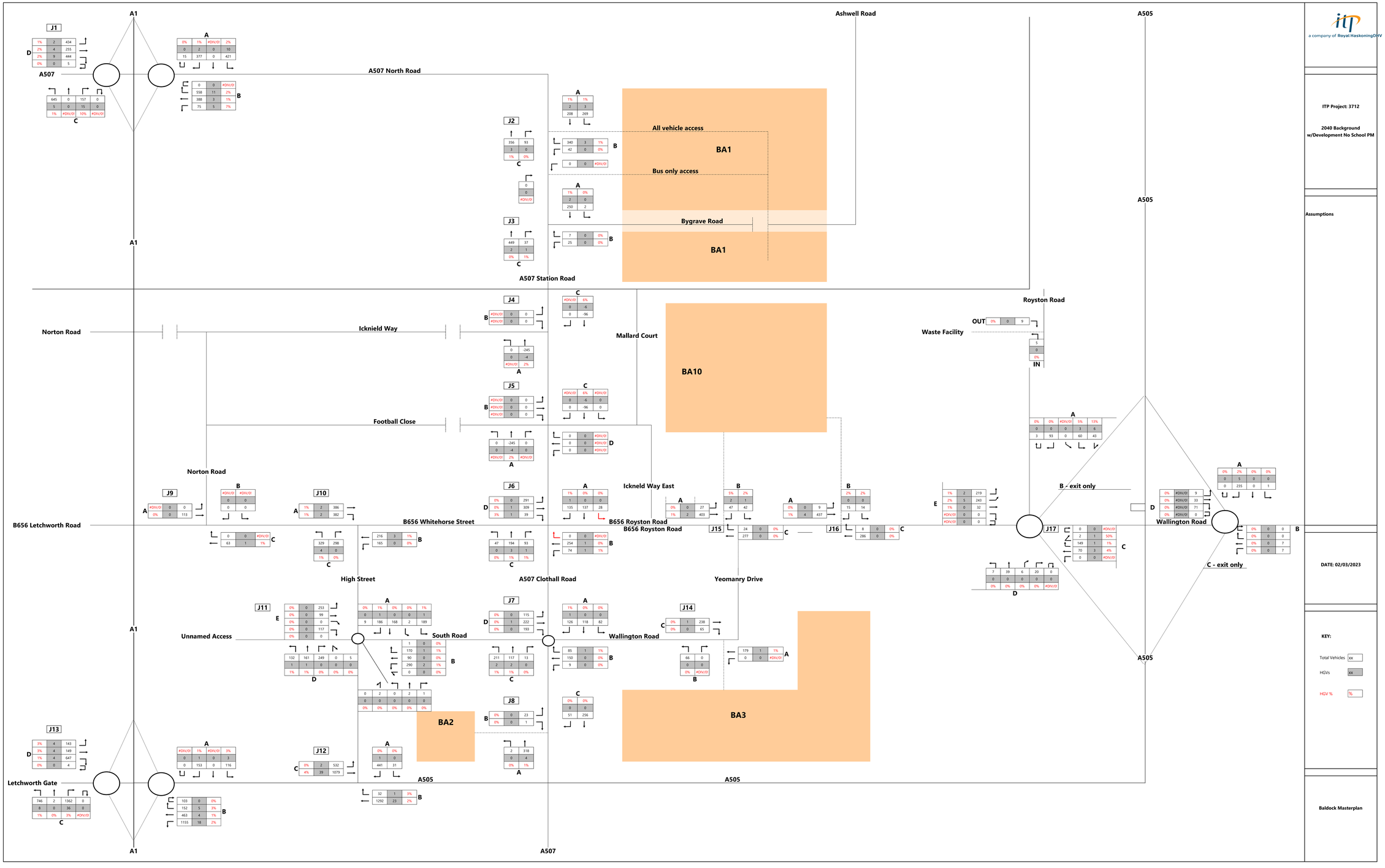
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2040 Background
w/Development No School PM

Assumptions

DATE: 02/03/2023

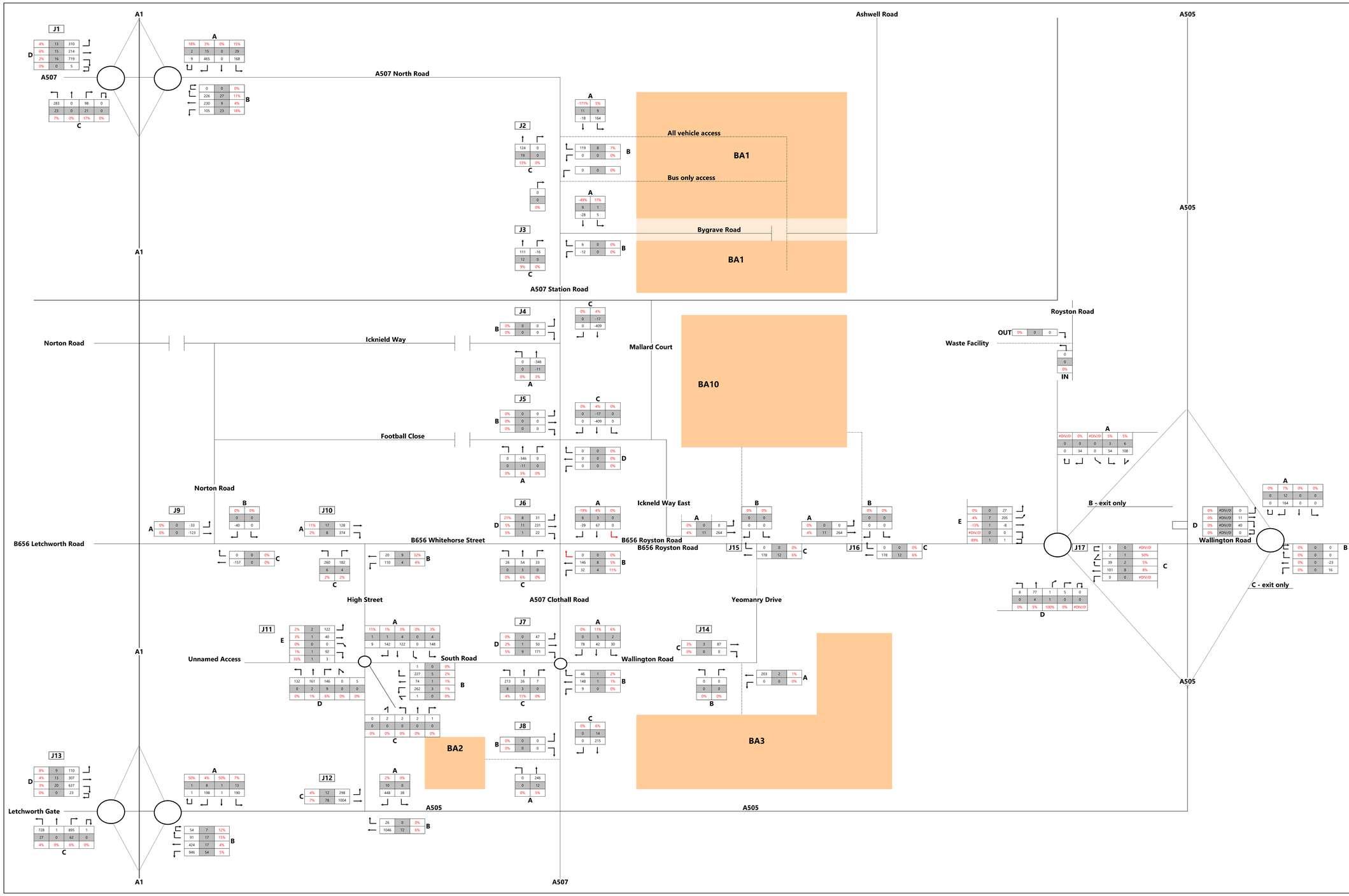
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2040 Background w/Rerouting AM

Assumptions

DATE: 02/03/2023

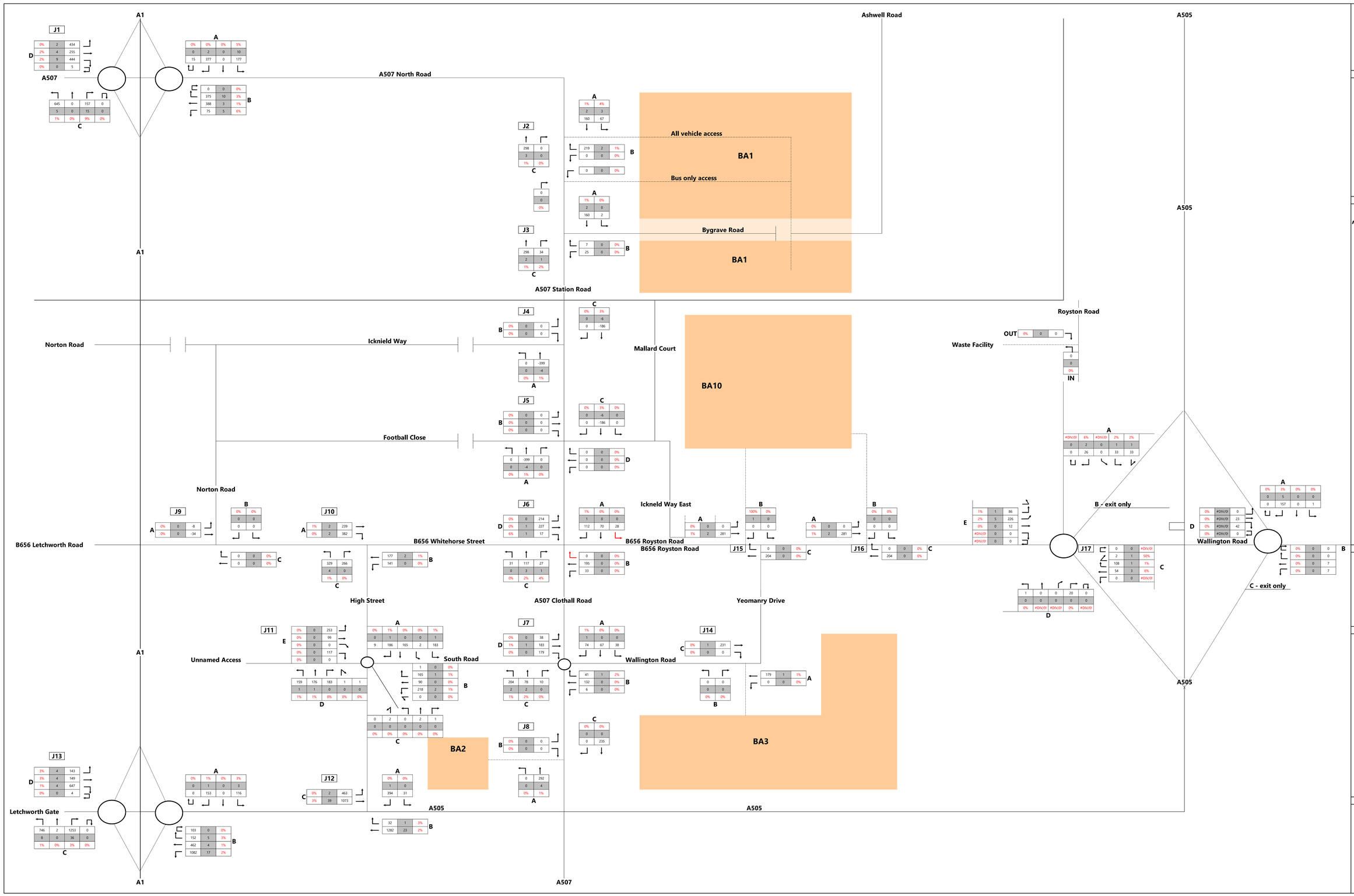
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2040 Background w/Rerouting PM

Assumptions

DATE: 02/03/2023

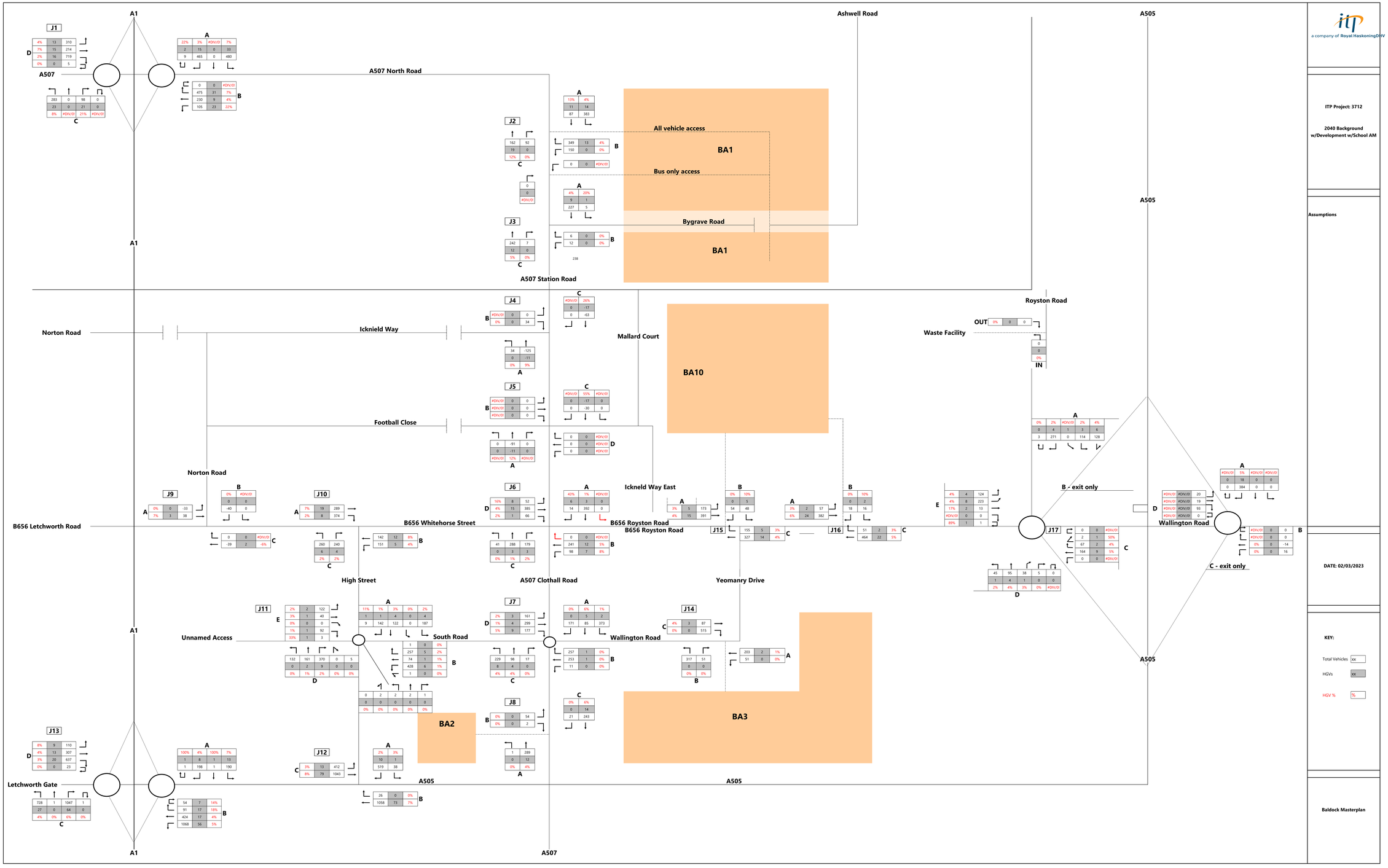
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan



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ITP Project: 3712

2040 Background w/Development w/School AM

Assumptions

DATE: 02/03/2023

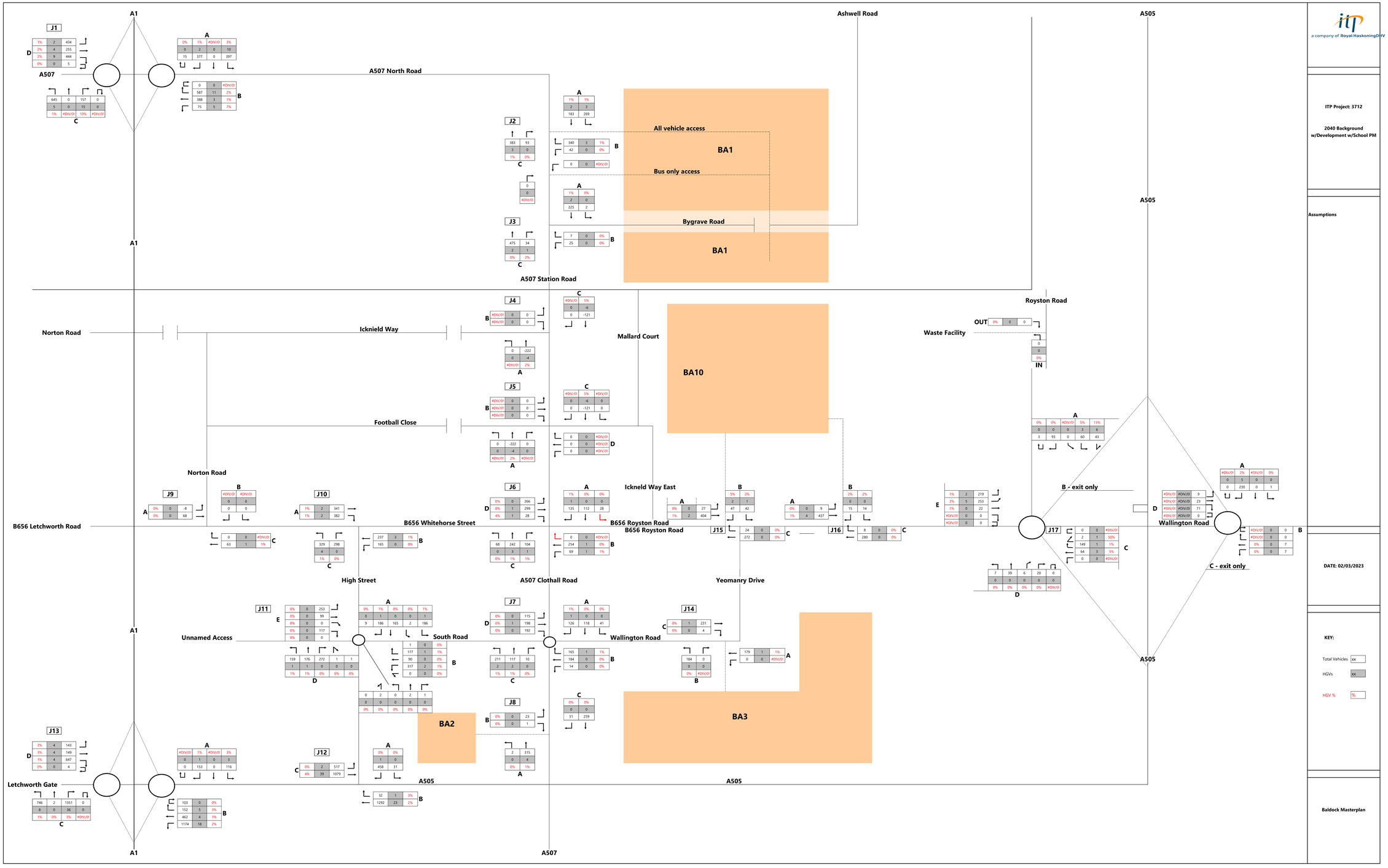
KEY:

Total Vehicles xx

HGVs xx

HGV % %

Baldock Masterplan


A1
A507
A507 North Road
Ashwell Road
A505
J1
D
A
B
C
All vehicle access
BA1
Bus only access
Bygrave Road
BA1
J2
J3
A507 Station Road
A1
Norton Road
Icknield Way
Mallard Court
BA10
Royston Road
OUT
Waste Facility
IN
J4
J5
Football Close
Norton Road
A505
B - exit only
C - exit only
Wallington Road
Ickneld Way East
B656 Royston Road
B656 Letchworth Road
B656 Whitehorse Street
B656 Royston Road
J6
J9
J10
J15
J16
J17
High Street
A507 Clothall Road
Yeomanry Road
E
J11
J7
J14
Unnamed Access
South Road
Wallington Road
BA2
BA3
J8
J12
J13
Letchworth Gate
A505
A505
A1
A507
ITP Project: 3712
2040 Background w/Development w/School PM
Assumptions
DATE: 02/03/2023
KEY:
Total Vehicles xx
HGVs xx
HGV % %
Baldock Masterplan

Appendix L – Junction Model Reports

A507 Corridor

2025 Base AM

Junction - 90 Sec Cycle Time	Link	Qlen Ave Max (5mins) (m)	Qlen Maximum (Avg, Max) Queues (m)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Station Road	24	203.85	392	102.63	1.9	LOS_F
Royston Road	21	57.94	122	65.46	1.4	LOS_D
Clothall Road	15	48.75	79	32.16	0.8	LOS_C
Whitehorse Street	11	38.75	74	35.99	0.8	LOS_D

Max Observed Average Peak Queues Per 60 min period (m)	Max Observed Peak Queues Per 15 min period (m)
273	402
96	150
68	69
73	90

Notes

20 Simulation Runs
Qlen Ave Max (every 5mins), (Qlen Max, Avg)
Time periods indicative
Vissim Qlen Ave MAX (5mins) to compare with Linsig MMQ Outputs
Veh Delay (Delay of all vehicles. The delay of a vehicle in leaving a travel time measurement is obtained by subtracting the theoretical (ideal) travel time from the actual travel time. The theoretical travel time is the travel time which could be achieved if there were no other vehicles and/or no signal controls or other reasons for stops.

1 LOS_A
2 LOS_B
3 LOS_C
4 LOS_D
5 LOS_E
6 LOS_F

A507 - 20 sim runs (5 minute Segments) Average

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(Avg,Avg)	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 24@44.4 - 19@50.5	41.3	107.9	9	9	1	0	48.89	37.92	1.14	4	LOS_D	203.85	275.94
AVG	1200-1500	1: Whitehorse Junction - 24@44.4 - 19@50.5	72.3	140.4	9	9	1	0	65.42	52.65	1.36	5	LOS_E	203.85	275.94
AVG	1500-1800	1: Whitehorse Junction - 24@44.4 - 19@50.5	94.4	169.0	12	11	1	0	87.07	72.14	1.66	5	LOS_E	203.85	275.94
AVG	1800-2100	1: Whitehorse Junction - 24@44.4 - 19@50.5	121.1	191.7	11	10	1	0	94.98	78.65	1.86	6	LOS_F	203.85	275.94
AVG	2100-2400	1: Whitehorse Junction - 24@44.4 - 19@50.5	134.3	196.0	9	9	1	0	99.21	83.20	1.81	5	LOS_E	203.85	275.94
AVG	2400-2700	1: Whitehorse Junction - 24@44.4 - 19@50.5	143.4	205.3	12	11	1	0	110.28	92.68	2.00	6	LOS_F	203.85	275.94
AVG	2700-3000	1: Whitehorse Junction - 24@44.4 - 19@50.5	155.5	219.3	11	11	1	0	111.53	93.72	2.10	6	LOS_F	203.85	275.94
AVG	3000-3300	1: Whitehorse Junction - 24@44.4 - 19@50.5	168.8	229.6	10	9	1	0	113.54	95.40	2.13	6	LOS_F	203.85	275.94
AVG	3300-3600	1: Whitehorse Junction - 24@44.4 - 19@50.5	187.1	241.3	12	12	1	0	121.80	102.95	2.14	6	LOS_F	203.85	275.94
AVG	3600-3900	1: Whitehorse Junction - 24@44.4 - 19@50.5	178.8	239.6	11	11	1	0	123.10	104.49	2.15	6	LOS_F	203.85	275.94
AVG	3900-4200	1: Whitehorse Junction - 24@44.4 - 19@50.5	187.0	247.3	10	10	1	0	122.35	103.38	2.20	6	LOS_F	203.85	275.94
AVG	4200-4500	1: Whitehorse Junction - 24@44.4 - 19@50.5	206.7	258.9	12	12	1	0	133.38	113.95	2.32	6	LOS_F	203.85	275.94
				204	128				102.63	85.93	1.9	6.0	LOS_F	204	276

A507 - 20 sim runs (5 minute Segments) Maximum

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)							
MAX	900-1200	1: Whitehorse Junction - 24@44.4 - 19@50.5	80.24	164.96	15	14	2	0	80.51	66.31	2.00				
MAX	1200-1500	1: Whitehorse Junction - 24@44.4 - 19@50.5	152.16	231.47	12	12	3	0	104.29	87.29	2.17				
MAX	1500-1800	1: Whitehorse Junction - 24@44.4 - 19@50.5	213.23	276.61	19	19	3	0	136.60	117.75	2.53				
MAX	1800-2100	1: Whitehorse Junction - 24@44.4 - 19@50.5	257.27	277.54	17	16	3	0	128.44	109.80	2.58				
MAX	2100-2400	1: Whitehorse Junction - 24@44.4 - 19@50.5	251.63	277.54	12	12	3	0	144.04	124.78	2.64				
MAX	2400-2700	1: Whitehorse Junction - 24@44.4 - 19@50.5	251.02	277.57	17	17	2	0	146.18	124.21	2.47				
MAX	2700-3000	1: Whitehorse Junction - 24@44.4 - 19@50.5	257.13	277.36	16	15	4	0	144.28	125.21	2.64				
MAX	3000-3300	1: Whitehorse Junction - 24@44.4 - 19@50.5	253.69	277.67	15	15	3	0	150.39	130.25	2.83				
MAX	3300-3600	1: Whitehorse Junction - 24@44.4 - 19@50.5	256.53	277.67	18	17	2	0	146.91	126.11	2.67				
MAX	3600-3900	1: Whitehorse Junction - 24@44.4 - 19@50.5	255.84	277.44	17	17	2	0	146.64	128.19	2.60				
MAX	3900-4200	1: Whitehorse Junction - 24@44.4 - 19@50.5	254.48	277.46	15	14	2	0	146.04	126.83	2.79				
MAX	4200-4500	1: Whitehorse Junction - 24@44.4 - 19@50.5	256.26	277.60	18	18	2	0	148.33	127.31	2.70				
				264	191				135.22	116.17	2.6				

Royston Road - 20 sim runs (5 minute Segments) Average

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(Avg,Avg)	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 21@63.2 - 13@20.1	10.21	47.27	10	10	1	0	46.98	34.85	0.94	4	LOS_D	57.94	121.85
AVG	1200-1500	1: Whitehorse Junction - 21@63.2 - 13@20.1	15.44	53.46	9	8	1	0	57.62	42.82	1.21	4	LOS_D	57.94	121.85
AVG	1500-1800	1: Whitehorse Junction - 21@63.2 - 13@20.1	20.34	61.89	9	8	1	0	66.27	51.16	1.38	5	LOS_E	57.94	121.85
AVG	1800-2100	1: Whitehorse Junction - 21@63.2 - 13@20.1	20.31	59.26	12	12	1	0	74.17	57.34	1.64	4	LOS_D	57.94	121.85
AVG	2100-2400	1: Whitehorse Junction - 21@63.2 - 13@20.1	13.78	50.78	10	10	1	0	60.30	46.56	1.25	4	LOS_D	57.94	121.85
AVG	2400-2700	1: Whitehorse Junction - 21@63.2 - 13@20.1	13.54	47.92	10	9	1	0	47.24	34.83	0.95	4	LOS_D	57.94	121.85
AVG	2700-3000	1: Whitehorse Junction - 21@63.2 - 13@20.1	14.66	57.10	13	12	1	0	57.77	43.89	1.18	4	LOS_D	57.94	121.85
AVG	3000-3300	1: Whitehorse Junction - 21@63.2 - 13@20.1	22.07	65.82	8	7	0	0	67.64	50.86	1.51	4	LOS_D	57.94	121.85
AVG	3300-3600	1: Whitehorse Junction - 21@63.2 - 13@20.1	38.21	79.44	10	9	0	0	94.01	73.17	2.01	5	LOS_E	57.94	121.85
AVG	3600-3900	1: Whitehorse Junction - 21@63.2 - 13@20.1	22.91	62.11	12	11	1	0	77.24	58.44	1.65	5	LOS_E	57.94	121.85
AVG	3900-4200	1: Whitehorse Junction - 21@63.2 - 13@20.1	23.47	58.25	10	9	1	0	74.27	57.00	1.54	5	LOS_E	57.94	121.85

AVG	4200-4500	1: Whitehorse Junction - 21@63.2 - 13@20.1	14.82	52.00	9	9	1	0	62.02	46.81	1.26	4	LOS_D	57.94	121.85
				58	122				65.46	49.81	1.4	4.0	LOS_D	58	122

Royston Road - 20 sim runs (5 minute Segments) Maximum

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)
MAX	900-1200	1: Whitehorse Junction - 21@62.7 - 23@42.7	41.68	109.33	16	15	2	0	127.49	102.13	3.22
MAX	1200-1500	1: Whitehorse Junction - 21@62.7 - 23@42.7	110.84	150.27	11	11	2	0	232.67	189.84	5.13
MAX	1500-1800	1: Whitehorse Junction - 21@62.7 - 23@42.7	120.71	193.93	14	12	2	0	224.07	178.58	5.57
MAX	1800-2100	1: Whitehorse Junction - 21@62.7 - 23@42.7	143.38	187.17	12	12	3	0	295.95	237.21	8.09
MAX	2100-2400	1: Whitehorse Junction - 21@62.7 - 23@42.7	63.61	152.21	13	13	1	0	201.49	167.84	4.29
MAX	2400-2700	1: Whitehorse Junction - 21@62.7 - 23@42.7	65.11	131.87	12	12	2	0	153.62	121.49	4.13
MAX	2700-3000	1: Whitehorse Junction - 21@62.7 - 23@42.7	132.19	195.72	13	13	3	0	209.64	163.85	5.89
MAX	3000-3300	1: Whitehorse Junction - 21@62.7 - 23@42.7	201.30	255.25	10	10	2	0	376.66	304.62	8.88
MAX	3300-3600	1: Whitehorse Junction - 21@62.7 - 23@42.7	206.65	261.05	10	9	2	0	428.03	345.69	10.33
MAX	3600-3900	1: Whitehorse Junction - 21@62.7 - 23@42.7	111.37	137.47	14	14	3	0	330.27	275.46	7.45
MAX	3900-4200	1: Whitehorse Junction - 21@62.7 - 23@42.7	132.97	194.74	11	11	2	0	291.59	239.67	7.43
MAX	4200-4500	1: Whitehorse Junction - 21@62.7 - 23@42.7	60.27	154.80	12	11	3	0	194.85	156.14	5.80
				177	148				255.53	206.88	6.4

Clothall Road - 20 sim runs (5 minute Segments) Average

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(Avg,Avg)	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 15@456.3 - 23@42.1	15.46	51.84	15	14	1	0	31.20	23.49	0.78	3	LOS_C	48.75	78.98
AVG	1200-1500	1: Whitehorse Junction - 15@456.3 - 23@42.1	11.69	52.45	20	18	1	0	32.20	24.02	0.78	3	LOS_C	48.75	78.98
AVG	1500-1800	1: Whitehorse Junction - 15@456.3 - 23@42.1	11.62	43.57	15	14	1	0	31.35	23.03	0.72	3	LOS_C	48.75	78.98
AVG	1800-2100	1: Whitehorse Junction - 15@456.3 - 23@42.1	13.73	49.88	14	14	1	0	30.00	21.76	0.75	3	LOS_C	48.75	78.98
AVG	2100-2400	1: Whitehorse Junction - 15@456.3 - 23@42.1	9.61	38.61	17	16	1	0	31.16	23.50	0.73	3	LOS_C	48.75	78.98
AVG	2400-2700	1: Whitehorse Junction - 15@456.3 - 23@42.1	13.85	49.34	15	14	1	0	32.24	24.34	0.76	3	LOS_C	48.75	78.98
AVG	2700-3000	1: Whitehorse Junction - 15@456.3 - 23@42.1	14.04	49.56	14	14	0	0	32.09	23.95	0.78	3	LOS_C	48.75	78.98
AVG	3000-3300	1: Whitehorse Junction - 15@456.3 - 23@42.1	14.18	54.65	21	20	1	0	33.80	25.12	0.82	3	LOS_C	48.75	78.98
AVG	3300-3600	1: Whitehorse Junction - 15@456.3 - 23@42.1	14.13	47.92	13	13	1	0	33.26	24.86	0.76	3	LOS_C	48.75	78.98
AVG	3600-3900	1: Whitehorse Junction - 15@456.3 - 23@42.1	14.70	51.65	14	14	1	0	35.01	26.45	0.82	3	LOS_C	48.75	78.98
AVG	3900-4200	1: Whitehorse Junction - 15@456.3 - 23@42.1	12.65	52.32	19	18	1	0	32.93	24.73	0.78	3	LOS_C	48.75	78.98
AVG	4200-4500	1: Whitehorse Junction - 15@456.3 - 23@42.1	12.04	43.22	14	13	1	0	30.74	22.81	0.77	3	LOS_C	48.75	78.98
				49	191				32.16	24.00	0.8	3.0	LOS_C	49	79

Clothall Road - 20 sim runs (5 minute Segments) Maximum

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)			
MAX	900-1200	1: Whitehorse Junction - 15@456.3 - 23@42.1	24.45	80.59	20	20	3	0	41.95	33.48	1.00
MAX	1200-1500	1: Whitehorse Junction - 15@456.3 - 23@42.1	23.35	88.63	28	25	3	0	42.65	34.15	1.00
MAX	1500-1800	1: Whitehorse Junction - 15@456.3 - 23@42.1	20.53	74.43	22	22	2	0	44.39	32.77	0.86
MAX	1800-2100	1: Whitehorse Junction - 15@456.3 - 23@42.1	23.54	82.19	21	21	2	0	42.88	31.95	1.00
MAX	2100-2400	1: Whitehorse Junction - 15@456.3 - 23@42.1	16.62	63.30	27	26	3	0	43.32	33.45	0.95
MAX	2400-2700	1: Whitehorse Junction - 15@456.3 - 23@42.1	22.38	68.92	23	23	3	0	42.58	34.72	0.96
MAX	2700-3000	1: Whitehorse Junction - 15@456.3 - 23@42.1	24.72	76.05	21	20	1	0	43.42	33.74	0.94
MAX	3000-3300	1: Whitehorse Junction - 15@456.3 - 23@42.1	37.49	103.32	31	28	3	0	57.06	45.34	1.10
MAX	3300-3600	1: Whitehorse Junction - 15@456.3 - 23@42.1	19.98	92.63	18	18	2	0	47.98	37.66	0.94
MAX	3600-3900	1: Whitehorse Junction - 15@456.3 - 23@42.1	28.46	82.70	25	24	2	0	50.89	41.74	1.06
MAX	3900-4200	1: Whitehorse Junction - 15@456.3 - 23@42.1	20.20	80.37	30	28	4	0	42.16	34.84	1.00
MAX	4200-4500	1: Whitehorse Junction - 15@456.3 - 23@42.1	21.47	58.58	20	20	2	0	44.67	33.16	1.00
				79	286				45.33	35.58	1.0

Whitehorse Road - 20 sim runs (5 minute Segments) Average

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(Avg,Avg)	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 10046@3.7 - 19@50.5	8.61	32.63	15	14	1	0	36.50	29.10	0.82	4	LOS_D	38.75	73.67
AVG	1200-1500	1: Whitehorse Junction - 10046@3.7 - 19@50.5	10.08	41.89	12	12	1	0	35.88	28.17	0.86	3	LOS_C	38.75	73.67
AVG	1500-1800	1: Whitehorse Junction - 10046@3.7 - 19@50.5	9.81	35.67	12	11	1	0	34.25	26.99	0.83	3	LOS_C	38.75	73.67
AVG	1800-2100	1: Whitehorse Junction - 10046@3.7 - 19@50.5	10.04	34.91	15	14	1	0	36.56	28.92	0.83	4	LOS_D	38.75	73.67
AVG	2100-2400	1: Whitehorse Junction - 10046@3.7 - 19@50.5	8.93	36.50	11	11	0	0	35.42	28.01	0.81	4	LOS_D	38.75	73.67
AVG	2400-2700	1: Whitehorse Junction - 10046@3.7 - 19@50.5	12.01	40.04	13	13	1	0	38.04	30.38	0.84	4	LOS_D	38.75	73.67
AVG	2700-3000	1: Whitehorse Junction - 10046@3.7 - 19@50.5	10.30	47.59	16	15	1	0	35.35	27.79	0.83	3	LOS_C	38.75	73.67
AVG	3000-3300	1: Whitehorse Junction - 10046@3.7 - 19@50.5	11.54	42.49	13	12	1	0	40.17	31.88	0.90	4	LOS_D	38.75	73.67
AVG	3300-3600	1: Whitehorse Junction - 10046@3.7 - 19@50.5	10.08	38.26	12	11	1	0	33.62	26.46	0.78	3	LOS_C	38.75	73.67
AVG	3600-3900	1: Whitehorse Junction - 10046@3.7 - 19@50.5	9.72	36.32	15	15	1	0	35.32	27.65	0.84	4	LOS_D	38.75	73.67
AVG	3900-4200	1: Whitehorse Junction - 10046@3.7 - 19@50.5	9.74	38.22	11	11	1	0	34.92	27.48	0.83	4	LOS_D	38.75	73.67
AVG	4200-4500	1: Whitehorse Junction - 10046@3.7 - 19@50.5	10.77	40.50	11	10	1	0	35.78	27.96	0.87	4	LOS_D	38.75	73.67
				39	156				35.99	28.40	0.8	4.0	LOS_D	39	74

Whitehorse Road - 20 sim runs (5 minute Segments) Maximum

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)
MAX	900-1200	1: Whitehorse Junction - 10046@3.7 - 19@50.5	20.10	74.94	27	25	2	0	53.99	46.21	1.00
MAX	1200-1500	1: Whitehorse Junction - 10046@3.7 - 19@50.5	24.94	87.59	20	19	3	0	53.32	43.80	1.11

MAX	1500-1800	1: Whitehorse Junction - 10046@3.7 - 19@50.5	15.37	53.41	18	18	2	0	54.74	45.96	1.06
MAX	1800-2100	1: Whitehorse Junction - 10046@3.7 - 19@50.5	39.17	97.74	20	19	2	0	63.92	50.58	1.05
MAX	2100-2400	1: Whitehorse Junction - 10046@3.7 - 19@50.5	14.07	58.64	17	15	2	0	50.19	40.86	1.07
MAX	2400-2700	1: Whitehorse Junction - 10046@3.7 - 19@50.5	20.81	75.99	18	17	3	0	58.49	51.88	1.00
MAX	2700-3000	1: Whitehorse Junction - 10046@3.7 - 19@50.5	24.45	91.68	26	26	2	0	53.17	44.41	1.00
MAX	3000-3300	1: Whitehorse Junction - 10046@3.7 - 19@50.5	20.40	85.71	18	17	2	0	60.66	51.18	1.13
MAX	3300-3600	1: Whitehorse Junction - 10046@3.7 - 19@50.5	14.86	64.20	16	16	3	0	51.21	42.81	1.19
MAX	3600-3900	1: Whitehorse Junction - 10046@3.7 - 19@50.5	15.51	63.05	22	22	3	0	41.85	33.62	1.09
MAX	3900-4200	1: Whitehorse Junction - 10046@3.7 - 19@50.5	25.98	85.25	18	18	4	0	60.03	48.51	1.08
MAX	4200-4500	1: Whitehorse Junction - 10046@3.7 - 19@50.5	35.35	98.91	19	17	2	0	77.93	62.43	1.83
				78	239				56.62	46.85	1.1

2025 Base PM

Junction - 90 Sec Cycle Time	Link	Qlen Ave Max (5mins) (m)	Qlen Maximum (Avg, Max) Queues (m)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Station Road	24	173.80	248	115.26	2.0	LOS_F
Royston Road	21	65.71	133	101.68	3.0	LOS_E
Clothall Road	15	60.95	86	32.46	0.8	LOS_C
Whitehorse Street	11	42.83	80	36.60	0.8	LOS_D

Max Observed Average Peak Queues Per 60 min period (m)	Max Observed Peak Queues Per 15 min period (m)
296	324
125	153
73	78
95	117

Notes

20 Simulation Runs
Qlen Ave Max (every 5mins), (Qlen Max, Avg)
Time periods indicative
Vissim Qlen Ave MAX (5mins) to compare with Linsig MMQ Outputs
Veh Delay (Delay of all vehicles. The delay of a vehicle in leaving a travel time measurement is obtained by subtracting the theoretical (ideal) travel time from the actual travel time. The theoretical travel time is the travel time which could be achieved if there were no other vehicles and/or no signal controls or other reasons for stops.

1 LOS_A
2 LOS_B
3 LOS_C
4 LOS_D
5 LOS_E
6 LOS_F

A507 - 20 sim runs (5 minute Segments) Average

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(Avg,Avg)	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 24@44.4 - 19@50.5	53.5	114.3	7	7	0	0	67.47	55.20	1.40	5	LOS_E	173.80	248.08
AVG	1200-1500	1: Whitehorse Junction - 24@44.4 - 19@50.5	75.3	135.7	8	8	0	0	80.29	66.17	1.55	5	LOS_E	173.80	248.08
AVG	1500-1800	1: Whitehorse Junction - 24@44.4 - 19@50.5	86.0	150.5	9	9	0	0	98.57	84.01	1.73	6	LOS_F	173.80	248.08
AVG	1800-2100	1: Whitehorse Junction - 24@44.4 - 19@50.5	100.9	163.0	7	7	0	0	104.62	88.84	1.92	5	LOS_E	173.80	248.08
AVG	2100-2400	1: Whitehorse Junction - 24@44.4 - 19@50.5	105.4	162.9	7	7	0	0	110.78	94.34	1.99	6	LOS_F	173.80	248.08
AVG	2400-2700	1: Whitehorse Junction - 24@44.4 - 19@50.5	114.9	174.4	9	9	0	0	120.33	102.34	2.14	6	LOS_F	173.80	248.08
AVG	2700-3000	1: Whitehorse Junction - 24@44.4 - 19@50.5	116.7	177.8	8	8	0	0	116.13	98.61	2.05	6	LOS_F	173.80	248.08
AVG	3000-3300	1: Whitehorse Junction - 24@44.4 - 19@50.5	133.2	189.5	7	7	0	0	120.46	102.53	2.15	6	LOS_F	173.80	248.08
AVG	3300-3600	1: Whitehorse Junction - 24@44.4 - 19@50.5	142.2	197.8	9	9	0	0	132.93	113.47	2.30	6	LOS_F	173.80	248.08
AVG	3600-3900	1: Whitehorse Junction - 24@44.4 - 19@50.5	139.4	195.4	8	8	0	0	138.89	118.85	2.41	6	LOS_F	173.80	248.08
AVG	3900-4200	1: Whitehorse Junction - 24@44.4 - 19@50.5	148.2	209.5	8	8	0	0	142.63	122.06	2.43	6	LOS_F	173.80	248.08
AVG	4200-4500	1: Whitehorse Junction - 24@44.4 - 19@50.5	162.2	214.9	10	10	0	0	150.05	128.62	2.51	6	LOS_F	173.80	248.08
				174	97				115.26	97.92	2.0	6.0	LOS_F	174	248

A507 - 20 sim runs (5 minute Segments) Maximum

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)							
MAX	900-1200	1: Whitehorse Junction - 24@44.4 - 19@50.5	125.02	190.44	13	13	0	0	129.35	110.56	2.63				
MAX	1200-1500	1: Whitehorse Junction - 24@44.4 - 19@50.5	207.90	265.49	10	10	0	0	154.86	132.06	2.80				
MAX	1500-1800	1: Whitehorse Junction - 24@44.4 - 19@50.5	188.10	252.16	14	14	0	0	165.91	143.02	2.80				
MAX	1800-2100	1: Whitehorse Junction - 24@44.4 - 19@50.5	237.40	276.28	11	11	0	0	174.25	151.67	3.11				
MAX	2100-2400	1: Whitehorse Junction - 24@44.4 - 19@50.5	242.56	277.36	11	11	0	0	196.48	171.02	3.36				
MAX	2400-2700	1: Whitehorse Junction - 24@44.4 - 19@50.5	249.43	277.66	15	15	0	0	183.43	159.33	3.07				
MAX	2700-3000	1: Whitehorse Junction - 24@44.4 - 19@50.5	245.30	277.37	15	15	0	0	184.78	162.93	3.67				
MAX	3000-3300	1: Whitehorse Junction - 24@44.4 - 19@50.5	249.09	277.49	9	9	0	0	191.75	167.90	3.33				
MAX	3300-3600	1: Whitehorse Junction - 24@44.4 - 19@50.5	252.39	277.59	15	15	0	0	194.34	169.50	3.38				
MAX	3600-3900	1: Whitehorse Junction - 24@44.4 - 19@50.5	253.58	274.37	12	12	0	0	208.20	182.08	3.44				
MAX	3900-4200	1: Whitehorse Junction - 24@44.4 - 19@50.5	249.58	277.52	15	15	0	0	190.81	165.99	3.50				
MAX	4200-4500	1: Whitehorse Junction - 24@44.4 - 19@50.5	257.38	277.40	14	14	0	0	203.25	175.06	3.50				
				267	154				181.45	157.59	3.2				

Royston Road - 20 sim runs (5 minute Segments) Average

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(Avg,Avg)	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 21@62.7 - 23@42.7	14.34	48.36	12	12	0	0	64.62	45.89	2.21	5	LOS_E	65.71	133.34
AVG	1200-1500	1: Whitehorse Junction - 21@62.7 - 23@42.7	29.14	57.96	9	9	0	0	92.63	68.33	2.84	5	LOS_E	65.71	133.34
AVG	1500-1800	1: Whitehorse Junction - 21@62.7 - 23@42.7	38.51	74.13	10	9	0	0	123.35	92.97	3.54	5	LOS_E	65.71	133.34
AVG	1800-2100	1: Whitehorse Junction - 21@62.7 - 23@42.7	32.91	73.99	13	13	0	0	113.42	85.71	3.27	5	LOS_E	65.71	133.34
AVG	2100-2400	1: Whitehorse Junction - 21@62.7 - 23@42.7	26.75	58.09	9	9	0	0	92.64	67.54	2.72	5	LOS_E	65.71	133.34
AVG	2400-2700	1: Whitehorse Junction - 21@62.7 - 23@42.7	31.02	66.10	10	10	0	0	105.47	79.27	3.13	5	LOS_E	65.71	133.34
AVG	2700-3000	1: Whitehorse Junction - 21@62.7 - 23@42.7	29.13	64.77	14	14	0	0	101.02	73.81	2.93	5	LOS_E	65.71	133.34
AVG	3000-3300	1: Whitehorse Junction - 21@62.7 - 23@42.7	25.72	58.68	10	10	0	0	87.74	63.42	2.74	5	LOS_E	65.71	133.34
AVG	3300-3600	1: Whitehorse Junction - 21@62.7 - 23@42.7	37.15	71.92	10	10	0	0	111.45	83.54	3.27	5	LOS_E	65.71	133.34
AVG	3600-3900	1: Whitehorse Junction - 21@62.7 - 23@42.7	36.46	78.09	14	14	1	0	116.11	87.06	3.16	6	LOS_F	65.71	133.34
AVG	3900-4200	1: Whitehorse Junction - 21@62.7 - 23@42.7	31.53	64.09	11	11	0	0	102.60	75.91	2.94	5	LOS_E	65.71	133.34

AVG	4200-4500	1: Whitehorse Junction - 21@62.7 - 23@42.7	37.56	72.27	10	10	0	0	109.10	81.59	3.29	5	LOS_E	65.71	133.34
				66	132				101.68	75.42	3.0	5.0	LOS_E	66	133

Royston Road - 20 sim runs (5 minute Segments) Maximum

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)
MAX	900-1200	1: Whitehorse Junction - 21@62.7 - 23@42.7	45.34	125.70	22	22	1	0	115.48	92.71	3.67
MAX	1200-1500	1: Whitehorse Junction - 21@62.7 - 23@42.7	114.23	150.14	12	12	1	0	268.73	210.43	8.00
MAX	1500-1800	1: Whitehorse Junction - 21@62.7 - 23@42.7	125.13	184.97	14	14	1	0	356.24	280.83	10.50
MAX	1800-2100	1: Whitehorse Junction - 21@62.7 - 23@42.7	166.53	204.58	16	16	1	0	375.29	303.01	10.07
MAX	2100-2400	1: Whitehorse Junction - 21@62.7 - 23@42.7	139.94	173.02	12	12	1	0	268.96	203.83	7.00
MAX	2400-2700	1: Whitehorse Junction - 21@62.7 - 23@42.7	131.80	167.22	15	15	1	0	356.96	282.99	8.42
MAX	2700-3000	1: Whitehorse Junction - 21@62.7 - 23@42.7	146.33	207.83	19	19	1	0	225.77	174.74	6.33
MAX	3000-3300	1: Whitehorse Junction - 21@62.7 - 23@42.7	112.79	207.09	14	14	2	0	268.49	213.84	6.55
MAX	3300-3600	1: Whitehorse Junction - 21@62.7 - 23@42.7	114.67	150.00	15	15	2	0	263.63	206.89	7.50
MAX	3600-3900	1: Whitehorse Junction - 21@62.7 - 23@42.7	121.51	174.55	22	22	2	0	212.23	167.74	5.44
MAX	3900-4200	1: Whitehorse Junction - 21@62.7 - 23@42.7	122.78	162.07	16	16	1	0	274.50	218.62	6.56
MAX	4200-4500	1: Whitehorse Junction - 21@62.7 - 23@42.7	97.70	168.81	16	16	1	0	255.38	203.01	7.75
				173	193				270.14	213.22	7.3

Clothall Road - 20 sim runs (5 minute Segments) Average

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(Avg,Avg)	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 15@456.3 - 23@42.1	18.06	56.54	20	20	0	0	31.05	22.82	0.73	3	LOS_C	60.95	86.20
AVG	1200-1500	1: Whitehorse Junction - 15@456.3 - 23@42.1	16.84	67.10	28	27	0	0	33.43	24.18	0.80	3	LOS_C	60.95	86.20
AVG	1500-1800	1: Whitehorse Junction - 15@456.3 - 23@42.1	17.88	61.76	22	22	0	0	31.92	23.24	0.78	3	LOS_C	60.95	86.20
AVG	1800-2100	1: Whitehorse Junction - 15@456.3 - 23@42.1	17.27	61.86	20	20	0	0	31.68	23.03	0.76	3	LOS_C	60.95	86.20
AVG	2100-2400	1: Whitehorse Junction - 15@456.3 - 23@42.1	15.14	59.85	26	26	0	0	33.33	23.93	0.79	3	LOS_C	60.95	86.20
AVG	2400-2700	1: Whitehorse Junction - 15@456.3 - 23@42.1	16.39	61.60	20	20	0	0	30.83	22.08	0.80	3	LOS_C	60.95	86.20
AVG	2700-3000	1: Whitehorse Junction - 15@456.3 - 23@42.1	18.50	61.67	21	20	0	0	32.30	23.13	0.77	3	LOS_C	60.95	86.20
AVG	3000-3300	1: Whitehorse Junction - 15@456.3 - 23@42.1	16.39	64.17	28	28	0	0	33.48	24.62	0.79	3	LOS_C	60.95	86.20
AVG	3300-3600	1: Whitehorse Junction - 15@456.3 - 23@42.1	15.84	55.71	19	19	0	0	32.79	23.75	0.80	3	LOS_C	60.95	86.20
AVG	3600-3900	1: Whitehorse Junction - 15@456.3 - 23@42.1	18.63	63.02	21	20	0	0	34.14	25.36	0.83	4	LOS_D	60.95	86.20
AVG	3900-4200	1: Whitehorse Junction - 15@456.3 - 23@42.1	17.17	62.78	27	27	1	0	32.72	23.60	0.77	3	LOS_C	60.95	86.20
AVG	4200-4500	1: Whitehorse Junction - 15@456.3 - 23@42.1	16.41	55.33	20	19	1	0	31.88	23.14	0.79	3	LOS_C	60.95	86.20
				61	272				32.46	23.57	0.8	3.0	LOS_C	61	86

Clothall Road - 20 sim runs (5 minute Segments) Maximum

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)			
MAX	900-1200	1: Whitehorse Junction - 15@456.3 - 23@42.1	24.89	81.73	24	24	1	0	39.93	30.11	0.90
MAX	1200-1500	1: Whitehorse Junction - 15@456.3 - 23@42.1	32.33	90.91	41	41	1	0	43.67	34.39	0.92
MAX	1500-1800	1: Whitehorse Junction - 15@456.3 - 23@42.1	29.90	94.65	29	29	1	0	41.25	32.80	0.92
MAX	1800-2100	1: Whitehorse Junction - 15@456.3 - 23@42.1	28.86	99.24	27	27	1	0	41.44	31.75	0.91
MAX	2100-2400	1: Whitehorse Junction - 15@456.3 - 23@42.1	25.21	82.42	34	34	2	0	44.95	35.43	0.93
MAX	2400-2700	1: Whitehorse Junction - 15@456.3 - 23@42.1	25.49	93.15	26	25	1	0	41.98	31.22	1.00
MAX	2700-3000	1: Whitehorse Junction - 15@456.3 - 23@42.1	29.75	94.60	28	28	2	0	46.01	33.46	1.00
MAX	3000-3300	1: Whitehorse Junction - 15@456.3 - 23@42.1	28.81	114.75	36	36	2	0	43.53	34.15	0.93
MAX	3300-3600	1: Whitehorse Junction - 15@456.3 - 23@42.1	24.08	86.03	23	23	1	0	49.59	40.76	1.00
MAX	3600-3900	1: Whitehorse Junction - 15@456.3 - 23@42.1	29.31	97.57	32	32	1	0	42.93	34.89	0.95
MAX	3900-4200	1: Whitehorse Junction - 15@456.3 - 23@42.1	24.64	96.79	35	33	2	0	44.21	31.28	1.00
MAX	4200-4500	1: Whitehorse Junction - 15@456.3 - 23@42.1	29.73	91.80	29	29	2	0	45.69	37.44	1.00
				94	364				43.76	33.97	1.0

Whitehorse Road - 20 sim runs (5 minute Segments) Average

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(Avg,Avg)	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 10046@3.7 - 19@50.5	11.11	44.29	17	17	0	0	38.37	30.54	0.85	4	LOS_D	42.83	80.34
AVG	1200-1500	1: Whitehorse Junction - 10046@3.7 - 19@50.5	11.26	43.00	14	14	0	0	36.72	28.39	0.86	4	LOS_D	42.83	80.34
AVG	1500-1800	1: Whitehorse Junction - 10046@3.7 - 19@50.5	13.05	43.11	14	14	0	0	36.42	28.33	0.82	4	LOS_D	42.83	80.34
AVG	1800-2100	1: Whitehorse Junction - 10046@3.7 - 19@50.5	10.73	48.04	19	18	0	0	35.04	27.20	0.83	4	LOS_D	42.83	80.34
AVG	2100-2400	1: Whitehorse Junction - 10046@3.7 - 19@50.5	11.54	43.72	13	13	0	0	35.15	27.43	0.82	4	LOS_D	42.83	80.34
AVG	2400-2700	1: Whitehorse Junction - 10046@3.7 - 19@50.5	11.71	41.50	13	13	0	0	38.36	30.29	0.84	4	LOS_D	42.83	80.34
AVG	2700-3000	1: Whitehorse Junction - 10046@3.7 - 19@50.5	8.79	34.20	17	17	0	0	33.53	25.83	0.82	4	LOS_D	42.83	80.34
AVG	3000-3300	1: Whitehorse Junction - 10046@3.7 - 19@50.5	12.26	47.64	14	13	0	0	37.72	29.75	0.86	4	LOS_D	42.83	80.34
AVG	3300-3600	1: Whitehorse Junction - 10046@3.7 - 19@50.5	13.92	46.54	13	13	0	0	37.80	29.95	0.86	4	LOS_D	42.83	80.34
AVG	3600-3900	1: Whitehorse Junction - 10046@3.7 - 19@50.5	9.47	41.86	17	17	0	0	35.89	28.01	0.85	4	LOS_D	42.83	80.34
AVG	3900-4200	1: Whitehorse Junction - 10046@3.7 - 19@50.5	10.36	37.96	13	12	0	0	38.30	30.38	0.87	4	LOS_D	42.83	80.34
AVG	4200-4500	1: Whitehorse Junction - 10046@3.7 - 19@50.5	12.12	42.06	14	14	0	0	35.89	28.10	0.81	4	LOS_D	42.83	80.34
				43	178				36.60	28.68	0.8	4.0	LOS_D	43	80

Whitehorse Road - 20 sim runs (5 minute Segments) Maximum

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)
MAX	900-1200	1: Whitehorse Junction - 10046@3.7 - 19@50.5	28.40	90.89	29	28	2	0	51.32	41.58	1.06
MAX	1200-1500	1: Whitehorse Junction - 10046@3.7 - 19@50.5	20.65	76.97	21	21	1	0	51.35	39.93	1.19

MAX	1500-1800	1: Whitehorse Junction - 10046@3.7 - 19@50.5	40.38	100.73	21	21	1	0	60.09	49.51	1.14
MAX	1800-2100	1: Whitehorse Junction - 10046@3.7 - 19@50.5	17.66	87.65	24	24	1	0	46.40	38.56	1.17
MAX	2100-2400	1: Whitehorse Junction - 10046@3.7 - 19@50.5	36.11	111.75	20	20	1	0	61.27	50.04	1.25
MAX	2400-2700	1: Whitehorse Junction - 10046@3.7 - 19@50.5	22.98	75.81	21	21	1	0	55.41	47.45	1.12
MAX	2700-3000	1: Whitehorse Junction - 10046@3.7 - 19@50.5	15.72	50.89	26	26	1	0	44.10	36.25	1.00
MAX	3000-3300	1: Whitehorse Junction - 10046@3.7 - 19@50.5	31.99	92.49	19	19	1	0	62.14	54.01	1.11
MAX	3300-3600	1: Whitehorse Junction - 10046@3.7 - 19@50.5	42.56	112.93	25	25	1	0	70.02	59.20	1.29
MAX	3600-3900	1: Whitehorse Junction - 10046@3.7 - 19@50.5	17.58	71.40	23	23	1	0	48.15	39.52	1.00
MAX	3900-4200	1: Whitehorse Junction - 10046@3.7 - 19@50.5	15.66	74.69	17	17	1	0	46.72	38.66	1.18
MAX	4200-4500	1: Whitehorse Junction - 10046@3.7 - 19@50.5	22.61	81.53	21	21	1	0	48.85	40.93	1.00
				86	267				53.82	44.64	1.1

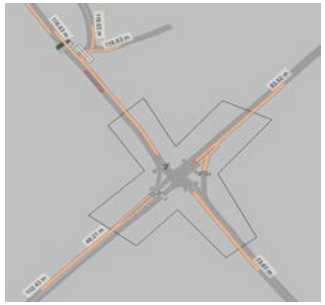
2033 Interim AM

Junction - 100 Sec Cycle Time	Link	Qlen Ave Max (Smins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
AS07 - Station Road	24	116.63	148.95	41.80	1.1	LOS D
Royston Road - Ahead	21	83.52	156.71	59.37	1.4	LOS D
Royston Road - Left	21	77.15	150.63	42.42	1.1	LOS C
Clothall Road	15	73.67	115.58	115.89	1.7	LOS F
Whitehorse Street - Ahead & LeftTurn	11	102.43	184.59	56.14	1.3	LOS D
Whitehorse Street - Right Turn	11	102.43	184.59	55.83	1.4	LOS D

Priority Working - 60 Sec Cycle Time	Link	Qlen Ave Max (Smins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
Railway Underpass - Southbound	31	95.15	126.53	47.75	1.59	LOS D
Railway Underpass - Northbound	32	56.28	98.19	17.65	0.73	LOS B

Northern Junction - 90 sec Cycle Time	Link	Qlen Ave Max (Smins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
AS07 - Station Road (N) - Left Turn	118	129.89	196.19	67.68	1.5	LOS D
AS07 - Station Road (N) - Ahead Only	118	129.89	196.19	143.02	2.5	LOS F
BA1 - Access - Left Turn	121	17.00	29.33	32.82	0.8	LOS D
BA1 - Access - Right Turn	121	12.84	24.58	38.48	0.9	LOS C
AS07 - Station Road (S) - Ahead	1	45.42	76.11	13.73	0.5	LOS B
AS07 - Station Road (S) - Right Turn	1	45.42	76.11	49.84	1.0	LOS D

Bus Priority Working - 90 Sec Cycle Time 1 ped phase every cycle. Signals for Buses only called when required.	Link	Qlen Ave Max (Smins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
AS07 - Northbound	1	30.92	73.47	10.59	0.33	LOS A
AS07 - Southbound	117	66.47	104.53	26	0.88	LOS C









Notes

20 Simulation Runs
Qlen Ave Max (every Smins), (Qlen Max, Avg)
Time periods indicative
Vissim Qlen Ave MAX (Smins) to compare with Linsig MMQ Outputs
Veh Delay (Delay of all vehicles. The delay of a vehicle in leaving a travel time measurement is obtained by subtracting the theoretical (ideal) travel time from the actual travel time. The theoretical travel time is the travel time which could be achieved if there were no other vehicles and/or no signal controls or other reasons for stops.

1	LOS	A
2	LOS	B
3	LOS	C
4	LOS	D
5	LOS	E
6	LOS	F

Southbound - 20 sim runs (5 minute Segments) Average

$MO!	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 31@2.1 - 31@108.9	23.32	83.28	30	29	1	0	31.31	18.74	1.14	3	LOS C	95.15	126.53
AVG	1200-1500	2: Railway Bridge Priority - 31@2.1 - 31@108.9	33.55	90.11	35	32	2	1	45.09	30.02	1.27	4	LOS D	95.15	126.53
AVG	1500-1800	2: Railway Bridge Priority - 31@2.1 - 31@108.9	31.07	87.77	34	32	2	0	47.16	31.41	1.50	4	LOS D	95.15	126.53
AVG	1800-2100	2: Railway Bridge Priority - 31@2.1 - 31@108.9	42.76	108.94	35	32	2	1	55.69	34.91	2.04	5	LOS E	95.15	126.53
AVG	2100-2400	2: Railway Bridge Priority - 31@2.1 - 31@108.9	34.82	95.26	38	36	2	0	46.73	30.92	1.63	4	LOS D	95.15	126.53
AVG	2400-2700	2: Railway Bridge Priority - 31@2.1 - 31@108.9	35.73	98.57	33	31	1	1	48.26	30.64	1.59	4	LOS D	95.15	126.53
AVG	2700-3000	2: Railway Bridge Priority - 31@2.1 - 31@108.9	31.70	90.47	36	35	1	0	40.39	25.50	1.41	4	LOS D	95.15	126.53
AVG	3000-3300	2: Railway Bridge Priority - 31@2.1 - 31@108.9	31.31	88.20	36	33	2	1	41.13	26.66	1.20	4	LOS D	95.15	126.53
AVG	3300-3600	2: Railway Bridge Priority - 31@2.1 - 31@108.9	33.92	90.82	36	34	2	0	45.61	29.95	1.39	4	LOS D	95.15	126.53
AVG	3600-3900	2: Railway Bridge Priority - 31@2.1 - 31@108.9	40.33	100.55	35	33	1	1	60.62	38.84	2.24	5	LOS E	95.15	126.53
AVG	3900-4200	2: Railway Bridge Priority - 31@2.1 - 31@108.9	46.26	106.50	38	36	2	1	55.85	35.93	1.92	5	LOS E	95.15	126.53
AVG	4200-4500	2: Railway Bridge Priority - 31@2.1 - 31@108.9	41.21	101.33	35	33	1	1	55.13	36.75	1.73	4	LOS D	95.15	126.53
				95	421				47.75	30.86	1.59	4.0	LOS D	95	127

Northbound - 20 sim runs (5 minute Segments) Average

$MO!	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 32@67.4 - 32@173.4	6.10	44.23	31	29	1	0	15.34	7.46	0.67	2	LOS B	56.28	98.19
AVG	1200-1500	2: Railway Bridge Priority - 32@67.4 - 32@173.4	9.26	52.20	35	32	1	1	18.88	8.84	0.77	2	LOS B	56.28	98.19
AVG	1500-1800	2: Railway Bridge Priority - 32@67.4 - 32@173.4	7.49	54.08	34	32	2	0	15.73	7.65	0.65	2	LOS B	56.28	98.19
AVG	1800-2100	2: Railway Bridge Priority - 32@67.4 - 32@173.4	9.10	58.13	35	33	1	1	18.46	8.86	0.74	2	LOS B	56.28	98.19
AVG	2100-2400	2: Railway Bridge Priority - 32@67.4 - 32@173.4	7.40	47.07	34	32	1	1	16.82	7.09	0.72	2	LOS B	56.28	98.19
AVG	2400-2700	2: Railway Bridge Priority - 32@67.4 - 32@173.4	9.54	62.15	33	30	1	1	18.34	8.49	0.74	2	LOS B	56.28	98.19
AVG	2700-3000	2: Railway Bridge Priority - 32@67.4 - 32@173.4	9.07	54.82	38	36	2	0	18.49	9.25	0.78	2	LOS B	56.28	98.19
AVG	3000-3300	2: Railway Bridge Priority - 32@67.4 - 32@173.4	9.95	58.84	37	34	1	1	18.34	8.65	0.76	2	LOS B	56.28	98.19
AVG	3300-3600	2: Railway Bridge Priority - 32@67.4 - 32@173.4	8.55	54.27	36	35	1	0	16.00	8.05	0.61	2	LOS B	56.28	98.19
AVG	3600-3900	2: Railway Bridge Priority - 32@67.4 - 32@173.4	9.61	61.96	37	34	2	1	18.69	8.58	0.76	2	LOS B	56.28	98.19
AVG	3900-4200	2: Railway Bridge Priority - 32@67.4 - 32@173.4	8.61	56.53	38	36	2	0	16.26	7.28	0.69	2	LOS B	56.28	98.19
AVG	4200-4500	2: Railway Bridge Priority - 32@67.4 - 32@173.4	12.31	71.07	35	31	2	1	20.46	10.16	0.85	3	LOS C	56.28	98.19
				56	423				17.65	8.37	0.73	2.0	LOS B	56	98

AS07 - 20 sim runs (5 minute Segments) Average

$MO!	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 24@44.4 - 19@50.5	26.4	83.9	10	9	0	0	40.50	30.54	1.01	4	LOS D	116.63	148.95
AVG	1200-1500	1: Whitehorse Junction - 24@44.4 - 19@50.5	35.0	129.8	12	10	1	1	41.28	29.07	0.98	4	LOS D	116.63	148.95
AVG	1500-1800	1: Whitehorse Junction - 24@44.4 - 19@50.5	37.5	114.6	14	13	1	0	43.87	32.23	1.11	4	LOS D	116.63	148.95
AVG	1800-2100	1: Whitehorse Junction - 24@44.4 - 19@50.5	31.4	114.3	13	12	0	1	40.92	28.04	1.01	4	LOS D	116.63	148.95
AVG	2100-2400	1: Whitehorse Junction - 24@44.4 - 19@50.5	43.1	125.4	14	13	1	0	44.25	33.05	1.15	4	LOS D	116.63	148.95
AVG	2400-2700	1: Whitehorse Junction - 24@44.4 - 19@50.5	35.1	120.8	13	12	0	1	38.17	25.16	1.13	4	LOS D	116.63	148.95
AVG	2700-3000	1: Whitehorse Junction - 24@44.4 - 19@50.5	36.8	105.7	13	13	0	0	43.48	32.65	1.08	4	LOS D	116.63	148.95
AVG	3000-3300	1: Whitehorse Junction - 24@44.4 - 19@50.5	33.7	128.8	13	12	0	1	40.13	26.74	1.10	4	LOS D	116.63	148.95
AVG	3300-3600	1: Whitehorse Junction - 24@44.4 - 19@50.5	40.1	121.1	12	12	0	0	41.63	30.88	1.13	4	LOS D	116.63	148.95
AVG	3600-3900	1: Whitehorse Junction - 24@44.4 - 19@50.5	32.6	115.0	12	11	0	1	40.76	27.00	1.18	4	LOS D	116.63	148.95
AVG	3900-4200	1: Whitehorse Junction - 24@44.4 - 19@50.5	38.8	124.7	12	11	0	0	44.33	31.70	1.26	4	LOS D	116.63	148.95
AVG	4200-4500	1: Whitehorse Junction - 24@44.4 - 19@50.5	34.1	115.6	15	13	0	1	42.33	29.36	1.02	4	LOS D	116.63	148.95
				117	153				41.80	29.70	1.1	4.0	LOS D	117	149

Royston Road - Ahead Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 21@62.5 - 13@19.3	14.94	61.35	12	11	1	0	42.04	28.97	0.95	4	LOS D	83.52	156.71
AVG	1200-1500	1: Whitehorse Junction - 21@62.5 - 13@19.3	20.25	71.31	14	13	1	0	43.20	29.30	1.04	4	LOS D	83.52	156.71
AVG	1500-1800	1: Whitehorse Junction - 21@62.5 - 13@19.3	20.86	79.32	15	14	1	0	55.39	39.10	1.32	4	LOS D	83.52	156.71
AVG	1800-2100	1: Whitehorse Junction - 21@62.5 - 13@19.3	26.23	81.11	13	13	1	0	58.50	40.91	1.27	4	LOS D	83.52	156.71
AVG	2100-2400	1: Whitehorse Junction - 21@62.5 - 13@19.3	18.45	75.40	14	13	1	0	54.86	39.28	1.19	4	LOS D	83.52	156.71
AVG	2400-2700	1: Whitehorse Junction - 21@62.5 - 13@19.3	23.13	74.84	13	12	1	0	50.14	35.36	1.17	4	LOS D	83.52	156.71
AVG	2700-3000	1: Whitehorse Junction - 21@62.5 - 13@19.3	26.04	79.43	13	13	1	0	63.23	45.43	1.47	4	LOS D	83.52	156.71
AVG	3000-3300	1: Whitehorse Junction - 21@62.5 - 13@19.3	22.43	75.54	13	13	0	0	57.04	39.81	1.28	4	LOS D	83.52	156.71
AVG	3300-3600	1: Whitehorse Junction - 21@62.5 - 13@19.3	36.34	92.98	13	12	1	0	67.96	49.33	1.51	5	LOS E	83.52	156.71
AVG	3600-3900	1: Whitehorse Junction - 21@62.5 - 13@19.3	44.44	103.62	15	14	1	0	80.37	58.40	1.96	5	LOS E	83.52	156.71
AVG	3900-4200	1: Whitehorse Junction - 21@62.5 - 13@19.3	37.33	97.85	14	13	1	0	70.59	51.21	1.65	4	LOS D	83.52	156.71
AVG	4200-4500	1: Whitehorse Junction - 21@62.5 - 13@19.3	41.68	109.48	14	13	1	0	69.14	50.01	1.59	5	LOS E	83.52	156.71
				84	163				59.37	42.26	1.4	4.0	LOS D	84	157

Royston Road - Left Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 21@62.5 - 17@8.3	8.70	55.89	3	3	0	0	18.36	9.79	0.55	2	LOS B	77.15	150.63
AVG	1200-1500	1: Whitehorse Junction - 21@62.5 - 17@8.3	15.82	67.41	3	3	0	0	24.73	13.13	0.69	2	LOS B	77.15	150.63
AVG	1500-1800	1: Whitehorse Junction - 21@62.5 - 17@8.3	13.28	70.13	4	4	0	0	37.48	25.47	0.95	3	LOS C	77.15	150.63
AVG	1800-2100	1: Whitehorse Junction - 21@62.5 - 17@8.3	16.33	75.05	3	3	0	0	39.84	25.96	1.15	3	LOS C	77.15	150.63
AVG	2100-2400	1: Whitehorse Junction - 21@62.5 - 17@8.3	13.60	72.11	4	4	0	0	41.84	27.13	1.02	3	LOS C	77.15	150.63
AVG	2400-2700	1: Whitehorse Junction - 21@62.5 - 17@8.3	17.92	76.19	4	4	0	0	33.41	21.64	0.85	3	LOS C	77.15	150.63
AVG	2700-3000	1: Whitehorse Junction - 21@62.5 - 17@8.3	18.77	77.34	4	4	0	0	43.99	28.83	1.36	3	LOS C	77.15	150.63
AVG	3000-3300	1: Whitehorse Junction - 21@62.5 - 17@8.3	15.92	67.53	5	4	1	0	35.56	22.77	0.94	3	LOS C	77.15	150.63
AVG	3300-3600	1: Whitehorse Junction - 21@62.5 - 17@8.3	23.19	84.48	4	3	1	0	56.15	39.31	1.31	4	LOS D	77.15	150.63
AVG	3600-3900	1: Whitehorse Junction - 21@62.5 - 17@8.3	28.09	89.69	4	3	0	0	63.78	45.28	1.63	4	LOS D	77.15	150.63
AVG	3900-4200	1: Whitehorse Junction - 21@62.5 - 17@8.3	28.28	89.04	4	3	0	0	59.10	40.75	1.42	4	LOS D	77.15	150.63
AVG	4200-4500	1: Whitehorse Junction - 21@62.5 - 17@8.3	34.69	100.91	4	4	0	0	54.77	36.35	1.52	4	LOS D	77.15	150.63
				77	46				42.42	28.03	1.1	3.0	LOS C	77	151

Clothall Road - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 15@456.3 - 23@42.1	21.60	49.21	6	6	0	0	60.57	50.75	1.06	5	LOS E	73.67	115.58
AVG	1200-1500	1: Whitehorse Junction - 15@456.3 - 23@42.1	28.64	57.46	6	6	0	0	74.69	63.44	1.25	5	LOS E	73.67	115.58
AVG	1500-1800	1: Whitehorse Junction - 15@456.3 - 23@42.1	36.63	65.59	7	7	0	0	92.00	79.71	1.39	5	LOS E	73.67	115.58
AVG	1800-2100	1: Whitehorse Junction - 15@456.3 - 23@42.1	36.33	67.78	7	7	0	0	106.30	92.99	1.59	5	LOS E	73.67	115.58
AVG	2100-2400	1: Whitehorse Junction - 15@456.3 - 23@42.1	47.08	74.61	8	6	0	1	134.56	112.61	1.91	6	LOS F	73.67	115.58
AVG	2400-2700	1: Whitehorse Junction - 15@456.3 - 23@42.1	48.06	78.76	8	7	0	0	119.87	103.81	1.80	6	LOS F	73.67	115.58
AVG	2700-3000	1: Whitehorse Junction - 15@456.3 - 23@42.1	47.95	80.67	8	7	0	0	129.10	112.80	1.90	6	LOS F	73.67	115.58
AVG	3000-3300	1: Whitehorse Junction - 15@456.3 - 23@42.1	51.44	84.12	7	7	0	0	133.32	116.55	1.99	6	LOS F	73.67	115.58
AVG	3300-3600	1: Whitehorse Junction - 15@456.3 - 23@42.1	51.48	81.28	8	8	0	0	133.54	116.53	1.92	6	LOS F	73.67	115.58
AVG	3600-3900	1: Whitehorse Junction - 15@456.3 - 23@42.1	48.34	78.99	8	7	0	0	134.60	117.89	1.92	6	LOS F	73.67	115.58
AVG	3900-4200	1: Whitehorse Junction - 15@456.3 - 23@42.1	53.95	86.85	7	7	0	0	134.88	117.24	1.91	6	LOS F	73.67	115.58
AVG	4200-4500	1: Whitehorse Junction - 15@456.3 - 23@42.1	47.75	78.66	8	7	1	0	137.23	118.69	2.11	6	LOS F	73.67	115.58
				74	88				115.89	100.25	1.7	6.0	LOS F	74	116

Whitehorse Road - Ahead & Left Turn - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	24.71	79.39	21	20	1	0	42.54	33.81	0.87	4	LOS D	102.43	184.59
AVG	1200-1500	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	30.98	90.06	24	23	1	0	49.80	36.61	1.29	4	LOS D	102.43	184.59
AVG	1500-1800	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	33.41	96.70	24	23	1	0	52.45	41.37	1.09	4	LOS D	102.43	184.59
AVG	1800-2100	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	30.43	94.96	25	24	1	0	48.56	36.29	1.16	4	LOS D	102.43	184.59
AVG	2100-2400	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	37.04	99.49	25	24	1	0	55.77	44.93	1.12	5	LOS E	102.43	184.59
AVG	2400-2700	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	39.39	110.64	27	25	1	0	58.83	44.25	1.39	4	LOS D	102.43	184.59
AVG	2700-3000	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	42.94	108.53	23	22	1	0	61.09	48.87	1.25	5	LOS E	102.43	184.59
AVG	3000-3300	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	53.76	119.44	24	24	1	0	65.23	49.59	1.51	5	LOS E	102.43	184.59
AVG	3300-3600	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	61.07	131.09	26	25	2	0	74.07	58.72	1.58	5	LOS E	102.43	184.59
AVG	3600-3900	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	41.47	116.75	25	24	1	0	66.35	51.27	1.50	5	LOS E	102.43	184.59
AVG	3900-4200	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	26.25	89.13	24	23	1	0	50.86	40.42	1.06	4	LOS D	102.43	184.59
AVG	4200-4500	1: Whitehorse Junction - 10@46@3.7 - 19@50.5	30.18	92.98	24	23	1	0	48.19	35.30	1.22	4	LOS D	102.43	184.59
				102	292				56.14	43.45	1.3	4.0	LOS D	102	185

Whitehorse Road - Right Turn - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	24.71	79.39	2	2	0	0	46.23	36.99	1.15	4	LOS D	102.43	184.59
AVG	1200-1500	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	30.98	90.06	2	2	0	0	50.68	35.04	1.54	4	LOS D	102.43	184.59
AVG	1500-1800	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	33.41	96.70	2	2	0	0	56.60	44.79	1.38	4	LOS D	102.43	184.59
AVG	1800-2100	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	30.43	94.96	2	2	0	0	48.44	36.62	1.26	4	LOS D	102.43	184.59
AVG	2100-2400	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	37.04	99.49	2	2	0	0	63.99	51.03	1.42	5	LOS E	102.43	184.59
AVG	2400-2700	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	39.39	110.64	2	2	0	0	58.56	44.22	1.52	5	LOS E	102.43	184.59
AVG	2700-3000	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	42.94	108.53	3	2	0	0	59.49	46.35	1.35	4	LOS D	102.43	184.59
AVG	3000-3300	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	53.76	119.44	2	2	0	0	65.78	51.41	1.52	4	LOS D	102.43	184.59
AVG	3300-3600	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	61.07	131.09	2	2	0	0	69.95	56.88	1.57	5	LOS E	102.43	184.59
AVG	3600-3900	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	41.47	116.75	2	2	0	0	49.67	37.87	1.36	4	LOS D	102.43	184.59
AVG	3900-4200	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	26.25	89.13	2	2	0	0	53.06	41.74	1.37	4	LOS D	102.43	184.59
AVG	4200-4500	1: Whitehorse Junction - 10@46@3.7 - 17@8.4	30.18	92.98	3	2	0	0	47.51	31.95	1.67	4	LOS D	102.43	184.59
				102	26				55.83	42.91	1.4	4.0	LOS D	102	185

A507 (N) - Left Turn - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 118@17.6 - 120@94.2	27.11	68.99	1	1	0	0	14.38	7.76	0.56	2	LOS B	129.89	196.19
AVG	1200-1500	6: A507 - Northern Access - 118@17.6 - 120@94.2	47.04	96.23	1	1	0	0	18.10	11.83	0.56	2	LOS B	129.89	196.19
AVG	1500-1800	6: A507 - Northern Access - 118@17.6 - 120@94.2	70.87	112.64	2	2	0	0	55.93	40.50	1.26	4	LOS D	129.89	196.19
AVG	1800-2100	6: A507 - Northern Access - 118@17.6 - 120@94.2	72.40	117.29	2	2	0	0	43.60	30.70	1.09	3	LOS C	129.89	196.19
AVG	2100-2400	6: A507 - Northern Access - 118@17.6 - 120@94.2	69.58	116.87	2	2	0	0	51.77	37.25	1.27	4	LOS D	129.89	196.19
AVG	2400-2700	6: A507 - Northern Access - 118@17.6 - 120@94.2	78.08	122.20	1	1	0	0	53.67	39.20	1.07	4	LOS D	129.89	196.19
AVG	2700-3000	6: A507 - Northern Access - 118@17.6 - 120@94.2	84.94	133.77	1	1	0	0	81.06	62.19	1.98	4	LOS D	129.89	196.19
AVG	3000-3300	6: A507 - Northern Access - 118@17.6 - 120@94.2	104.64	152.28	2	2	0	0	79.88	62.16	1.81	5	LOS E	129.89	196.19
AVG	3300-3600	6: A507 - Northern Access - 118@17.6 - 120@94.2	112.59	159.25	2	2	0	0	101.77	76.22	2.19	5	LOS E	129.89	196.19
AVG	3600-3900	6: A507 - Northern Access - 118@17.6 - 120@94.2	108.92	153.09	1	1	0	0	104.94	80.92	2.16	5	LOS E	129.89	196.19
AVG	3900-4200	6: A507 - Northern Access - 118@17.6 - 120@94.2	112.47	159.46	2	2	0	0	102.17	80.79	1.93	5	LOS E	129.89	196.19
AVG	4200-4500	6: A507 - Northern Access - 118@17.6 - 120@94.2	121.59	166.62	1	1	0	0	104.85	82.24	1.95	5	LOS E	129.89	196.19
				130	18				67.68	50.98	1.5	4.0	LOS D	130	196

A507 (N) - Ahead - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Ave,Max)
AVG	900-1200	6: A507 - Northern Access - 118@17.6 - 117@61.5	27.11	68.99	23	21	2	0	57.12	42.72	1.07	5	LOS E	129.89	196.19
AVG	1200-1500	6: A507 - Northern Access - 118@17.6 - 117@61.5	47.04	96.23	24	22	2	0	83.81	64.27	1.53	5	LOS E	129.89	196.19

AVG	1500-1800	6: A507 - Northern Access - 118@17.6 - 117@61.5	70.87	112.64	21	18	2	0	112.55	89.01	1.96	6	LOS F	129.89	196.19
AVG	1800-2100	6: A507 - Northern Access - 118@17.6 - 117@61.5	72.40	117.29	25	22	2	0	132.11	106.29	2.27	6	LOS F	129.89	196.19
AVG	2100-2400	6: A507 - Northern Access - 118@17.6 - 117@61.5	69.58	116.87	25	24	2	0	120.88	96.25	2.14	6	LOS F	129.89	196.19
AVG	2400-2700	6: A507 - Northern Access - 118@17.6 - 117@61.5	78.08	122.20	22	20	2	0	138.89	112.61	2.34	6	LOS F	129.89	196.19
AVG	2700-3000	6: A507 - Northern Access - 118@17.6 - 117@61.5	84.94	133.77	26	24	1	0	143.04	115.58	2.58	6	LOS F	129.89	196.19
AVG	3000-3300	6: A507 - Northern Access - 118@17.6 - 117@61.5	104.64	152.28	25	23	2	0	163.66	132.62	2.84	6	LOS F	129.89	196.19
AVG	3300-3600	6: A507 - Northern Access - 118@17.6 - 117@61.5	112.59	159.25	22	20	2	0	189.03	154.97	3.14	6	LOS F	129.89	196.19
AVG	3600-3900	6: A507 - Northern Access - 118@17.6 - 117@61.5	108.92	153.09	25	24	2	0	195.27	160.65	3.27	6	LOS F	129.89	196.19
AVG	3900-4200	6: A507 - Northern Access - 118@17.6 - 117@61.5	112.47	159.46	27	25	1	0	185.44	151.51	3.17	6	LOS F	129.89	196.19
AVG	4200-4500	6: A507 - Northern Access - 118@17.6 - 117@61.5	121.59	166.62	22	20	2	0	194.50	159.16	3.43	6	LOS F	129.89	196.19
				130	287				143.02	115.47	2.5	6.0	LOS F	130	196

Northern Access (E) - Right Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 121@369.8 - 107@69.0		1.88	11.09	3	3	0	0	27.29	22.12	0.70	3	LOS C	12.84	24.58
AVG	1200-1500	6: A507 - Northern Access - 121@369.8 - 107@69.0		2.13	12.13	4	4	0	0	29.45	23.80	0.79	3	LOS C	12.84	24.58
AVG	1500-1800	6: A507 - Northern Access - 121@369.8 - 107@69.0		2.56	14.34	4	4	0	0	29.88	23.97	0.79	3	LOS C	12.84	24.58
AVG	1800-2100	6: A507 - Northern Access - 121@369.8 - 107@69.0		3.28	14.07	4	4	0	0	35.56	29.29	0.77	3	LOS C	12.84	24.58
AVG	2100-2400	6: A507 - Northern Access - 121@369.8 - 107@69.0		2.28	12.03	5	5	0	0	37.81	31.97	0.83	4	LOS D	12.84	24.58
AVG	2400-2700	6: A507 - Northern Access - 121@369.8 - 107@69.0		2.62	11.86	4	4	0	0	34.97	29.35	0.76	3	LOS C	12.84	24.58
AVG	2700-3000	6: A507 - Northern Access - 121@369.8 - 107@69.0		2.76	12.01	4	4	0	0	38.38	32.23	0.88	4	LOS D	12.84	24.58
AVG	3000-3300	6: A507 - Northern Access - 121@369.8 - 107@69.0		3.13	14.85	6	6	0	0	37.26	30.87	0.85	4	LOS D	12.84	24.58
AVG	3300-3600	6: A507 - Northern Access - 121@369.8 - 107@69.0		2.94	14.26	5	5	0	0	30.25	24.38	0.71	3	LOS C	12.84	24.58
AVG	3600-3900	6: A507 - Northern Access - 121@369.8 - 107@69.0		2.31	12.41	4	4	0	0	34.57	28.08	0.88	3	LOS C	12.84	24.58
AVG	3900-4200	6: A507 - Northern Access - 121@369.8 - 107@69.0		2.93	15.29	5	5	0	0	31.85	25.91	0.77	3	LOS C	12.84	24.58
AVG	4200-4500	6: A507 - Northern Access - 121@369.8 - 107@69.0		2.06	9.77	4	4	0	0	26.54	21.39	0.64	3	LOS C	12.84	24.58
					13	52				32.82	26.95	0.8	3.0	LOS C	13	25

Northern Access (E) - Left Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Ave,Max)
AVG	900-1200	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.63	16.15	5	5	0	0	38.36	30.60	0.84	4	LOS D	17.00	29.33
AVG	1200-1500	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.13	16.33	7	7	0	0	40.18	30.61	1.20	4	LOS D	17.00	29.33
AVG	1500-1800	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.05	18.50	7	7	0	0	38.22	29.91	0.79	4	LOS D	17.00	29.33
AVG	1800-2100	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.03	16.56	6	6	0	0	36.75	28.52	0.81	3	LOS C	17.00	29.33
AVG	2100-2400	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.01	16.94	6	6	0	0	35.79	27.68	0.92	3	LOS C	17.00	29.33
AVG	2400-2700	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.10	17.20	6	6	0	0	40.39	32.00	0.90	4	LOS D	17.00	29.33
AVG	2700-3000	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.45	16.13	5	5	0	0	36.11	28.29	0.82	4	LOS D	17.00	29.33
AVG	3000-3300	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.95	16.89	6	6	0	0	41.71	31.95	1.20	4	LOS D	17.00	29.33
AVG	3300-3600	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.01	17.93	8	8	0	0	34.32	25.96	0.82	4	LOS D	17.00	29.33
AVG	3600-3900	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.62	17.31	5	5	0	0	40.70	31.76	0.93	4	LOS D	17.00	29.33
AVG	3900-4200	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.15	17.66	6	6	0	0	42.52	33.74	1.00	4	LOS D	17.00	29.33
AVG	4200-4500	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.44	16.40	7	7	0	0	36.71	28.03	0.90	3	LOS C	17.00	29.33
					17	74				38.48	29.92	0.9	4.0	LOS D	17	29

A507 (S) - Ahead Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 1@138.2 - 107@49.7		5.21	41.11	28	27	1	0	13.64	9.00	0.44	2	LOS B	45.42	76.11
AVG	1200-1500	6: A507 - Northern Access - 1@138.2 - 107@49.7		8.89	46.05	27	26	1	0	14.93	10.28	0.44	2	LOS B	45.42	76.11
AVG	1500-1800	6: A507 - Northern Access - 1@138.2 - 107@49.7		9.99	47.87	25	23	2	0	13.01	7.62	0.52	2	LOS B	45.42	76.11
AVG	1800-2100	6: A507 - Northern Access - 1@138.2 - 107@49.7		5.83	41.63	30	29	1	0	12.61	8.22	0.40	2	LOS B	45.42	76.11
AVG	2100-2400	6: A507 - Northern Access - 1@138.2 - 107@49.7		9.90	49.08	26	24	2	0	16.63	11.96	0.45	2	LOS B	45.42	76.11
AVG	2400-2700	6: A507 - Northern Access - 1@138.2 - 107@49.7		7.26	41.81	26	25	1	0	10.98	6.28	0.47	2	LOS B	45.42	76.11
AVG	2700-3000	6: A507 - Northern Access - 1@138.2 - 107@49.7		6.78	39.28	33	31	2	0	12.37	8.00	0.39	2	LOS B	45.42	76.11
AVG	3000-3300	6: A507 - Northern Access - 1@138.2 - 107@49.7		12.63	57.70	30	28	2	0	19.05	13.60	0.55	2	LOS B	45.42	76.11
AVG	3300-3600	6: A507 - Northern Access - 1@138.2 - 107@49.7		8.54	42.89	27	25	1	0	11.86	6.94	0.48	2	LOS B	45.42	76.11
AVG	3600-3900	6: A507 - Northern Access - 1@138.2 - 107@49.7		5.75	38.90	33	31	2	0	10.69	6.70	0.37	2	LOS B	45.42	76.11
AVG	3900-4200	6: A507 - Northern Access - 1@138.2 - 107@49.7		11.66	51.07	32	29	2	0	17.09	12.00	0.50	2	LOS B	45.42	76.11
AVG	4200-4500	6: A507 - Northern Access - 1@138.2 - 107@49.7		9.02	47.61	25	23	2	0	11.94	6.96	0.45	2	LOS B	45.42	76.11
					45	342				13.73	8.96	0.5	2.0	LOS B	45	76

A507 (S) - Right Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
MAX	900-1200	6: A507 - Northern Access - 1@138.2 - 120@94.2		5.21	41.11	2	2	0	0	54.55	45.41	1.17	4	LOS D	45.42	76.11
MAX	1200-1500	6: A507 - Northern Access - 1@138.2 - 120@94.2		8.89	46.05	1	1	0	0	38.04	29.98	0.82	4	LOS D	45.42	76.11
MAX	1500-1800	6: A507 - Northern Access - 1@138.2 - 120@94.2		9.99	47.87	4	3	0	0	50.18	41.16	1.06	4	LOS D	45.42	76.11
MAX	1800-2100	6: A507 - Northern Access - 1@138.2 - 120@94.2		5.83	41.63	3	3	0	0	54.47	46.18	1.00	5	LOS E	45.42	76.11
MAX	2100-2400	6: A507 - Northern Access - 1@138.2 - 120@94.2		9.90	49.08	2	2	0	0	58.95	49.54	1.17	5	LOS E	45.42	76.11
MAX	2400-2700	6: A507 - Northern Access - 1@138.2 - 120@94.2		7.26	41.81	2	2	0	0	48.57	39.39	1.08	4	LOS D	45.42	76.11
MAX	2700-3000	6: A507 - Northern Access - 1@138.2 - 120@94.2		6.78	39.28	3	3	0	0	49.59	41.25	1.00	4	LOS D	45.42	76.11
MAX	3000-3300	6: A507 - Northern Access - 1@138.2 - 120@94.2		12.63	57.70	2	2	0	0	48.88	39.58	1.07	4	LOS D	45.42	76.11
MAX	3300-3600	6: A507 - Northern Access - 1@138.2 - 120@94.2		8.54	42.89	3	3	0	0	47.99	39.32	1.04	4	LOS D	45.42	76.11
MAX	3600-3900	6: A507 - Northern Access - 1@138.2 - 120@94.2		5.75	38.90	2	2	0	0	45.96	37.99	1.00	4	LOS D	45.42	76.11
MAX	3900-4200	6: A507 - Northern Access - 1@138.2 - 120@94.2		11.66	51.07	2	2	0	0	53.03	43.94	1.10	4	LOS D	45.42	76.11
MAX	4200-4500	6: A507 - Northern Access - 1@138.2 - 120@94.2		9.02	47.61	2	2	0	0	47.88	39.58	0.95	4	LOS D	45.42	76.11
					45	28				49.84	41.11	1.0	4.0	LOS D	45	76

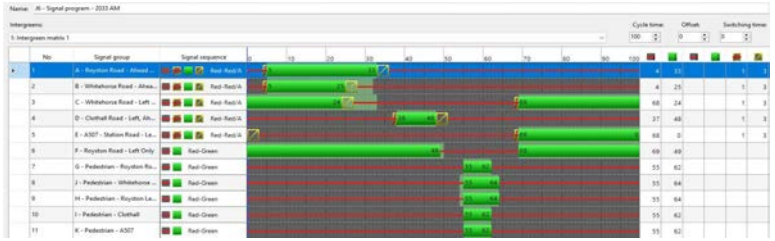
A507 (N) - Bus Priority - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Ave,Max)
AVG	900-1200	7: Bus Priority Junction - 1@7.9 - 1@71.4		1.99	24.03	26	24	1	0	8.21	2.38	0.28	1	LOS A	30.92	73.47
AVG	1200-1500	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.41	37.90	30	28	1	0	12.96	5.10	0.39	2	LOS B	30.92	73.47
AVG	1500-1800	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.71	26.43	32	30	2	0	8.83	3.04	0.24	1	LOS A	30.92	73.47
AVG	1800-2100	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.82	34.64	30	28	2	0	12.44	4.55	0.47	2	LOS B	30.92	73.47
AVG	2100-2400	7: Bus Priority Junction - 1@7.9 - 1@71.4		0.75	16.49	28	26	2	0	8.77	2.62	0.21	1	LOS A	30.92	73.47
AVG	2400-2700	7: Bus Priority Junction - 1@7.9 - 1@71.4		3.79	37.22	30	29	1	0	14.83	6.60	0.53	2	LOS B	30.92	73.47
AVG	2700-3000	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.54	33.54	33	31	2	0	8.67	2.14	0.26	1	LOS A	30.92	73.47
AVG	3000-3300	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.08	31.74	33	31	2	0	9.93	3.31	0.27	1	LOS A	30.92	73.47
AVG	3300-3600	7: Bus Priority Junction - 1@7.9 - 1@71.4		3.49	36.29	31	30	1	0	9.42	3.53	0.29	1	LOS A	30.92	73.47
AVG	3600-3900	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.98	35.55	33	31	2	0	11.90	4.01	0.35	2	LOS B	30.92	73.47
AVG	3900-4200	7: Bus Priority Junction - 1@7.9 - 1@71.4		1.14	19.96	33	31	2	0	6.24	1.01	0.12	1	LOS A	30.92	73.47
AVG	4200-4500	7: Bus Priority Junction - 1@7.9 - 1@71.4		3.73	37.30	31	28	3	0	14.92	6.72	0.51	2	LOS B	30.92	73.47
					31	370				10.59	3.75	0.3	1.0	LOS A	31	73

A507 (S) - Bus Priority - 20 sim runs (5 minute Segments) Average

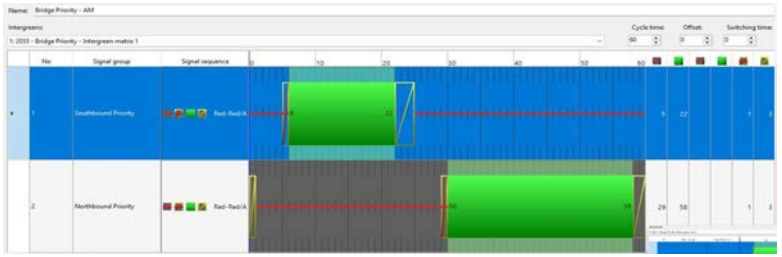
$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	7: Bus Priority Junction - 117@113.9 - 4@15.8		9.96	51.13	24	23	1	0	21.97	14.20	0.83	3	LOS C	66.47	104.53
AVG	1200-1500	7: Bus Priority Junction - 117@113.9 - 4@15.8		28.67	88.43	28	27	2	0	36.89	28.48	0.96	4	LOS D	66.47	104.53
AVG	1500-1800	7: Bus Priority Junction - 117@113.9 - 4@15.8		11.80	63.15	34	31	3	0	21.84	13.86	0.83	3	LOS C	66.47	104.53
AVG	1800-2100	7: Bus Priority Junction - 117@113.9 - 4@15.8		13.09	56.58	26	24	2	0	22.21	13.99	0.86	3	LOS C	66.47	104.53
AVG	2100-2400	7: Bus Priority Junction - 117@113.9 - 4@15.8		17.03	62.52	29	28	2	0	24.67	16.66	0.87	3	LOS C	66.47	104.53
AVG	2400-2700	7: Bus Priority Junction - 117@113.9 - 4@15.8		16.39	68.04	35	33	2	0	25.99	17.79	0.89	3	LOS C	66.47	104.53
AVG	2700-3000	7: Bus Priority Junction - 117@113.9 - 4@15.8		11.72	54.05	27	26	1	0	22.71	14.67	0.86	3	LOS C	66.47	104.53
AVG	3000-3300	7: Bus Priority Junction - 117@113.9 - 4@15.8		29.82	89.77	28	27	2	0	38.25	29.54	0.97	4	LOS D	66.47	104.53
AVG	3300-3600	7: Bus Priority Junction - 117@113.9 - 4@15.8		15.56	65.89	36	34	2	0	24.36	16.51	0.81	3	LOS C	66.47	104.53
AVG	3600-3900	7: Bus Priority Junction - 117@113.9 - 4@15.8		14.67	59.57	25	24	1	0	24.03	15.57	0.88	3	LOS C	66.47	104.53
AVG	3900-4200	7: Bus Priority Junction - 117@113.9 - 4@15.8		18.51	70.37	31	30	2	0	26.04	17.87	0.88	3	LOS C	66.47	104.53
AVG	4200-4500	7: Bus Priority Junction - 117@113.9 - 4@15.8		15.56	68.10	35	33	2	0	25.27	17.23	0.86	3	LOS C	66.47	104.53
					66	358				26.19	18.03	0.9	3.0	LOS C	66	105

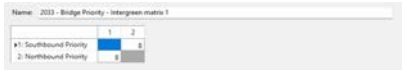
A507 / Whitehorse Road / Clothall Road / Royston Road



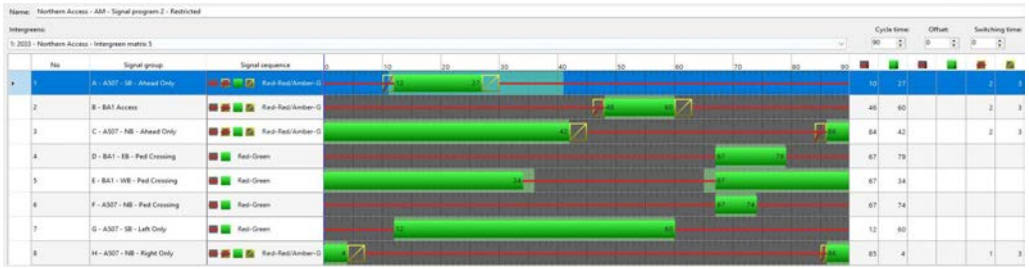


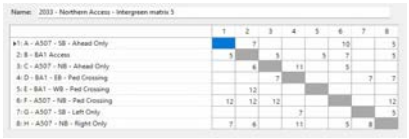
Bridge Priority



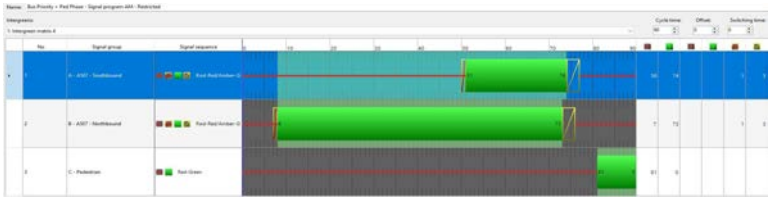


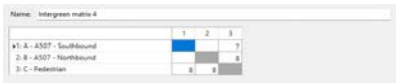
Northern Access Junction Phase A - A507 Southbound have had the green time restricted to hold back traffic.





Bus Priority + Ped Phase - Bus Priority signals ignals work on detetors. Called only when required.
Phase A - A507 Southbound have had the green time restricted to hold back traffic.





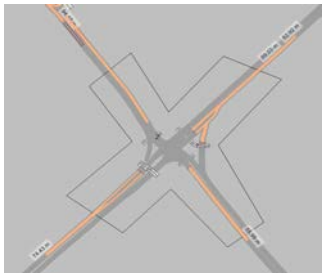
2033 Interim PM

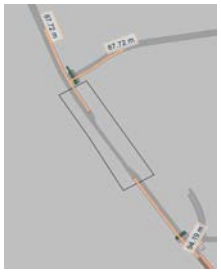
Junction - 100 Sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
AS07 - Station Road	24	80.98	123.16	48.33	1.1	LOS_D
Royston Road - Ahead	21	78.40	145.32	45.40	1.1	LOS_D
Royston Road - Left	21	69.03	139.03	29.80	0.9	LOS_C
Clothall Road	15	55.99	88.27	59.16	1.1	LOS_E
Whitehorse Street - Ahead & LeftTurn	11	74.43	141.21	48.86	1.2	LOS_D
Whitehorse Street - Right Turn	11	74.43	141.21	51.11	1.4	LOS_D

Priority Working - 60 Sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
Railway Underpass - Southbound	31	87.72	138.79	57.44	1.78	LOS_D
Railway Underpass - Northbound	32	94.19	144.61	18.68	0.82	LOS_B

Northern Junction - 90 sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
AS07 - Station Road (N) - Left Turn	118	120.43	200.21	67.50	1.4	LOS_D
AS07 - Station Road (N) - Ahead Only	118	120.43	200.21	160.28	2.6	LOS_F
BA1 - Access - Left Turn	121	10.28	18.91	32.64	0.8	LOS_D
BA1 - Access - Right Turn	121	7.81	15.72	42.82	1.1	LOS_C
AS07 - Station Road (S) - Ahead	1	80.78	123.51	17.47	0.5	LOS_B
AS07 - Station Road (S) - Right Turn	1	80.78	123.51	59.95	1.2	LOS_E

Bus Priority Working - 90 Sec Cycle Time 1 ped phase every cycle. Signals for Buses only called when required.	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
AS07 - Northbound	1	63.72	130.47	15.10	0.48	LOS_B
AS07 - Southbound	117	71.71	124.82	50	1.07	LOS_D









Notes

20 Simulation Runs
Qlen Ave Max (every 5mins), (Qlen Max, Avg,Avg)
Time periods indicative
Vissim Qlen Ave MAX (5mins) to compare with Linsig MMQ Outputs
Veh Delay (Delay of all vehicles. The delay of a vehicle in leaving a travel time measurement is obtained by subtracting the theoretical (ideal) travel time from the actual travel time. The theoretical travel time is the travel time which could be achieved if there were no other vehicles and/or no signal controls or other reasons for stops.

1 LOS_A
2 LOS_B
3 LOS_C
4 LOS_D
5 LOS_E
6 LOS_F

Southbound - 20 sim runs (5 minute Segments) Average

SMO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 31@2.1 - 31@108.9	16.63	65.04	24	24	0	0	34.57	21.82	1.12	3	LOS_C	87.72	138.79
AVG	1200-1500	2: Railway Bridge Priority - 31@2.1 - 31@108.9	11.34	72.86	19	17	0	1	35.36	20.25	1.26	4	LOS_D	87.72	138.79
AVG	1500-1800	2: Railway Bridge Priority - 31@2.1 - 31@108.9	34.72	88.16	31	30	0	0	50.53	33.69	1.62	4	LOS_D	87.72	138.79
AVG	1800-2100	2: Railway Bridge Priority - 31@2.1 - 31@108.9	48.03	95.16	31	29	1	1	71.03	50.54	2.05	5	LOS_E	87.72	138.79
AVG	2100-2400	2: Railway Bridge Priority - 31@2.1 - 31@108.9	38.86	83.69	31	30	0	0	63.74	45.73	1.79	5	LOS_E	87.72	138.79
AVG	2400-2700	2: Railway Bridge Priority - 31@2.1 - 31@108.9	25.38	74.17	28	27	0	1	44.55	29.02	1.41	4	LOS_D	87.72	138.79
AVG	2700-3000	2: Railway Bridge Priority - 31@2.1 - 31@108.9	27.30	70.55	30	29	1	0	43.46	29.08	1.31	4	LOS_D	87.72	138.79
AVG	3000-3300	2: Railway Bridge Priority - 31@2.1 - 31@108.9	13.08	71.93	19	18	0	1	38.32	23.24	1.44	4	LOS_D	87.72	138.79
AVG	3300-3600	2: Railway Bridge Priority - 31@2.1 - 31@108.9	36.58	93.46	32	31	1	0	50.38	33.43	1.56	4	LOS_D	87.72	138.79
AVG	3600-3900	2: Railway Bridge Priority - 31@2.1 - 31@108.9	61.31	123.83	32	30	0	1	82.28	59.24	2.47	6	LOS_F	87.72	138.79
AVG	3900-4200	2: Railway Bridge Priority - 31@2.1 - 31@108.9	68.01	115.42	31	29	1	1	99.30	71.34	2.99	5	LOS_E	87.72	138.79
AVG	4200-4500	2: Railway Bridge Priority - 31@2.1 - 31@108.9	52.49	98.37	30	29	0	1	75.73	53.89	2.37	5	LOS_E	87.72	138.79
				88	338				57.44	39.27	1.78	4.0	LOS_D	88	139

Northbound - 20 sim runs (5 minute Segments) Average

SMO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 32@67.4 - 32@173.4	11.46	66.46	51	51	0	0	15.40	6.82	0.64	2	LOS_B	94.19	144.61
AVG	1200-1500	2: Railway Bridge Priority - 32@67.4 - 32@173.4	15.59	94.81	63	61	1	1	18.07	6.96	0.79	2	LOS_B	94.19	144.61
AVG	1500-1800	2: Railway Bridge Priority - 32@67.4 - 32@173.4	18.68	97.56	64	63	1	0	18.58	8.45	0.81	2	LOS_B	94.19	144.61
AVG	1800-2100	2: Railway Bridge Priority - 32@67.4 - 32@173.4	16.65	94.22	62	61	0	1	19.25	7.79	0.85	2	LOS_B	94.19	144.61
AVG	2100-2400	2: Railway Bridge Priority - 32@67.4 - 32@173.4	19.75	97.17	65	64	1	1	19.66	8.64	0.85	3	LOS_C	94.19	144.61
AVG	2400-2700	2: Railway Bridge Priority - 32@67.4 - 32@173.4	17.63	93.12	66	65	0	1	18.75	7.29	0.80	2	LOS_B	94.19	144.61
AVG	2700-3000	2: Railway Bridge Priority - 32@67.4 - 32@173.4	19.68	95.17	64	63	1	0	18.44	8.10	0.85	2	LOS_B	94.19	144.61
AVG	3000-3300	2: Railway Bridge Priority - 32@67.4 - 32@173.4	16.71	93.97	64	63	0	1	18.93	7.45	0.86	2	LOS_B	94.19	144.61
AVG	3300-3600	2: Railway Bridge Priority - 32@67.4 - 32@173.4	26.35	112.79	66	66	1	0	20.56	9.63	0.94	2	LOS_B	94.19	144.61
AVG	3600-3900	2: Railway Bridge Priority - 32@67.4 - 32@173.4	17.01	93.59	63	62	0	1	20.33	8.70	0.88	2	LOS_B	94.19	144.61
AVG	3900-4200	2: Railway Bridge Priority - 32@67.4 - 32@173.4	18.35	98.11	63	62	1	0	18.35	8.10	0.81	2	LOS_B	94.19	144.61
AVG	4200-4500	2: Railway Bridge Priority - 32@67.4 - 32@173.4	15.75	93.37	63	62	1	1	17.88	7.51	0.76	2	LOS_B	94.19	144.61
				94	754				18.68	7.95	0.82	2.0	LOS_B	94	145

A507 - 20 sim runs (5 minute Segments) Average

SMO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 24@44.5 - 13@20.1	14.6	49.2	8	8	0	0	39.17	30.17	0.97	4	LOS_D	80.98	123.16
AVG	1200-1500	1: Whitehorse Junction - 24@44.5 - 13@20.1	22.0	63.3	10	9	0	1	45.55	33.68	0.91	4	LOS_D	80.98	123.16
AVG	1500-1800	1: Whitehorse Junction - 24@44.5 - 13@20.1	20.8	70.0	13	13	0	0	38.56	29.20	0.94	4	LOS_D	80.98	123.16
AVG	1800-2100	1: Whitehorse Junction - 24@44.5 - 13@20.1	35.2	96.2	14	13	0	1	54.64	41.26	1.26	5	LOS_E	80.98	123.16
AVG	2100-2400	1: Whitehorse Junction - 24@44.5 - 13@20.1	36.4	94.2	14	14	0	0	54.56	43.00	1.17	5	LOS_E	80.98	123.16
AVG	2400-2700	1: Whitehorse Junction - 24@44.5 - 13@20.1	31.3	94.1	14	13	0	1	51.96	39.14	1.10	4	LOS_D	80.98	123.16
AVG	2700-3000	1: Whitehorse Junction - 24@44.5 - 13@20.1	24.4	70.2	13	13	0	0	45.38	34.97	1.05	4	LOS_D	80.98	123.16
AVG	3000-3300	1: Whitehorse Junction - 24@44.5 - 13@20.1	21.5	63.4	11	10	0	1	44.53	33.07	0.89	4	LOS_D	80.98	123.16
AVG	3300-3600	1: Whitehorse Junction - 24@44.5 - 13@20.1	20.9	68.1	12	12	0	0	36.10	26.15	0.90	4	LOS_D	80.98	123.16

AVG	3600-3900	1: Whitehorse Junction - 24@44.5 - 13@20.1	42.1	102.6	13	12	0	1	56.86	43.62	1.20	4	LOS_D	80.98	123.16	
AVG	3900-4200	1: Whitehorse Junction - 24@44.5 - 13@20.1	40.3	107.1	14	14	0	0	56.99	44.73	1.26	5	LOS_E	80.98	123.16	
AVG	4200-4500	1: Whitehorse Junction - 24@44.5 - 13@20.1	36.7	93.4	13	12	0	1	55.61	41.78	1.21	5	LOS_E	80.98	123.16	
				81	149				48.33	36.73	1.1	4.0	LOS_D	81	123	

Royston Road - Ahead Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	1: Whitehorse Junction - 21@62.5 - 13@19.3	10.50	58.86	13	13	0	0	34.88	20.42	0.79	3	LOS_C	78.40	145.32	
AVG	1200-1500	1: Whitehorse Junction - 21@62.5 - 13@19.3	19.87	76.04	16	16	0	0	42.41	26.26	0.98	4	LOS_D	78.40	145.32	
AVG	1500-1800	1: Whitehorse Junction - 21@62.5 - 13@19.3	19.03	77.21	14	14	0	0	48.43	30.40	1.19	4	LOS_D	78.40	145.32	
AVG	1800-2100	1: Whitehorse Junction - 21@62.5 - 13@19.3	21.34	76.54	13	13	0	0	45.69	29.27	1.14	4	LOS_D	78.40	145.32	
AVG	2100-2400	1: Whitehorse Junction - 21@62.5 - 13@19.3	24.93	85.51	15	15	0	0	50.78	32.12	1.32	4	LOS_D	78.40	145.32	
AVG	2400-2700	1: Whitehorse Junction - 21@62.5 - 13@19.3	15.89	70.19	15	15	0	0	38.22	22.10	0.90	4	LOS_D	78.40	145.32	
AVG	2700-3000	1: Whitehorse Junction - 21@62.5 - 13@19.3	17.30	72.03	14	14	0	0	44.40	27.73	1.08	4	LOS_D	78.40	145.32	
AVG	3000-3300	1: Whitehorse Junction - 21@62.5 - 13@19.3	17.43	68.39	14	13	0	0	42.77	26.42	1.05	4	LOS_D	78.40	145.32	
AVG	3300-3600	1: Whitehorse Junction - 21@62.5 - 13@19.3	22.77	82.63	15	15	0	0	48.74	30.57	1.20	4	LOS_D	78.40	145.32	
AVG	3600-3900	1: Whitehorse Junction - 21@62.5 - 13@19.3	33.79	96.67	15	15	0	0	52.07	33.15	1.35	4	LOS_D	78.40	145.32	
AVG	3900-4200	1: Whitehorse Junction - 21@62.5 - 13@19.3	23.82	87.94	16	16	0	0	49.40	31.43	1.13	4	LOS_D	78.40	145.32	
AVG	4200-4500	1: Whitehorse Junction - 21@62.5 - 13@19.3	22.12	88.80	15	15	0	0	47.03	29.13	1.16	4	LOS_D	78.40	145.32	
				78	175				45.40	28.25	1.1	4.0	LOS_D	78	145	

Royston Road - Left Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	1: Whitehorse Junction - 21@62.5 - 17@8.3	7.78	56.94	5	5	0	0	19.90	7.36	0.50	2	LOS_B	69.03	139.03	
AVG	1200-1500	1: Whitehorse Junction - 21@62.5 - 17@8.3	14.11	65.69	6	6	0	0	30.38	14.42	0.85	3	LOS_C	69.03	139.03	
AVG	1500-1800	1: Whitehorse Junction - 21@62.5 - 17@8.3	11.60	69.39	5	5	0	0	32.37	16.82	0.84	3	LOS_C	69.03	139.03	
AVG	1800-2100	1: Whitehorse Junction - 21@62.5 - 17@8.3	11.57	67.47	5	5	0	0	33.30	17.16	0.96	3	LOS_C	69.03	139.03	
AVG	2100-2400	1: Whitehorse Junction - 21@62.5 - 17@8.3	13.46	65.20	5	5	0	0	34.66	18.71	1.04	3	LOS_C	69.03	139.03	
AVG	2400-2700	1: Whitehorse Junction - 21@62.5 - 17@8.3	8.76	58.01	5	5	0	0	25.05	11.10	0.72	3	LOS_C	69.03	139.03	
AVG	2700-3000	1: Whitehorse Junction - 21@62.5 - 17@8.3	10.57	62.77	5	5	0	0	25.07	10.53	0.72	3	LOS_C	69.03	139.03	
AVG	3000-3300	1: Whitehorse Junction - 21@62.5 - 17@8.3	11.56	59.60	6	6	0	0	24.81	11.65	0.71	3	LOS_C	69.03	139.03	
AVG	3300-3600	1: Whitehorse Junction - 21@62.5 - 17@8.3	17.37	74.66	5	5	0	0	32.84	16.33	0.88	3	LOS_C	69.03	139.03	
AVG	3600-3900	1: Whitehorse Junction - 21@62.5 - 17@8.3	27.53	94.46	6	6	0	0	35.33	19.09	1.23	3	LOS_C	69.03	139.03	
AVG	3900-4200	1: Whitehorse Junction - 21@62.5 - 17@8.3	17.11	83.80	6	6	0	0	31.80	17.06	0.82	3	LOS_C	69.03	139.03	
AVG	4200-4500	1: Whitehorse Junction - 21@62.5 - 17@8.3	14.03	70.36	7	6	0	0	32.10	15.40	0.95	3	LOS_C	69.03	139.03	
				69	66				29.80	14.64	0.9	3.0	LOS_C	69	139	

Clothall Road - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	1: Whitehorse Junction - 15@456.3 - 23@42.1	17.51	48.96	12	11	0	0	48.02	39.07	0.93	4	LOS_D	55.99	88.27	
AVG	1200-1500	1: Whitehorse Junction - 15@456.3 - 23@42.1	21.49	54.58	13	12	0	0	54.82	44.89	1.01	4	LOS_D	55.99	88.27	
AVG	1500-1800	1: Whitehorse Junction - 15@456.3 - 23@42.1	23.94	56.83	13	13	0	0	60.00	50.06	1.03	4	LOS_D	55.99	88.27	
AVG	1800-2100	1: Whitehorse Junction - 15@456.3 - 23@42.1	22.01	52.97	13	12	0	1	58.77	47.53	1.03	5	LOS_E	55.99	88.27	
AVG	2100-2400	1: Whitehorse Junction - 15@456.3 - 23@42.1	23.90	57.13	13	12	0	0	69.33	56.80	1.23	5	LOS_E	55.99	88.27	
AVG	2400-2700	1: Whitehorse Junction - 15@456.3 - 23@42.1	21.72	55.81	14	14	0	0	54.43	44.25	1.03	4	LOS_D	55.99	88.27	
AVG	2700-3000	1: Whitehorse Junction - 15@456.3 - 23@42.1	21.24	56.21	13	12	0	0	57.60	46.95	1.10	5	LOS_E	55.99	88.27	
AVG	3000-3300	1: Whitehorse Junction - 15@456.3 - 23@42.1	24.48	58.00	14	14	0	0	59.55	49.13	1.09	5	LOS_E	55.99	88.27	
AVG	3300-3600	1: Whitehorse Junction - 15@456.3 - 23@42.1	25.24	58.86	14	14	0	0	64.71	53.51	1.12	5	LOS_E	55.99	88.27	
AVG	3600-3900	1: Whitehorse Junction - 15@456.3 - 23@42.1	22.94	55.90	11	11	0	0	65.12	54.04	1.11	5	LOS_E	55.99	88.27	
AVG	3900-4200	1: Whitehorse Junction - 15@456.3 - 23@42.1	25.90	61.53	14	14	0	0	59.91	49.05	1.10	5	LOS_E	55.99	88.27	
AVG	4200-4500	1: Whitehorse Junction - 15@456.3 - 23@42.1	21.23	55.03	13	12	1	0	57.60	47.93	1.08	5	LOS_E	55.99	88.27	
				56	157				59.16	48.60	1.1	5.0	LOS_E	56	88	

Whitehorse Road - Ahead & Left Turn - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	1: Whitehorse Junction - 11@281.7 - 19@52.5	20.38	65.12	15	14	0	0	46.12	36.62	0.91	4	LOS_D	74.43	141.21	
AVG	1200-1500	1: Whitehorse Junction - 11@281.7 - 19@52.5	20.09	79.35	19	18	0	0	48.34	35.11	1.28	4	LOS_D	74.43	141.21	
AVG	1500-1800	1: Whitehorse Junction - 11@281.7 - 19@52.5	27.60	80.58	19	19	0	0	52.10	40.94	1.11	4	LOS_D	74.43	141.21	
AVG	1800-2100	1: Whitehorse Junction - 11@281.7 - 19@52.5	23.18	82.00	19	19	0	0	51.25	38.49	1.26	4	LOS_D	74.43	141.21	
AVG	2100-2400	1: Whitehorse Junction - 11@281.7 - 19@52.5	22.76	77.67	19	18	0	0	48.39	37.37	1.13	4	LOS_D	74.43	141.21	
AVG	2400-2700	1: Whitehorse Junction - 11@281.7 - 19@52.5	15.73	65.04	18	18	0	0	47.30	34.33	1.22	4	LOS_D	74.43	141.21	
AVG	2700-3000	1: Whitehorse Junction - 11@281.7 - 19@52.5	17.82	64.13	17	16	0	0	45.56	35.58	0.98	4	LOS_D	74.43	141.21	
AVG	3000-3300	1: Whitehorse Junction - 11@281.7 - 19@52.5	19.21	72.25	19	19	0	0	46.77	33.48	1.18	4	LOS_D	74.43	141.21	
AVG	3300-3600	1: Whitehorse Junction - 11@281.7 - 19@52.5	28.29	82.41	19	18	0	0	54.46	42.76	1.17	4	LOS_D	74.43	141.21	
AVG	3600-3900	1: Whitehorse Junction - 11@281.7 - 19@52.5	16.48	69.37	18	18	0	0	48.23	35.40	1.23	4	LOS_D	74.43	141.21	
AVG	3900-4200	1: Whitehorse Junction - 11@281.7 - 19@52.5	20.18	76.96	17	17	0	0	46.46	36.52	1.01	4	LOS_D	74.43	141.21	
AVG	4200-4500	1: Whitehorse Junction - 11@281.7 - 19@52.5	22.93	78.30	18	18	0	0	51.37	35.95	1.37	4	LOS_D	74.43	141.21	
				74	217				48.86	36.88	1.2	4.0	LOS_D	74	141	

Whitehorse Road - Right Turn - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	1: Whitehorse Junction - 11@469.2 - 17@8.3	20.38	65.12	2	2	0	0	44.44	33.75	1.04	4	LOS_D	74.43	141.21	
AVG	1200-1500	1: Whitehorse Junction - 11@469.2 - 17@8.3	20.09	79.35	2	2	0	0	49.40	33.27	1.75	4	LOS_D	74.43	141.21	
AVG	1500-1800	1: Whitehorse Junction - 11@469.2 - 17@8.3	27.60	80.58	2	2	0	0	61.09	47.85	1.43	5	LOS_E	74.43	141.21	
AVG	1800-2100	1: Whitehorse Junction - 11@469.2 - 17@8.3	23.18	82.00	2	2	0	0	60.37	46.41	1.55	5	LOS_E	74.43	141.21	
AVG	2100-2400	1: Whitehorse Junction - 11@469.2 - 17@8.3	22.76	77.67	3	3	0	0	51.25	38.92	1.43	4	LOS_D	74.43	141.21	
AVG	2400-2700	1: Whitehorse Junction - 11@469.2 - 17@8.3	15.73	65.04	2	2	0	0	40.03	24.95	1.35	4	LOS_D	74.43	141.21	
AVG	2700-3000	1: Whitehorse Junction - 11@469.2 - 17@8.3	17.82	64.13	2	2	0	0	41.79	31.79	0.88	4	LOS_D	74.43	141.21	
AVG	3000-3300	1: Whitehorse Junction - 11@469.2 - 17@8.3	19.21	72.25	3	3	0	0	52.49	36.81	1.38	4	LOS_D	74.43	141.21	
AVG	3300-3600	1: Whitehorse Junction - 11@469.2 - 17@8.3	28.29	82.41	2	2	0	0	56.45	43.51	1.38	5	LOS_E	74.43	141.21	
AVG	3600-3900	1: Whitehorse Junction - 11@469.2 - 17@8.3	16.48	69.37	2	2	0	0	52.71	38.42	1.42	4	LOS_D	74.43	141.21	
AVG	3900-4200	1: Whitehorse Junction - 11@469.2 - 17@8.3	20.18	76.96	2	2	0	0	50.00	35.64	1.45	4	LOS_D	74.43	141.21	
AVG	4200-4500	1: Whitehorse Junction - 11@469.2 - 17@8.3	22.93	78.30	2	2	0	0	53.27	34.75	1.79	4	LOS_D	74.43	141.21	
				74	26				51.11	37.17	1.4	4.0	LOS_D	74	141	

A507 (N) - Left Turn - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	6: A507 - Northern Access - 118@17.6 - 120@94.2	22.60	56.05	4	4	0	0	17.03	10.47	0.54	2	LOS_B	120.43	200.21	
AVG	1200-1500	6: A507 - Northern Access - 118@17.6 - 120@94.2	33.92	70.09	5	5	0	0	17.98	10.87	0.58	2	LOS_B	120.43	200.21	
AVG	1500-1800	6: A507 - Northern Access - 118@17.6 - 120@94.2	46.69	81.51	4	4	0	0	25.72	17.10	0.67	3	LOS_C	120.43	200.21	

AVG	1800-2100	6: A507 - Northern Access - 118@17.6 - 120@94.2	55.01	92.48	4	4	0	0	36.74	25.93	0.93	3	LOS_C	120.43	200.21
AVG	2100-2400	6: A507 - Northern Access - 118@17.6 - 120@94.2	59.41	100.57	5	5	0	0	40.60	29.41	0.91	3	LOS_C	120.43	200.21
AVG	2400-2700	6: A507 - Northern Access - 118@17.6 - 120@94.2	70.12	105.96	4	4	0	0	54.68	41.57	1.14	3	LOS_C	120.43	200.21
AVG	2700-3000	6: A507 - Northern Access - 118@17.6 - 120@94.2	84.22	124.71	4	4	0	0	72.34	56.23	1.54	4	LOS_D	120.43	200.21
AVG	3000-3300	6: A507 - Northern Access - 118@17.6 - 120@94.2	108.16	155.07	5	5	0	0	91.83	71.57	1.87	5	LOS_E	120.43	200.21
AVG	3300-3600	6: A507 - Northern Access - 118@17.6 - 120@94.2	116.21	163.44	5	5	0	0	108.22	85.59	2.07	5	LOS_E	120.43	200.21
AVG	3600-3900	6: A507 - Northern Access - 118@17.6 - 120@94.2	112.48	151.37	5	5	0	0	104.55	82.73	1.91	5	LOS_E	120.43	200.21
AVG	3900-4200	6: A507 - Northern Access - 118@17.6 - 120@94.2	124.87	165.88	4	4	0	0	113.25	89.26	2.28	5	LOS_E	120.43	200.21
AVG	4200-4500	6: A507 - Northern Access - 118@17.6 - 120@94.2	136.53	177.99	5	5	0	0	127.04	101.56	2.29	5	LOS_E	120.43	200.21
				120	54				67.50	51.86	1.4	4.0	LOS_D	120	200

A507 (N) - Ahead - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	6: A507 - Northern Access - 118@17.6 - 117@61.5	22.60	56.05	19	19	0	0	56.38	43.39	1.03	5	LOS_E	120.43	200.21
AVG	1200-1500	6: A507 - Northern Access - 118@17.6 - 117@61.5	33.92	70.09	16	16	0	0	89.17	69.85	1.60	5	LOS_E	120.43	200.21
AVG	1500-1800	6: A507 - Northern Access - 118@17.6 - 117@61.5	46.69	81.51	24	23	1	0	117.44	94.43	2.05	6	LOS_F	120.43	200.21
AVG	1800-2100	6: A507 - Northern Access - 118@17.6 - 117@61.5	55.01	92.48	22	21	1	0	117.66	95.81	1.95	6	LOS_F	120.43	200.21
AVG	2100-2400	6: A507 - Northern Access - 118@17.6 - 117@61.5	59.41	100.57	22	21	0	0	114.41	92.55	1.86	5	LOS_E	120.43	200.21
AVG	2400-2700	6: A507 - Northern Access - 118@17.6 - 117@61.5	70.12	105.96	19	19	0	0	138.41	113.39	2.25	6	LOS_F	120.43	200.21
AVG	2700-3000	6: A507 - Northern Access - 118@17.6 - 117@61.5	84.22	124.71	22	21	1	0	161.25	133.63	2.56	6	LOS_F	120.43	200.21
AVG	3000-3300	6: A507 - Northern Access - 118@17.6 - 117@61.5	108.16	155.07	15	15	1	0	193.71	160.58	3.18	6	LOS_F	120.43	200.21
AVG	3300-3600	6: A507 - Northern Access - 118@17.6 - 117@61.5	116.21	163.44	27	26	1	0	245.58	203.96	4.16	6	LOS_F	120.43	200.21
AVG	3600-3900	6: A507 - Northern Access - 118@17.6 - 117@61.5	112.48	151.37	22	21	1	0	231.09	193.63	3.66	6	LOS_F	120.43	200.21
AVG	3900-4200	6: A507 - Northern Access - 118@17.6 - 117@61.5	124.87	165.88	23	22	1	0	218.53	182.38	3.46	6	LOS_F	120.43	200.21
AVG	4200-4500	6: A507 - Northern Access - 118@17.6 - 117@61.5	136.53	177.99	20	19	0	0	239.72	201.13	3.84	6	LOS_F	120.43	200.21
				120	251				160.28	132.06	2.6	6.0	LOS_F	120	200

Northern Access (E) - Right Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	6: A507 - Northern Access - 121@369.8 - 107@69.0	0.94	6.64	2	2	0	0	29.96	24.73	0.79	3	LOS_C	7.81	15.72
AVG	1200-1500	6: A507 - Northern Access - 121@369.8 - 107@69.0	1.43	8.97	3	3	0	0	35.22	29.47	0.77	3	LOS_C	7.81	15.72
AVG	1500-1800	6: A507 - Northern Access - 121@369.8 - 107@69.0	1.43	7.69	3	3	0	0	31.24	26.25	0.66	3	LOS_C	7.81	15.72
AVG	1800-2100	6: A507 - Northern Access - 121@369.8 - 107@69.0	1.37	8.88	2	2	0	0	31.92	26.39	0.77	3	LOS_C	7.81	15.72
AVG	2100-2400	6: A507 - Northern Access - 121@369.8 - 107@69.0	0.92	6.22	2	2	0	0	38.49	32.32	0.88	4	LOS_D	7.81	15.72
AVG	2400-2700	6: A507 - Northern Access - 121@369.8 - 107@69.0	1.15	8.39	2	2	0	0	33.33	27.32	0.86	3	LOS_C	7.81	15.72
AVG	2700-3000	6: A507 - Northern Access - 121@369.8 - 107@69.0	1.48	9.16	2	2	0	0	31.74	26.29	0.77	3	LOS_C	7.81	15.72
AVG	3000-3300	6: A507 - Northern Access - 121@369.8 - 107@69.0	1.48	8.97	3	3	0	0	35.05	29.20	0.86	3	LOS_C	7.81	15.72
AVG	3300-3600	6: A507 - Northern Access - 121@369.8 - 107@69.0	1.19	8.51	2	2	0	0	28.19	22.94	0.73	3	LOS_C	7.81	15.72
AVG	3600-3900	6: A507 - Northern Access - 121@369.8 - 107@69.0	1.20	6.83	2	2	0	0	33.52	28.03	0.84	3	LOS_C	7.81	15.72
AVG	3900-4200	6: A507 - Northern Access - 121@369.8 - 107@69.0	0.98	6.41	2	2	0	0	30.25	24.95	0.77	3	LOS_C	7.81	15.72
AVG	4200-4500	6: A507 - Northern Access - 121@369.8 - 107@69.0	1.24	7.27	2	2	0	0	32.81	27.54	0.75	3	LOS_C	7.81	15.72
				8	27				32.64	27.12	0.8	3.0	LOS_C	8	16

Northern Access (E) - Left Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	6: A507 - Northern Access - 121@369.5 - 117@61.5	2.24	12.42	3	3	0	0	36.04	29.34	0.86	3	LOS_C	10.28	18.91
AVG	1200-1500	6: A507 - Northern Access - 121@369.5 - 117@61.5	1.33	10.10	3	3	0	0	44.46	34.09	1.26	4	LOS_D	10.28	18.91
AVG	1500-1800	6: A507 - Northern Access - 121@369.5 - 117@61.5	1.75	9.67	4	4	0	0	58.38	46.76	1.47	5	LOS_E	10.28	18.91
AVG	1800-2100	6: A507 - Northern Access - 121@369.5 - 117@61.5	1.97	9.55	3	3	0	0	34.08	27.26	0.83	3	LOS_C	10.28	18.91
AVG	2100-2400	6: A507 - Northern Access - 121@369.5 - 117@61.5	1.68	11.22	4	4	0	0	31.65	25.10	0.83	3	LOS_C	10.28	18.91
AVG	2400-2700	6: A507 - Northern Access - 121@369.5 - 117@61.5	1.78	9.55	3	3	0	0	39.19	32.84	0.80	4	LOS_D	10.28	18.91
AVG	2700-3000	6: A507 - Northern Access - 121@369.5 - 117@61.5	2.16	11.54	3	3	0	0	36.42	30.10	0.84	4	LOS_D	10.28	18.91
AVG	3000-3300	6: A507 - Northern Access - 121@369.5 - 117@61.5	2.12	10.07	3	3	0	0	52.88	41.38	1.45	4	LOS_D	10.28	18.91
AVG	3300-3600	6: A507 - Northern Access - 121@369.5 - 117@61.5	2.08	11.46	5	5	0	0	72.01	56.97	1.94	5	LOS_E	10.28	18.91
AVG	3600-3900	6: A507 - Northern Access - 121@369.5 - 117@61.5	1.51	9.31	3	3	0	0	36.08	27.51	1.11	3	LOS_C	10.28	18.91
AVG	3900-4200	6: A507 - Northern Access - 121@369.5 - 117@61.5	1.77	9.08	3	3	0	0	34.85	28.42	0.81	3	LOS_C	10.28	18.91
AVG	4200-4500	6: A507 - Northern Access - 121@369.5 - 117@61.5	1.56	9.43	3	3	0	0	37.84	31.35	0.78	3	LOS_C	10.28	18.91
				10	40				42.82	34.26	1.1	4.0	LOS_D	10	19

A507 (S) - Ahead Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	6: A507 - Northern Access - 1@138.2 - 107@49.7	12.21	59.23	44	44	0	0	16.86	11.59	0.52	2	LOS_B	80.78	123.51
AVG	1200-1500	6: A507 - Northern Access - 1@138.2 - 107@49.7	20.10	72.93	48	48	0	0	17.30	11.98	0.52	2	LOS_B	80.78	123.51
AVG	1500-1800	6: A507 - Northern Access - 1@138.2 - 107@49.7	26.00	86.07	49	49	0	0	19.15	13.80	0.53	2	LOS_B	80.78	123.51
AVG	1800-2100	6: A507 - Northern Access - 1@138.2 - 107@49.7	25.04	93.33	54	54	0	0	20.86	15.32	0.58	3	LOS_C	80.78	123.51
AVG	2100-2400	6: A507 - Northern Access - 1@138.2 - 107@49.7	20.65	77.01	52	52	0	0	15.31	10.82	0.42	2	LOS_B	80.78	123.51
AVG	2400-2700	6: A507 - Northern Access - 1@138.2 - 107@49.7	22.41	92.84	44	44	0	0	14.73	10.24	0.43	2	LOS_B	80.78	123.51
AVG	2700-3000	6: A507 - Northern Access - 1@138.2 - 107@49.7	25.69	94.31	62	61	1	0	21.55	15.85	0.60	3	LOS_C	80.78	123.51
AVG	3000-3300	6: A507 - Northern Access - 1@138.2 - 107@49.7	23.19	84.69	50	50	0	0	17.78	12.33	0.54	2	LOS_B	80.78	123.51
AVG	3300-3600	6: A507 - Northern Access - 1@138.2 - 107@49.7	25.04	76.24	50	50	0	0	18.40	13.26	0.51	2	LOS_B	80.78	123.51
AVG	3600-3900	6: A507 - Northern Access - 1@138.2 - 107@49.7	20.23	80.05	53	53	0	0	18.96	13.71	0.52	2	LOS_B	80.78	123.51
AVG	3900-4200	6: A507 - Northern Access - 1@138.2 - 107@49.7	20.49	75.72	51	51	0	0	15.67	10.84	0.45	2	LOS_B	80.78	123.51
AVG	4200-4500	6: A507 - Northern Access - 1@138.2 - 107@49.7	17.94	76.95	44	44	0	0	13.13	8.89	0.40	2	LOS_B	80.78	123.51
				81	601				17.47	12.38	0.5	2.0	LOS_B	81	124

A507 (S) - Right Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
MAX	900-1200	6: A507 - Northern Access - 1@138.2 - 120@94.2	12.21	59.23	7	7	0	0	49.56	40.62	1.02	4	LOS_D	80.78	123.51
MAX	1200-1500	6: A507 - Northern Access - 1@138.2 - 120@94.2	20.10	72.93	5	5	0	0	58.96	49.12	1.18	5	LOS_E	80.78	123.51
MAX	1500-1800	6: A507 - Northern Access - 1@138.2 - 120@94.2	26.00	86.07	6	6	0	0	62.57	52.37	1.23	5	LOS_E	80.78	123.51
MAX	1800-2100	6: A507 - Northern Access - 1@138.2 - 120@94.2	25.04	93.33	8	8	0	0	60.67	51.01	1.15	5	LOS_E	80.78	123.51
MAX	2100-2400	6: A507 - Northern Access - 1@138.2 - 120@94.2	20.65	77.01	5	5	0	0	65.97	55.51	1.28	5	LOS_E	80.78	123.51
MAX	2400-2700	6: A507 - Northern Access - 1@138.2 - 120@94.2	22.41	92.84	5	5	0	0	60.45	50.67	1.16	5	LOS_E	80.78	123.51
MAX	2700-3000	6: A507 - Northern Access - 1@138.2 - 120@94.2	25.69	94.31	9	9	0	0	61.63	51.92	1.18	5	LOS_E	80.78	123.51
MAX	3000-3300	6: A507 - Northern Access - 1@138.2 - 120@94.2	23.19	84.69	6	6	0	0	60.86	50.87	1.22	5	LOS_E	80.78	123.51
MAX	3300-3600	6: A507 - Northern Access - 1@138.2 - 120@94.2	25.04	76.24	6	6	0	0	62.97	52.61	1.25	5	LOS_E	80.78	123.51
MAX	3600-3900	6: A507 - Northern Access - 1@138.2 - 120@94.2	20.23	80.05	8	8	0	0	57.72	48.58	1.08	5	LOS_E	80.78	123.51
MAX	3900-4200	6: A507 - Northern Access - 1@138.2 - 120@94.2	20.49	75.72	6	6	0	0	59.40	49.42	1.19	5	LOS_E	80.78	123.51
MAX	4200-4500	6: A507 - Northern Access - 1@138.2 - 120@94.2	17.94	76.95	4	4	0	0	58.62	49.43	1.11	5	LOS_E	80.78	123.51
				81	75				59.95	50.18	1.2	5.0	LOS_E	81	124

A507 (S) - Bus Priority - 20 sim runs (5 minute Segments) Average

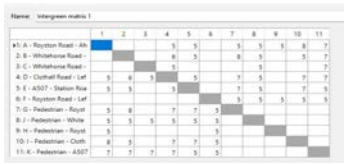
$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	7: Bus Priority Junction - 1@37.7 - 1@101.2	4.57	44.86	47	47	0	0	10.57	3.14	0.32	2	LOS_B	63.72	130.47
AVG	1200-1500	7: Bus Priority Junction - 1@37.7 - 1@101.2	6.75	53.22	56	55	1	0	16.25	7.43	0.51	2	LOS_B	63.72	130.47
AVG	1500-1800	7: Bus Priority Junction - 1@37.7 - 1@101.2	5.72	48.44	55	55	0	0	11.24	3.03	0.25	2	LOS_B	63.72	130.47
AVG	1800-2100	7: Bus Priority Junction - 1@37.7 - 1@101.2	5.61	59.40	60	59	0	0	16.46	6.70	0.51	2	LOS_B	63.72	130.47
AVG	2100-2400	7: Bus Priority Junction - 1@37.7 - 1@101.2	5.80	56.29	61	60	0	0	14.19	5.24	0.44	2	LOS_B	63.72	130.47
AVG	2400-2700	7: Bus Priority Junction - 1@37.7 - 1@101.2	15.90	118.95	53	52	0	0	22.99	11.40	0.91	3	LOS_C	63.72	130.47
AVG	2700-3000	7: Bus Priority Junction - 1@37.7 - 1@101.2	9.97	65.78	64	63	1	0	14.39	5.93	0.43	2	LOS_B	63.72	130.47
AVG	3000-3300	7: Bus Priority Junction - 1@37.7 - 1@101.2	6.41	52.32	59	58	0	0	16.24	7.42	0.51	2	LOS_B	63.72	130.47
AVG	3300-3600	7: Bus Priority Junction - 1@37.7 - 1@101.2	5.40	48.26	55	55	1	0	10.54	3.14	0.22	2	LOS_B	63.72	130.47
AVG	3600-3900	7: Bus Priority Junction - 1@37.7 - 1@101.2	5.56	61.68	59	58	0	0	15.36	6.02	0.50	2	LOS_B	63.72	130.47
AVG	3900-4200	7: Bus Priority Junction - 1@37.7 - 1@101.2	5.73	51.01	59	59	0	0	10.99	3.04	0.30	2	LOS_B	63.72	130.47
AVG	4200-4500	7: Bus Priority Junction - 1@37.7 - 1@101.2	14.12	104.49	52	52	0	0	22.00	10.76	0.82	3	LOS_C	63.72	130.47
				64	680				15.10	6.10	0.5	2.0	LOS_B	64	130

A507 (N) - Bus Priority - 20 sim runs (5 minute Segments) Average

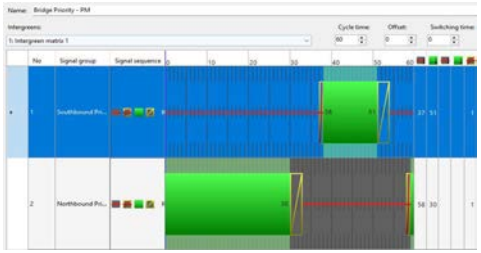
SMOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(ALL)	LOS	QLenMax(	QLenMax(Avg_Max)
AVG	900-1200	7: Bus Priority Junction - 117@99.1 - 4@21.0	9.91	48.05	19	19	0	0	28.42	19.97	0.97	3	LOS_C	71.71	124.82
AVG	1200-1500	7: Bus Priority Junction - 117@99.1 - 4@21.0	52.83	103.45	12	12	0	0	91.50	82.03	1.26	6	LOS_F	71.71	124.82
AVG	1500-1800	7: Bus Priority Junction - 117@99.1 - 4@21.0	41.78	99.42	36	36	1	0	70.75	61.23	1.12	5	LOS_E	71.71	124.82
AVG	1800-2100	7: Bus Priority Junction - 117@99.1 - 4@21.0	15.50	55.64	23	22	1	0	33.93	25.25	1.02	3	LOS_C	71.71	124.82
AVG	2100-2400	7: Bus Priority Junction - 117@99.1 - 4@21.0	15.91	53.07	22	21	0	0	31.51	22.91	1.01	3	LOS_C	71.71	124.82
AVG	2400-2700	7: Bus Priority Junction - 117@99.1 - 4@21.0	12.76	50.20	29	29	0	0	29.83	21.23	1.00	3	LOS_C	71.71	124.82
AVG	2700-3000	7: Bus Priority Junction - 117@99.1 - 4@21.0	11.99	48.80	22	21	0	0	29.35	20.74	1.01	3	LOS_C	71.71	124.82
AVG	3000-3300	7: Bus Priority Junction - 117@99.1 - 4@21.0	61.09	117.79	12	11	0	0	97.83	88.61	1.23	6	LOS_F	71.71	124.82
AVG	3300-3600	7: Bus Priority Junction - 117@99.1 - 4@21.0	60.75	115.79	38	37	1	0	81.17	71.73	1.11	6	LOS_F	71.71	124.82
AVG	3600-3900	7: Bus Priority Junction - 117@99.1 - 4@21.0	21.71	65.36	25	24	1	0	41.92	33.12	1.02	4	LOS_D	71.71	124.82
AVG	3900-4200	7: Bus Priority Junction - 117@99.1 - 4@21.0	15.77	51.23	22	22	0	0	30.02	21.41	1.01	3	LOS_C	71.71	124.82
AVG	4200-4500	7: Bus Priority Junction - 117@99.1 - 4@21.0	13.90	51.67	30	29	1	0	30.97	22.19	1.02	3	LOS_C	71.71	124.82
				72	290				49.77	40.87	1.1	4.0	LOS_D	72	125

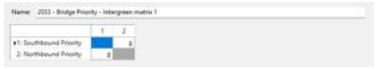
A507 / Whitehorse Road / Clothall Road / Royston Road





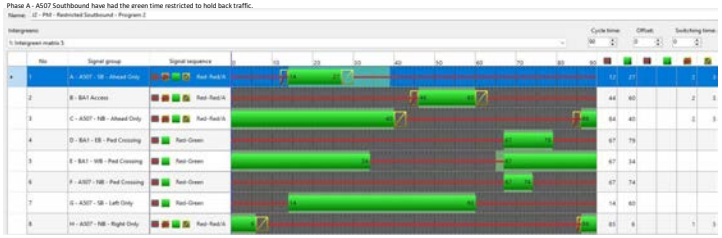
Bridge Priority

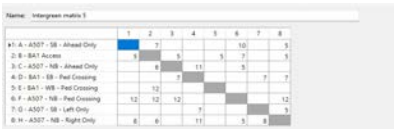




Northern Access Junction

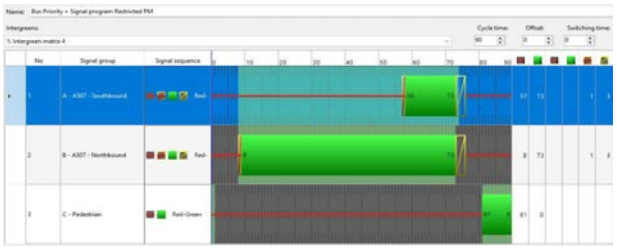
Phase A - A507 Southbound have had the areen time restricted to hold back traffic.

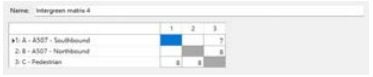




Bus Priority + Ped Phase - Bus Priority signals ignals work on detetors. Called only when required.

Phase A - A507 Southbound have had the green time restricted to hold back traffic.





2040 AM - No School

Junction - 100 Sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Station Road	24	93.14	149.95	83.73	1.6	LOS_E
Royston Road - Ahead	21	61.90	100.38	36.32	0.8	LOS_D
Royston Road - Left	21	44.63	87.46	35.51	0.8	LOS_D
Clothall Road	15	110.11	165.13	93.66	1.6	LOS_E
Whitehorse Street - Ahead & LeftTurn	11	166.56	270.32	60.05	1.5	LOS_E
Whitehorse Street - Right Turn	11	13.53	64.45	65.41	2.0	LOS_E

Priority Working - 60 Sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
Railway Underpass - Southbound	31	53.78	73.97	28.30	0.87	LOS_C
Railway Underpass - Northbound	32	36.35	69.05	14.28	0.00	LOS_B

Northern Junction - 90 sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Station Road (N) - Left Turn	118	46.06	83.28	18.42	0.5	LOS_B
A507 - Station Road (N) - Ahead Only	118	46.06	83.28	75.24	1.3	LOS_E
BA1 - Access - Left Turn	121	22.24	65.42	25.61	0.7	LOS_D
BA1 - Access - Right Turn	121	63.75	99.79	35.78	1.0	LOS_C
A507 - Station Road (S) - Ahead	1	53.12	85.75	34.26	0.8	LOS_D
A507 - Station Road (S) - Right Turn	1	53.12	85.75	50.60	1.0	LOS_D

Bus Priority Working - 90 Sec Cycle Time 1 ped phase every cycle. Signals for Buses only called when required.	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Northbound	1	29.65	56.53	10.60	0.37	LOS_B
A507 - Southbound	117	60.91	97.05	68	1.32	LOS_E









Notes

20 Simulation Runs
Qlen Ave Max (every 5mins), (Qlen Max, Avg)
Time periods indicative
Vissim Qlen Ave MAX (5mins) to compare with Linsig MMQ Outputs
Veh Delay (Delay of all vehicles. The delay of a vehicle in leaving a travel time measurement is obtained by subtracting the theoretical (ideal) travel time from the actual travel time. The theoretical travel time is the travel time which could be achieved if there were no other vehicles and/or no signal controls or other reasons for stops.

1 LOS A
2 LOS B
3 LOS C
4 LOS D
5 LOS E
6 LOS F

Southbound - 20 sim runs (5 minute Segments) Average

$MOV	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 31@2.1 - 31@108.8	6.89	46.58	15	14	1	0	19.76	10.83	0.58	3	LOS C	53.78	73.97
AVG	1200-1500	2: Railway Bridge Priority - 31@2.1 - 31@108.8	8.52	53.12	19	17	1	1	30.35	17.98	0.86	3	LOS C	53.78	73.97
AVG	1500-1800	2: Railway Bridge Priority - 31@2.1 - 31@108.8	9.63	47.97	18	17	1	0	28.72	17.57	0.79	3	LOS C	53.78	73.97
AVG	1800-2100	2: Railway Bridge Priority - 31@2.1 - 31@108.8	8.93	61.19	19	17	1	1	29.72	13.39	1.20	3	LOS C	53.78	73.97
AVG	2100-2400	2: Railway Bridge Priority - 31@2.1 - 31@108.8	5.59	44.41	19	19	1	0	20.37	10.08	0.58	3	LOS C	53.78	73.97
AVG	2400-2700	2: Railway Bridge Priority - 31@2.1 - 31@108.8	14.57	59.36	21	19	1	1	35.65	21.44	1.06	4	LOS D	53.78	73.97
AVG	2700-3000	2: Railway Bridge Priority - 31@2.1 - 31@108.8	8.52	54.33	18	18	1	0	21.33	10.63	0.66	3	LOS C	53.78	73.97
AVG	3000-3300	2: Railway Bridge Priority - 31@2.1 - 31@108.8	9.22	52.95	20	18	1	1	31.69	18.86	0.89	3	LOS C	53.78	73.97
AVG	3300-3600	2: Railway Bridge Priority - 31@2.1 - 31@108.8	11.13	55.66	20	19	1	0	28.98	18.00	0.86	3	LOS C	53.78	73.97
AVG	3600-3900	2: Railway Bridge Priority - 31@2.1 - 31@108.8	11.29	61.85	21	18	1	2	31.57	14.44	1.20	3	LOS C	53.78	73.97
AVG	3900-4200	2: Railway Bridge Priority - 31@2.1 - 31@108.8	8.11	48.55	22	21	1	0	24.88	14.24	0.74	3	LOS C	53.78	73.97
AVG	4200-4500	2: Railway Bridge Priority - 31@2.1 - 31@108.8	14.50	59.36	20	18	1	1	36.59	21.72	1.08	4	LOS D	53.78	73.97
				54	232				28.30	15.76	0.87	3.0	LOS C	54	74

Northbound - 20 sim runs (5 minute Segments) Average

$MOV	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 32@67.4 - 32@173.4	2.83	30.09	19	18	1	0	11.40	4.80	0.51	2	LOS B	36.35	69.05
AVG	1200-1500	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.22	31.42	24	21	1	1	14.06	6.14	0.54	2	LOS B	36.35	69.05
AVG	1500-1800	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.04	32.78	26	24	2	0	11.97	5.37	0.50	2	LOS B	36.35	69.05
AVG	1800-2100	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.55	34.65	25	23	1	1	15.55	6.73	0.62	2	LOS B	36.35	69.05
AVG	2100-2400	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.60	34.92	24	22	1	1	14.43	5.94	0.60	2	LOS B	36.35	69.05
AVG	2400-2700	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.41	36.10	24	22	1	1	15.37	6.49	0.65	2	LOS B	36.35	69.05
AVG	2700-3000	2: Railway Bridge Priority - 32@67.4 - 32@173.4	3.77	32.95	23	22	1	0	12.52	5.59	0.52	2	LOS B	36.35	69.05
AVG	3000-3300	2: Railway Bridge Priority - 32@67.4 - 32@173.4	5.95	43.66	26	23	2	1	17.33	8.05	0.70	2	LOS B	36.35	69.05
AVG	3300-3600	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.53	37.88	25	24	1	0	13.00	6.12	0.54	2	LOS B	36.35	69.05
AVG	3600-3900	2: Railway Bridge Priority - 32@67.4 - 32@173.4	5.96	42.72	24	22	1	1	16.86	7.99	0.65	2	LOS B	36.35	69.05
AVG	3900-4200	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.23	33.65	26	24	2	0	12.61	5.93	0.56	2	LOS B	36.35	69.05
AVG	4200-4500	2: Railway Bridge Priority - 32@67.4 - 32@173.4	5.22	45.37	24	22	1	1	16.24	6.96	0.67	2	LOS B	36.35	69.05
				36	290				14.28	6.34	0.59	2.0	LOS B	36	69

A507 - 20 sim runs (5 minute Segments) Average

$MOV	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 24@44.5 - 13@19.3	20.6	60.2	9	9	0	0	54.22	45.04	1.08	5	LOS E	93.14	149.95
AVG	1200-1500	1: Whitehorse Junction - 24@44.5 - 13@19.3	24.5	66.9	10	9	0	1	55.29	42.57	1.03	5	LOS E	93.14	149.95
AVG	1500-1800	1: Whitehorse Junction - 24@44.5 - 13@19.3	30.2	70.5	13	12	0	0	61.93	50.73	1.23	5	LOS E	93.14	149.95
AVG	1800-2100	1: Whitehorse Junction - 24@44.5 - 13@19.3	41.8	100.7	12	10	1	1	67.33	52.11	1.44	5	LOS E	93.14	149.95
AVG	2100-2400	1: Whitehorse Junction - 24@44.5 - 13@19.3	42.6	88.3	11	10	1	0	78.69	64.55	1.64	5	LOS E	93.14	149.95
AVG	2400-2700	1: Whitehorse Junction - 24@44.5 - 13@19.3	45.7	90.6	12	11	0	1	80.03	64.18	1.64	5	LOS E	93.14	149.95
AVG	2700-3000	1: Whitehorse Junction - 24@44.5 - 13@19.3	58.0	110.3	12	12	0	0	97.59	82.54	1.82	5	LOS E	93.14	149.95
AVG	3000-3300	1: Whitehorse Junction - 24@44.5 - 13@19.3	41.9	88.4	10	9	0	1	94.59	78.93	1.58	5	LOS E	93.14	149.95
AVG	3300-3600	1: Whitehorse Junction - 24@44.5 - 13@19.3	46.8	89.2	12	11	1	0	83.16	69.02	1.64	5	LOS E	93.14	149.95
AVG	3600-3900	1: Whitehorse Junction - 24@44.5 - 13@19.3	60.9	119.1	11	10	1	1	94.91	77.55	1.77	5	LOS E	93.14	149.95
AVG	3900-4200	1: Whitehorse Junction - 24@44.5 - 13@19.3	70.9	120.4	11	10	1	0	121.33	100.73	2.43	6	LOS F	93.14	149.95
AVG	4200-4500	1: Whitehorse Junction - 24@44.5 - 13@19.3	69.0	113.1	12	11	0	0	115.64	97.16	2.15	6	LOS F	93.14	149.95
				93	135				83.73	68.76	1.6	5.0	LOS E	93	150

Royston Road - Ahead Only - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 21@62.5 - 13@19.3	13.79	56.72	20	19	1	0	36.12	24.66	0.78	4	LOS D	61.90	100.38
AVG	1200-1500	1: Whitehorse Junction - 21@62.5 - 13@19.3	16.76	66.44	23	21	1	0	36.79	24.33	0.73	4	LOS D	61.90	100.38
AVG	1500-1800	1: Whitehorse Junction - 21@62.5 - 13@19.3	14.68	60.56	23	22	1	0	37.91	24.80	0.76	4	LOS D	61.90	100.38
AVG	1800-2100	1: Whitehorse Junction - 21@62.5 - 13@19.3	13.72	57.46	24	23	1	0	35.14	22.61	0.71	3	LOS C	61.90	100.38
AVG	2100-2400	1: Whitehorse Junction - 21@62.5 - 13@19.3	12.58	53.00	20	19	1	0	34.16	22.54	0.72	3	LOS C	61.90	100.38
AVG	2400-2700	1: Whitehorse Junction - 21@62.5 - 13@19.3	15.19	58.88	23	22	1	0	37.48	25.05	0.78	4	LOS D	61.90	100.38
AVG	2700-3000	1: Whitehorse Junction - 21@62.5 - 13@19.3	14.74	66.49	22	21	1	0	35.50	23.25	0.78	3	LOS C	61.90	100.38
AVG	3000-3300	1: Whitehorse Junction - 21@62.5 - 13@19.3	16.24	65.35	22	21	1	0	37.79	25.17	0.79	4	LOS D	61.90	100.38
AVG	3300-3600	1: Whitehorse Junction - 21@62.5 - 13@19.3	17.50	63.12	23	22	1	0	38.13	25.56	0.80	4	LOS D	61.90	100.38
AVG	3600-3900	1: Whitehorse Junction - 21@62.5 - 13@19.3	15.70	62.12	23	22	1	0	37.70	25.27	0.75	4	LOS D	61.90	100.38
AVG	3900-4200	1: Whitehorse Junction - 21@62.5 - 13@19.3	14.50	64.09	23	22	1	0	33.15	21.65	0.74	3	LOS C	61.90	100.38
AVG	4200-4500	1: Whitehorse Junction - 21@62.5 - 13@19.3	16.44	68.63	24	23	1	0	35.99	23.21	0.74	3	LOS C	61.90	100.38
				62	270				36.32	24.01	0.8	4.0	LOS D	62	100

Royston Road - Left Only - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Ave,Max)
AVG	900-1200	1: Whitehorse Junction - 21@62.5 - 17@8.3	6.00	38.22	6	6	1	0	33.72	23.73	0.71	3	LOS C	44.63	87.46
AVG	1200-1500	1: Whitehorse Junction - 21@62.5 - 17@8.3	7.26	42.77	7	6	0	0	34.89	24.17	0.78	3	LOS C	44.63	87.46
AVG	1500-1800	1: Whitehorse Junction - 21@62.5 - 17@8.3	5.46	39.69	6	5	1	0	36.34	22.65	0.76	4	LOS D	44.63	87.46
AVG	1800-2100	1: Whitehorse Junction - 21@62.5 - 17@8.3	6.13	47.78	6	6	0	0	38.75	27.30	0.78	4	LOS D	44.63	87.46
AVG	2100-2400	1: Whitehorse Junction - 21@62.5 - 17@8.3	4.87	34.23	7	7	0	0	28.01	18.05	0.68	3	LOS C	44.63	87.46
AVG	2400-2700	1: Whitehorse Junction - 21@62.5 - 17@8.3	7.88	48.47	6	6	1	0	38.20	25.08	0.78	4	LOS D	44.63	87.46
AVG	2700-3000	1: Whitehorse Junction - 21@62.5 - 17@8.3	6.76	48.68	7	6	1	0	32.07	21.25	0.77	3	LOS C	44.63	87.46
AVG	3000-3300	1: Whitehorse Junction - 21@62.5 - 17@8.3	8.43	50.39	8	7	1	0	39.62	28.15	0.79	4	LOS D	44.63	87.46
AVG	3300-3600	1: Whitehorse Junction - 21@62.5 - 17@8.3	7.30	42.34	7	7	1	0	36.54	24.15	0.85	3	LOS C	44.63	87.46
AVG	3600-3900	1: Whitehorse Junction - 21@62.5 - 17@8.3	8.13	46.09	7	6	0	0	38.15	26.44	0.80	4	LOS D	44.63	87.46
AVG	3900-4200	1: Whitehorse Junction - 21@62.5 - 17@8.3	6.05	46.78	7	7	1	0	32.50	20.48	0.77	3	LOS C	44.63	87.46
AVG	4200-4500	1: Whitehorse Junction - 21@62.5 - 17@8.3	7.91	50.14	7	7	1	0	37.33	24.53	0.78	4	LOS D	44.63	87.46
				45	81				35.51	23.83	0.8	4.0	LOS D	45	87

Clothall Road - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 15@456.3 - 23@57.7	29.99	79.98	10	10	0	0	50.11	40.03	0.97	4	LOS D	110.11	165.13
AVG	1200-1500	1: Whitehorse Junction - 15@456.3 - 23@57.7	48.39	99.29	10	10	0	0	76.07	63.14	1.31	5	LOS E	110.11	165.13
AVG	1500-1800	1: Whitehorse Junction - 15@456.3 - 23@57.7	62.59	111.19	12	11	0	0	91.32	76.39	1.55	6	LOS F	110.11	165.13
AVG	1800-2100	1: Whitehorse Junction - 15@456.3 - 23@57.7	62.17	113.40	12	11	0	1	99.30	82.06	1.63	5	LOS E	110.11	165.13
AVG	2100-2400	1: Whitehorse Junction - 15@456.3 - 23@57.7	69.46	115.36	11	10	0	1	107.34	87.97	1.97	5	LOS E	110.11	165.13
AVG	2400-2700	1: Whitehorse Junction - 15@456.3 - 23@57.7	71.20	125.55	11	11	0	0	107.43	90.39	1.75	5	LOS E	110.11	165.13
AVG	2700-3000	1: Whitehorse Junction - 15@456.3 - 23@57.7	67.40	115.28	11	11	0	0	103.51	86.89	1.77	6	LOS F	110.11	165.13
AVG	3000-3300	1: Whitehorse Junction - 15@456.3 - 23@57.7	67.66	112.86	11	10	0	0	101.22	85.32	1.68	5	LOS E	110.11	165.13
AVG	3300-3600	1: Whitehorse Junction - 15@456.3 - 23@57.7	63.45	111.96	10	10	0	0	101.49	85.15	1.65	5	LOS E	110.11	165.13
AVG	3600-3900	1: Whitehorse Junction - 15@456.3 - 23@57.7	57.28	107.41	10	10	0	0	93.31	78.67	1.62	5	LOS E	110.11	165.13
AVG	3900-4200	1: Whitehorse Junction - 15@456.3 - 23@57.7	66.29	114.40	12	11	1	0	92.82	77.51	1.52	5	LOS E	110.11	165.13
AVG	4200-4500	1: Whitehorse Junction - 15@456.3 - 23@57.7	63.26	114.58	12	11	0	0	100.03	83.95	1.67	5	LOS E	110.11	165.13
				110	132				93.66	78.12	1.6	5.0	LOS E	110	165

Whitehorse Road - Ahead & Left Turn - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 11@281.7 - 19@52.5	33.29	106.15	29	28	1	0	34.73	25.57	0.82	3	LOS C	166.56	270.32
AVG	1200-1500	1: Whitehorse Junction - 11@281.7 - 19@52.5	75.18	170.92	32	31	1	0	61.36	45.18	1.55	5	LOS E	166.56	270.32
AVG	1500-1800	1: Whitehorse Junction - 11@281.7 - 19@52.5	65.74	152.04	36	35	1	0	54.23	41.41	1.24	4	LOS D	166.56	270.32
AVG	1800-2100	1: Whitehorse Junction - 11@281.7 - 19@52.5	69.42	169.32	33	32	1	0	60.07	44.87	1.47	5	LOS E	166.56	270.32
AVG	2100-2400	1: Whitehorse Junction - 11@281.7 - 19@52.5	55.55	130.21	36	34	1	0	51.23	38.99	1.15	4	LOS D	166.56	270.32
AVG	2400-2700	1: Whitehorse Junction - 11@281.7 - 19@52.5	84.77	196.67	34	33	2	0	67.93	50.46	1.73	5	LOS E	166.56	270.32
AVG	2700-3000	1: Whitehorse Junction - 11@281.7 - 19@52.5	73.18	164.67	37	35	2	0	58.84	45.24	1.32	5	LOS E	166.56	270.32
AVG	3000-3300	1: Whitehorse Junction - 11@281.7 - 19@52.5	106.79	201.35	32	31	1	0	73.74	55.12	1.87	5	LOS E	166.56	270.32
AVG	3300-3600	1: Whitehorse Junction - 11@281.7 - 19@52.5	99.96	191.50	37	36	1	0	74.47	57.87	1.63	5	LOS E	166.56	270.32
AVG	3600-3900	1: Whitehorse Junction - 11@281.7 - 19@52.5	90.86	189.46	33	32	1	0	68.64	50.16	1.88	5	LOS E	166.56	270.32
AVG	3900-4200	1: Whitehorse Junction - 11@281.7 - 19@52.5	53.69	141.82	32	31	1	0	51.40	38.95	1.17	4	LOS D	166.56	270.32
AVG	4200-4500	1: Whitehorse Junction - 11@281.7 - 19@52.5	84.45	184.63	33	32	1	0	63.92	46.78	1.67	5	LOS E	166.56	270.32
				167	404				60.05	45.05	1.5	5.0	LOS E	167	270

Whitehorse Road - Right Turn - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.15	6.40	3	3	0	0	44.71	32.20	1.56	4	LOS D	13.53	64.45
AVG	1200-1500	1: Whitehorse Junction - 11@469.2 - 17@8.3	3.58	19.87	4	4	0	0	68.27	49.20	2.25	5	LOS E	13.53	64.45
AVG	1500-1800	1: Whitehorse Junction - 11@469.2 - 17@8.3	0.98	5.88	3	3	0	0	59.08	43.94	1.77	4	LOS D	13.53	64.45
AVG	1800-2100	1: Whitehorse Junction - 11@469.2 - 17@8.3	2.84	17.11	3	3	0	0	65.99	50.35	2.13	5	LOS E	13.53	64.45
AVG	2100-2400	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.37	6.53	3	3	0	0	56.63	43.07	1.65	4	LOS D	13.53	64.45
AVG	2400-2700	1: Whitehorse Junction - 11@469.2 - 17@8.3	2.59	12.95	4	4	0	0	65.33	47.90	2.15	5	LOS E	13.53	64.45
AVG	2700-3000	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.37	9.77	4	4	0	0	58.23	43.79	1.77	5	LOS E	13.53	64.45
AVG	3000-3300	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.37	7.26	4	4	0	0	73.82	55.44	2.19	5	LOS E	13.53	64.45
AVG	3300-3600	1: Whitehorse Junction - 11@469.2 - 17@8.3	4.06	20.84	4	4	0	0	83.77	66.15	2.22	5	LOS E	13.53	64.45
AVG	3600-3900	1: Whitehorse Junction - 11@469.2 - 17@8.3	2.68	19.59	4	4	0	0	79.23	57.59	2.67	5	LOS E	13.53	64.45
AVG	3900-4200	1: Whitehorse Junction - 11@469.2 - 17@8.3	6.45	22.77	4	4	0	0	54.18	40.26	1.76	4	LOS D	13.53	64.45
AVG	4200-4500	1: Whitehorse Junction - 11@469.2 - 17@8.3	2.33	13.33	4	3	0	0	75.75	56.09	2.25	5	LOS E	13.53	64.45
				14	44				65.41	48.83	2.0	5.0	LOS E	14	64

A507 (N) - Left Turn - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 118@17.6 - 120@94.2	14.88	42.46	28	27	1	0	19.79	11.69	0.57	3	43.17039	46.06	83.28
AVG	1200-1500	6: A507 - Northern Access - 118@17.6 - 120@94.2	16.88	48.18	33	32	1	0	17.98	9.93	0.53	2	43.17039	46.06	83.28
AVG	1500-1800	6: A507 - Northern Access - 118@17.6 - 120@94.2	18.80	51.07	30	29	1	0	18.41	9.95	0.58	2	43.17039	46.06	83.28
AVG	1800-2100	6: A507 - Northern Access - 118@17.6 - 120@94.2	15.95	42.83	32	30	1	0	19.08	10.66	0.56	2	43.17039	46.06	83.28
AVG	2100-2400	6: A507 - Northern Access - 118@17.6 - 120@94.2	12.78	38.21	36	35	1	0	17.32	9.56	0.54	2	43.17039	46.06	83.28
AVG	2400-2700	6: A507 - Northern Access - 118@17.6 - 120@94.2	16.46	47.52	30	29	1	0	18.01	9.67	0.50	2	43.17039	46.06	83.28
AVG	2700-3000	6: A507 - Northern Access - 118@17.6 - 120@94.2	16.37	49.12	32	31	1	0	20.70	12.58	0.60	3	43.17039	46.06	83.28
AVG	3000-3300	6: A507 - Northern Access - 118@17.6 - 120@94.2	17.12	47.63	34	33	1	0	17.73	9.55	0.50	2	43.17039	46.06	83.28
AVG	3300-3600	6: A507 - Northern Access - 118@17.6 - 120@94.2	18.52	47.13	29	28	1	0	15.78	8.44	0.44	2	43.17039	46.06	83.28
AVG	3600-3900	6: A507 - Northern Access - 118@17.6 - 120@94.2	18.42	47.91	29	29	1	0	20.57	12.24	0.61	2	43.17039	46.06	83.28
AVG	3900-4200	6: A507 - Northern Access - 118@17.6 - 120@94.2	17.38	47.63	34	33	1	0	17.13	9.16	0.52	2	43.17039	46.06	83.28
AVG	4200-4500	6: A507 - Northern Access - 118@17.6 - 120@94.2	16.75	43.05	31	30	1	0	18.58	10.43	0.55	2	43.17039	46.06	83.28
				46	378				18.42	10.32	0.5	2.0	LOS B	46	83

A507 (N) - Ahead - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 118@17.6 - 117@61.5	14.88	42.46	9	7	1	0	60.04	45.10	1.05	5	43.17039	46.06	83.28
AVG	1200-1500	6: A507 - Northern Access - 118@17.6 - 117@61.5	16.88	48.18	9	8	1	0	75.64	56.29	1.39	5	43.17039	46.06	83.28
AVG	1500-1800	6: A507 - Northern Access - 118@17.6 - 117@61.5	18.80	51.07	8	7	1	0	82.00	62.46	1.41	5	43.17039	46.06	83.28
AVG	1800-2100	6: A507 - Northern Access - 118@17.6 - 117@61.5	15.95	42.83	9	8	1	0	72.36	54.00	1.28	5	43.17039	46.06	83.28
AVG	2100-2400	6: A507 - Northern Access - 118@17.6 - 117@61.5	12.78	38.21	8	8	1	0	77.82	59.53	1.41	5	43.17039	46.06	83.28
AVG	2400-2700	6: A507 - Northern Access - 118@17.6 - 117@61.5	16.46	47.52	8	8	1	0	76.20	57.02	1.37	5	43.17039	46.06	83.28
AVG	2700-3000	6: A507 - Northern Access - 118@17.6 - 117@61.5	16.37	49.12	10	9	1	0	69.09	52.67	1.22	5	43.17039	46.06	83.28
AVG	3000-3300	6: A507 - Northern Access - 118@17.6 - 117@61.5	17.12	47.63	9	8	1	0	76.97	57.69	1.45	5	43.17039	46.06	83.28
AVG	3300-3600	6: A507 - Northern Access - 118@17.6 - 117@61.5	18.52	47.13	11	9	1	0	90.41	70.31	1.49	5	43.17039	46.06	83.28
AVG	3600-3900	6: A507 - Northern Access - 118@17.6 - 117@61.5	18.42	47.91	9	8	1	0	71.81	53.93	1.30	5	43.17039	46.06	83.28
AVG	3900-4200	6: A507 - Northern Access - 118@17.6 - 117@61.5	17.38	47.63	10	9	1	0	75.67	57.11	1.33	5	43.17039	46.06	83.28

AVG	4200-4500	6: A507 - Northern Access - 118@17.6 - 117@61.5		16.75	43.05	9	8	1	0	74.88	57.66	1.25	5	43.17039	46.06	83.28		
					46	109				75.24	56.98	1.3	5.0	LOS E	46	83		

Northern Access (E) - Right Only - 20 sim runs (5 minute Segments) Average

$MO?	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 121@369.8 - 107@69.0		14.13	60.78	24	23	1	0	23.80	17.23	0.67	3	LOS C	63.75	99.79		
AVG	1200-1500	6: A507 - Northern Access - 121@369.8 - 107@69.0		17.01	71.72	35	34	2	0	29.02	20.74	0.78	3	LOS C	63.75	99.79		
AVG	1500-1800	6: A507 - Northern Access - 121@369.8 - 107@69.0		15.22	69.30	29	28	1	0	25.47	17.84	0.68	3	LOS C	63.75	99.79		
AVG	1800-2100	6: A507 - Northern Access - 121@369.8 - 107@69.0		14.90	56.80	25	24	1	0	24.25	17.18	0.66	3	LOS C	63.75	99.79		
AVG	2100-2400	6: A507 - Northern Access - 121@369.8 - 107@69.0		13.94	65.18	35	34	1	0	25.75	18.23	0.68	3	LOS C	63.75	99.79		
AVG	2400-2700	6: A507 - Northern Access - 121@369.8 - 107@69.0		15.86	69.54	27	26	1	0	27.33	19.30	0.76	3	LOS C	63.75	99.79		
AVG	2700-3000	6: A507 - Northern Access - 121@369.8 - 107@69.0		16.98	65.72	29	28	1	0	25.61	18.10	0.69	3	LOS C	63.75	99.79		
AVG	3000-3300	6: A507 - Northern Access - 121@369.8 - 107@69.0		13.89	65.99	34	33	1	0	25.98	18.41	0.72	3	LOS C	63.75	99.79		
AVG	3300-3600	6: A507 - Northern Access - 121@369.8 - 107@69.0		12.16	52.77	27	26	1	0	22.73	15.98	0.62	3	LOS C	63.75	99.79		
AVG	3600-3900	6: A507 - Northern Access - 121@369.8 - 107@69.0		13.68	55.00	24	24	1	0	25.01	17.61	0.68	3	LOS C	63.75	99.79		
AVG	3900-4200	6: A507 - Northern Access - 121@369.8 - 107@69.0		14.47	68.21	35	34	1	0	26.05	18.39	0.74	3	LOS C	63.75	99.79		
AVG	4200-4500	6: A507 - Northern Access - 121@369.8 - 107@69.0		15.43	64.04	27	26	1	0	26.38	18.60	0.72	3	LOS C	63.75	99.79		
					64	351				25.61	18.13	0.7	3.0	LOS C	64	100		

Northern Access (E) - Left Only - 20 sim runs (5 minute Segments) Average

$MO?	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 121@369.5 - 117@61.5		2.47	13.85	6	6	0	0	22.49	16.14	0.61	3	LOS C	22.24	65.42		
AVG	1200-1500	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.56	26.61	8	8	0	0	39.33	27.83	1.15	4	LOS D	22.24	65.42		
AVG	1500-1800	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.38	26.70	9	9	0	0	43.04	31.34	1.18	4	LOS D	22.24	65.42		
AVG	1800-2100	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.08	19.42	7	7	0	0	32.56	23.54	0.88	3	LOS C	22.24	65.42		
AVG	2100-2400	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.22	28.54	8	8	0	0	48.60	36.39	1.21	4	LOS D	22.24	65.42		
AVG	2400-2700	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.63	20.50	9	9	0	0	42.19	31.27	1.12	4	LOS D	22.24	65.42		
AVG	2700-3000	6: A507 - Northern Access - 121@369.5 - 117@61.5		2.50	23.57	7	7	0	0	25.68	17.37	0.80	3	LOS C	22.24	65.42		
AVG	3000-3300	6: A507 - Northern Access - 121@369.5 - 117@61.5		2.14	17.92	7	7	0	0	37.95	27.44	1.07	4	LOS D	22.24	65.42		
AVG	3300-3600	6: A507 - Northern Access - 121@369.5 - 117@61.5		2.44	19.69	8	8	0	0	39.85	29.09	1.10	4	LOS D	22.24	65.42		
AVG	3600-3900	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.65	22.87	7	7	0	0	27.13	18.92	0.75	3	LOS C	22.24	65.42		
AVG	3900-4200	6: A507 - Northern Access - 121@369.5 - 117@61.5		3.72	27.68	7	7	0	0	38.42	28.35	1.04	4	LOS D	22.24	65.42		
AVG	4200-4500	6: A507 - Northern Access - 121@369.5 - 117@61.5		2.48	19.52	8	8	0	0	32.17	22.71	0.91	3	LOS C	22.24	65.42		
					22	91				35.78	25.87	1.0	4.0	LOS D	22	65		

A507 (S) - Ahead Only - 20 sim runs (5 minute Segments) Average

$MO?	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 1@138.2 - 107@49.7		11.15	44.19	20	19	1	0	35.09	27.16	0.81	4	LOS D	53.12	85.75		
AVG	1200-1500	6: A507 - Northern Access - 1@138.2 - 107@49.7		11.04	46.90	14	13	1	0	28.88	21.36	0.74	3	LOS C	53.12	85.75		
AVG	1500-1800	6: A507 - Northern Access - 1@138.2 - 107@49.7		19.72	62.57	21	19	2	0	34.64	26.63	0.83	4	LOS D	53.12	85.75		
AVG	1800-2100	6: A507 - Northern Access - 1@138.2 - 107@49.7		13.65	52.59	23	22	1	0	36.27	27.94	0.88	4	LOS D	53.12	85.75		
AVG	2100-2400	6: A507 - Northern Access - 1@138.2 - 107@49.7		12.96	48.43	18	17	1	0	30.59	22.61	0.81	3	LOS C	53.12	85.75		
AVG	2400-2700	6: A507 - Northern Access - 1@138.2 - 107@49.7		14.68	50.05	15	14	1	0	37.55	29.60	0.82	4	LOS D	53.12	85.75		
AVG	2700-3000	6: A507 - Northern Access - 1@138.2 - 107@49.7		15.22	54.71	25	24	1	0	37.24	28.75	0.91	4	LOS D	53.12	85.75		
AVG	3000-3300	6: A507 - Northern Access - 1@138.2 - 107@49.7		12.55	51.10	15	13	2	0	29.85	21.76	0.82	3	LOS C	53.12	85.75		
AVG	3300-3600	6: A507 - Northern Access - 1@138.2 - 107@49.7		19.87	65.51	21	20	2	0	38.44	30.15	0.87	4	LOS D	53.12	85.75		
AVG	3600-3900	6: A507 - Northern Access - 1@138.2 - 107@49.7		12.31	50.05	22	21	1	0	34.29	26.13	0.84	3	LOS C	53.12	85.75		
AVG	3900-4200	6: A507 - Northern Access - 1@138.2 - 107@49.7		15.41	54.91	20	18	2	0	30.68	23.05	0.78	3	LOS C	53.12	85.75		
AVG	4200-4500	6: A507 - Northern Access - 1@138.2 - 107@49.7		16.00	56.40	15	14	1	0	37.61	29.27	0.87	4	LOS D	53.12	85.75		
					53	229				34.26	26.20	0.8	4.0	LOS D	53	86		

A507 (S) - Right Only - 20 sim runs (5 minute Segments) Average

$MO?	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg,Max)
MAX	900-1200	6: A507 - Northern Access - 1@138.2 - 120@94.2		11.15	44.19	3	3	0	0	55.94	46.95	1.08	4	LOS D	53.12	85.75		
MAX	1200-1500	6: A507 - Northern Access - 1@138.2 - 120@94.2		11.04	46.90	2	2	0	0	39.94	31.68	0.92	4	LOS D	53.12	85.75		
MAX	1500-1800	6: A507 - Northern Access - 1@138.2 - 120@94.2		19.72	62.57	3	3	0	0	55.01	45.87	1.08	4	LOS D	53.12	85.75		
MAX	1800-2100	6: A507 - Northern Access - 1@138.2 - 120@94.2		13.65	52.59	4	4	0	0	45.83	36.92	1.01	4	LOS D	53.12	85.75		
MAX	2100-2400	6: A507 - Northern Access - 1@138.2 - 120@94.2		12.96	48.43	3	3	0	0	43.90	35.48	1.05	4	LOS D	53.12	85.75		
MAX	2400-2700	6: A507 - Northern Access - 1@138.2 - 120@94.2		14.68	50.05	2	2	0	0	52.54	43.72	1.03	4	LOS D	53.12	85.75		
MAX	2700-3000	6: A507 - Northern Access - 1@138.2 - 120@94.2		15.22	54.71	4	4	0	0	46.91	37.93	1.09	4	LOS D	53.12	85.75		
MAX	3000-3300	6: A507 - Northern Access - 1@138.2 - 120@94.2		12.55	51.10	2	2	0	0	43.27	34.88	1.02	4	LOS D	53.12	85.75		
MAX	3300-3600	6: A507 - Northern Access - 1@138.2 - 120@94.2		19.87	65.51	3	3	0	0	61.51	52.03	1.12	5	LOS E	53.12	85.75		
MAX	3600-3900	6: A507 - Northern Access - 1@138.2 - 120@94.2		12.31	50.05	4	4	0	0	52.61	43.13	1.09	4	LOS D	53.12	85.75		
MAX	3900-4200	6: A507 - Northern Access - 1@138.2 - 120@94.2		15.41	54.91	3	3	0	0	51.74	43.17	1.05	4	LOS D	53.12	85.75		
MAX	4200-4500	6: A507 - Northern Access - 1@138.2 - 120@94.2		16.00	56.40	3	3	0	0	58.03	48.95	1.05	5	LOS E	53.12	85.75		
					53	36				50.60	41.72	1.0	4.0	LOS D	53	86		

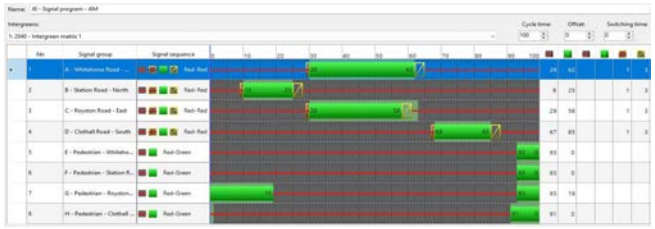
A507 (N) - Bus Priority - 20 sim runs (5 minute Segments) Average

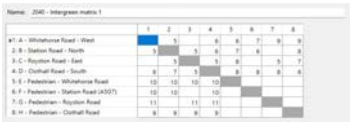
$MO?	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg,Max)
AVG	900-1200	7: Bus Priority Junction - 1@7.9 - 1@71.4		1.19	20.93	19	18	1	0	7.50	2.25	0.28	1	LOS A	29.65	56.53		
AVG	1200-1500	7: Bus Priority Junction - 1@7.9 - 1@71.4		1.93	31.61	20	19	2	0	12.35	4.46	0.48	2	LOS B	29.65	56.53		
AVG	1500-1800	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.85	40.79	24	22	2	0	9.53	3.20	0.32	1	LOS A	29.65	56.53		
AVG	1800-2100	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.16	30.65	24	22	1	0	13.41	5.29	0.47	2	LOS B	29.65	56.53		
AVG	2100-2400	7: Bus Priority Junction - 1@7.9 - 1@71.4		1.51	28.44	22	21	1	0	10.63	3.58	0.35	2	LOS B	29.65	56.53		
AVG	2400-2700	7: Bus Priority Junction - 1@7.9 - 1@71.4		1.34	24.79	20	19	1	0	11.74	4.17	0.42	2	LOS B	29.65	56.53		
AVG	2700-3000	7: Bus Priority Junction - 1@7.9 - 1@71.4		1.20	24.21	24	23	1	0	6.78	1.34	0.20	1	LOS A	29.65	56.53		
AVG	3000-3300	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.04	37.72	22	20	2	0	12.41	4.04	0.49	2	LOS B	29.65	56.53		
AVG	3300-3600	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.78	33.75	23	22	1	0	10.05	3.51	0.37	2	LOS B	29.65	56.53		
AVG	3600-3900	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.32	26.61	23	22	1	0	12.84	5.16	0.44	2	LOS B	29.65	56.53		
AVG	3900-4200	7: Bus Priority Junction - 1@7.9 - 1@71.4		2.02	30.10	24	22	2	0	8.74	2.71	0.33	1	LOS A	29.65	56.53		
AVG	4200-4500	7: Bus Priority Junction - 1@7.9 - 1@71.4		1.54	26.23	21	20	2	0	11.18	3.76	0.35	2	LOS B	29.65	56.53		
					30	266				10.60	3.62	0.4	2.0	LOS B	30	57		

A507 (S) - Bus Priority - 20 sim runs (5 minute Segments) Average

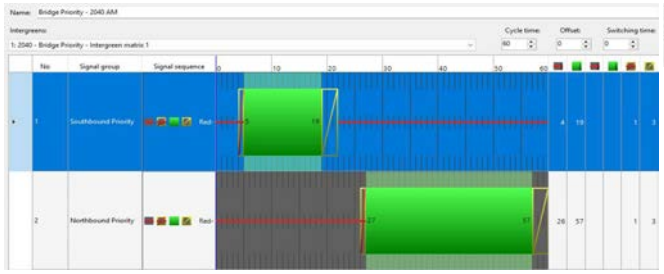
$MO?	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Ave,Max)
AVG	900-1200	7: Bus Priority Junction - 117@113.9 - 4@15.8		8.10	36.80	13	12	1	0	31.87	23.06	1.01	3	LOS C	60.91	97.05		
AVG	1200-1500	7: Bus Priority Junction - 117@113.9 - 4@15.8		35.74	71.14	12	11	1	0	92.34	81.98	1.22	6	LOS F	60.91	97.05		
AVG	1500-1800	7: Bus Priority Junction - 117@113.9 - 4@15.8		29.78	63.80	21	20	1	0	66.60	55.80	1.27	5	LOS E	60.91	97.05		
AVG	1800-2100	7: Bus Priority Junction - 117@113.9 - 4@15.8		26.88	54.28	11	10	1	0	56.73	45.93	1.41	4	LOS D	60.91	97.05		
AVG	2100-2400	7: Bus Priority Junction - 117@113.9 - 4@15.8		41.42	76.93	16	16	1	0	100.27	88.34	1.50	5	LOS E	60.91	97.05		
AVG	2400-2700	7: Bus Priority Junction - 117@113.9 - 4@15.8		31.14	68.12	23	22	1	0	68.33	57.33	1.34	5	LOS E	60.91	97.05		
AVG	2700-3000	7: Bus Priority Junction - 117@113.9 - 4@15.8		17.00	53.01	16	15	1	0	51.03	40.98	1.19	4	LOS D	60.91	97.05		
AVG	3000-3300	7: Bus Priority Junction - 117@113.9 - 4@15.8		37.57	69.86	11	11	1	0	97.25	86.85	1.23	6	LOS F	60.91	97.05		
AVG	3300-3600	7: Bus Priority Junction - 117@113.9 - 4@15.8		32.97	70.02	23	22	2	0	70.78	59.86	1.31	5	LOS E	60.91	97.05		
AVG	3600-3900	7: Bus Priority Junction - 117@113.9 - 4@15.8		21.42	53.03	14	13	1	0	55.22	44.34	1.47	4	LOS D	60.91	97.05		
AVG	3900-4200	7: Bus Priority Junction - 117@113.9 - 4@15.8		27.46	58.89	17	16	1	0	71.41	59.32	1.66	5	LOS E	60.91	97.05		
AVG	4200-4500	7: Bus Priority Junction - 117@113.9 - 4@15.8		19.93	55.08	21	20	1	0	50.67	40.48	1.23	4	LOS D	60.91	97.05		
					61	198				67.71	57.02	1.3	5.0	LOS E	61	97		

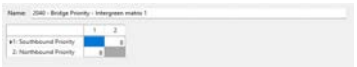
A507 / Whitehorse Road / Clothall Road / Royston Road





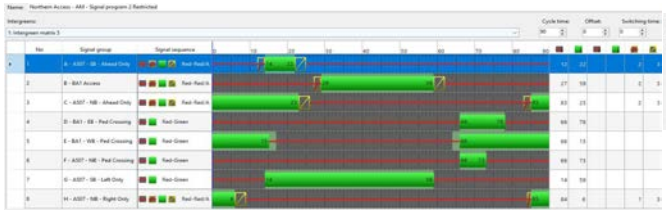
Bridge Priority

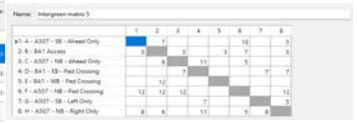




Northern Access Junction

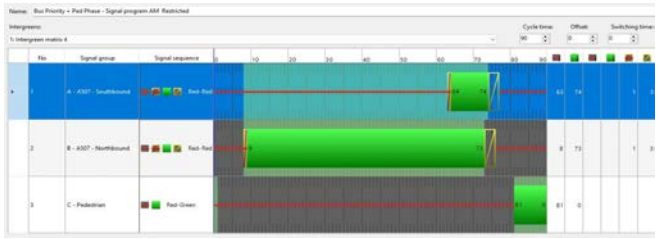
Phase A - A507 Southbound have had the green time restricted to hold back traffic.





Bus Priority + Ped Phase - Bus Priority signals ignals work on detetors. Called only when required.

Phase A - A507 Southbound have had the green time restricted to hold back traffic.



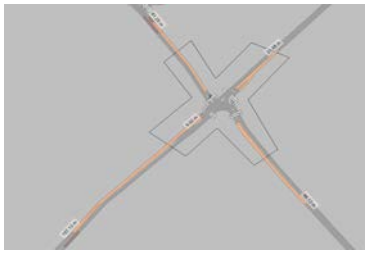
2040 PM - No School

Junction - 100 Sec Cycle Time	Link	Qlen Ave Max (Smins) (m) (Avg, Ave)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Station Road	24	81.25	125.79	82.18	1.5	LOS_E
Royston Road - Ahead	21	51.48	85.04	34.44	0.7	LOS_D
Royston Road - Left	21	37.57	78.05	34.14	0.7	LOS_C
Clothall Road	15	98.13	151.41	89.48	1.5	LOS_E
Whitehorse Street - Ahead & LeftTurn	11	157.13	263.28	54.27	1.4	LOS_D
Whitehorse Street - Right Turn	11	9.02	34.05	56.77	1.9	LOS_E

Priority Working - 60 Sec Cycle Time	Link	Qlen Ave Max (Smins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
Railway Underpass - Southbound	31	70.79	101.74	53.30	1.43	LOS_D
Railway Underpass - Northbound	32	71.53	121.99	15.67	0.00	LOS_B

Northern Junction - 90 sec Cycle Time	Link	Qlen Ave Max (Smins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Station Road (N) - Left Turn	118	44.96	79.48	14.86	0.5	LOS_B
A507 - Station Road (N) - Ahead Only	118	44.96	79.48	54.89	1.1	LOS_D
BA1 - Access - Left Turn	121	12.37	40.38	31.52	0.8	LOS_C
BA1 - Access - Right Turn	121	60.06	93.73	35.65	1.0	LOS_C
A507 - Station Road (S) - Ahead	1	69.39	120.21	24.56	0.6	LOS_C
A507 - Station Road (S) - Right Turn	1	69.39	120.21	66.59	1.2	LOS_E

Bus Priority Working - 90 Sec Cycle Time 1 ped phase every cycle. Signals for Buses only called when required.	Link	Qlen Ave Max (Smins) (m) (Avg, Ave)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Northbound	1	55.07	118.59	16.78	0.58	LOS_B
A507 - Southbound	117	58.00	89.97	46	1.01	LOS_D









Notes

20 Simulation Runs
Qlen Ave Max (every Smins), (Qlen Max, Avg)
Time periods indicative
Vissim Qlen Ave MAX (Smins) to compare with Linsig MMQ Outputs
Veh Delay (Delay of all vehicles. The delay of a vehicle in leaving a travel time measurement is obtained by subtracting the theoretical (ideal) travel time from the actual travel time. The theoretical travel time is the travel time which could be achieved if there were no other vehicles and/or no signal controls or other reasons for stops.

1 LOS_A
2 LOS_B
3 LOS_C
4 LOS_D
5 LOS_E
6 LOS_F

Southbound - 20 sim runs (5 minute Segments) Average

SMOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 31@2.1 - 31@108.8	15.10	59.96	18	18	0	0	39.49	26.70	1.17	4	LOS_D	70.79	101.74
AVG	1200-1500	2: Railway Bridge Priority - 31@2.1 - 31@108.8	17.04	65.45	19	18	0	1	40.49	25.81	1.18	4	LOS_D	70.79	101.74
AVG	1500-1800	2: Railway Bridge Priority - 31@2.1 - 31@108.8	26.59	73.37	26	26	0	0	55.24	38.87	1.44	4	LOS_D	70.79	101.74
AVG	1800-2100	2: Railway Bridge Priority - 31@2.1 - 31@108.8	25.71	66.09	23	22	0	1	56.46	38.73	1.50	5	LOS_E	70.79	101.74
AVG	2100-2400	2: Railway Bridge Priority - 31@2.1 - 31@108.8	21.61	64.82	23	23	0	0	49.62	34.64	1.32	4	LOS_D	70.79	101.74
AVG	2400-2700	2: Railway Bridge Priority - 31@2.1 - 31@108.8	23.54	70.09	23	22	0	1	48.13	32.68	1.33	4	LOS_D	70.79	101.74
AVG	2700-3000	2: Railway Bridge Priority - 31@2.1 - 31@108.8	22.39	74.04	21	21	0	0	48.11	33.35	1.31	4	LOS_D	70.79	101.74
AVG	3000-3300	2: Railway Bridge Priority - 31@2.1 - 31@108.8	20.83	68.11	21	20	0	1	46.65	30.58	1.39	4	LOS_D	70.79	101.74
AVG	3300-3600	2: Railway Bridge Priority - 31@2.1 - 31@108.8	35.61	81.50	27	27	0	0	62.22	45.10	1.60	5	LOS_E	70.79	101.74
AVG	3600-3900	2: Railway Bridge Priority - 31@2.1 - 31@108.8	31.79	76.87	23	21	0	1	66.25	46.29	1.71	5	LOS_E	70.79	101.74
AVG	3900-4200	2: Railway Bridge Priority - 31@2.1 - 31@108.8	33.45	74.00	25	24	0	1	65.85	47.37	1.64	5	LOS_E	70.79	101.74
AVG	4200-4500	2: Railway Bridge Priority - 31@2.1 - 31@108.8	33.06	75.17	25	24	0	1	61.13	43.01	1.62	5	LOS_E	70.79	101.74
			26	71	274				53.30	36.93	1.43	4.0	LOS_D	71	102

Northbound - 20 sim runs (5 minute Segments) Average

SMOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 32@67.4 - 32@173.4	5.24	48.25	34	34	0	0	11.54	4.67	0.49	2	LOS_B	71.53	121.99
AVG	1200-1500	2: Railway Bridge Priority - 32@67.4 - 32@173.4	11.69	93.13	39	38	0	1	18.34	6.07	0.88	2	LOS_B	71.53	121.99
AVG	1500-1800	2: Railway Bridge Priority - 32@67.4 - 32@173.4	7.25	58.14	43	42	0	0	12.94	5.13	0.55	2	LOS_B	71.53	121.99
AVG	1800-2100	2: Railway Bridge Priority - 32@67.4 - 32@173.4	10.58	86.63	41	40	0	1	18.07	5.69	0.89	2	LOS_B	71.53	121.99
AVG	2100-2400	2: Railway Bridge Priority - 32@67.4 - 32@173.4	5.84	45.61	40	39	0	1	13.00	4.79	0.52	2	LOS_B	71.53	121.99
AVG	2400-2700	2: Railway Bridge Priority - 32@67.4 - 32@173.4	10.16	86.01	39	38	0	1	19.62	5.95	0.99	3	LOS_C	71.53	121.99
AVG	2700-3000	2: Railway Bridge Priority - 32@67.4 - 32@173.4	7.16	56.55	42	42	0	0	12.93	5.03	0.54	2	LOS_B	71.53	121.99
AVG	3000-3300	2: Railway Bridge Priority - 32@67.4 - 32@173.4	9.23	78.37	41	40	0	1	18.30	5.31	0.89	2	LOS_B	71.53	121.99
AVG	3300-3600	2: Railway Bridge Priority - 32@67.4 - 32@173.4	6.65	53.90	42	42	0	0	12.70	4.85	0.56	2	LOS_B	71.53	121.99
AVG	3600-3900	2: Railway Bridge Priority - 32@67.4 - 32@173.4	11.72	95.19	41	39	0	1	19.10	6.02	0.93	2	LOS_B	71.53	121.99
AVG	3900-4200	2: Railway Bridge Priority - 32@67.4 - 32@173.4	7.21	58.83	41	41	1	0	12.62	5.14	0.56	2	LOS_B	71.53	121.99
AVG	4200-4500	2: Railway Bridge Priority - 32@67.4 - 32@173.4	11.72	97.73	41	39	0	1	18.85	6.07	0.92	2	LOS_B	71.53	121.99
			9	72	484				15.67	5.40	0.73	2.0	LOS_B	72	122

A507 - 20 sim runs (5 minute Segments) Average

SMOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 24@44.5 - 13@19.3	19.4	57.4	8	8	0	0	61.49	51.86	1.08	5	LOS_E	81.25	125.79
AVG	1200-1500	1: Whitehorse Junction - 24@44.5 - 13@19.3	21.2	62.4	10	9	0	1	52.33	39.48	1.11	4	LOS_D	81.25	125.79
AVG	1500-1800	1: Whitehorse Junction - 24@44.5 - 13@19.3	30.1	68.4	13	13	0	0	59.15	48.66	1.16	5	LOS_E	81.25	125.79
AVG	1800-2100	1: Whitehorse Junction - 24@44.5 - 13@19.3	35.0	75.8	11	10	0	1	73.59	59.53	1.40	5	LOS_E	81.25	125.79
AVG	2100-2400	1: Whitehorse Junction - 24@44.5 - 13@19.3	43.0	88.0	12	12	0	0	83.81	70.12	1.51	5	LOS_E	81.25	125.79
AVG	2400-2700	1: Whitehorse Junction - 24@44.5 - 13@19.3	39.0	76.4	11	10	0	1	79.36	64.28	1.43	5	LOS_E	81.25	125.79
AVG	2700-3000	1: Whitehorse Junction - 24@44.5 - 13@19.3	34.9	78.7	10	10	0	0	87.83	73.33	1.55	5	LOS_E	81.25	125.79
AVG	3000-3300	1: Whitehorse Junction - 24@44.5 - 13@19.3	36.4	85.7	11	10	0	1	80.72	65.63	1.50	5	LOS_E	81.25	125.79
AVG	3300-3600	1: Whitehorse Junction - 24@44.5 - 13@19.3	44.2	81.8	12	12	0	0	78.62	65.84	1.43	5	LOS_E	81.25	125.79
AVG	3600-3900	1: Whitehorse Junction - 24@44.5 - 13@19.3	51.1	88.2	12	11	0	1	94.26	78.62	1.60	6	LOS_F	81.25	125.79
AVG	3900-4200	1: Whitehorse Junction - 24@44.5 - 13@19.3	60.3	102.2	10	10	0	0	113.62	95.37	2.04	6	LOS_F	81.25	125.79
AVG	4200-4500	1: Whitehorse Junction - 24@44.5 - 13@19.3	64.5	109.9	12	12	0	0	121.33	103.63	2.01	6	LOS_F	81.25	125.79
				81	132				82.18	68.03	1.5	5.0	LOS_E	81	126

Royston Road - Ahead Only - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg_Max)
AVG	900-1200	1: Whitehorse Junction - 21@62.5 - 13@19.3		44.41	18	18	0	0	33.77	22.80	0.70	3	LOS C	51.48	85.04
AVG	1200-1500	1: Whitehorse Junction - 21@62.5 - 13@19.3		51.64	21	21	0	0	34.83	22.64	0.74	4	LOS D	51.48	85.04
AVG	1500-1800	1: Whitehorse Junction - 21@62.5 - 13@19.3		56.97	22	22	0	0	35.74	23.43	0.72	4	LOS D	51.48	85.04
AVG	1800-2100	1: Whitehorse Junction - 21@62.5 - 13@19.3		52.80	20	20	0	0	38.97	26.89	0.79	4	LOS D	51.48	85.04
AVG	2100-2400	1: Whitehorse Junction - 21@62.5 - 13@19.3		44.01	20	20	0	0	31.74	21.08	0.67	3	LOS C	51.48	85.04
AVG	2400-2700	1: Whitehorse Junction - 21@62.5 - 13@19.3		51.87	21	20	0	0	33.12	21.88	0.69	3	LOS C	51.48	85.04
AVG	2700-3000	1: Whitehorse Junction - 21@62.5 - 13@19.3		51.61	20	20	0	0	32.80	21.02	0.70	3	LOS C	51.48	85.04
AVG	3000-3300	1: Whitehorse Junction - 21@62.5 - 13@19.3		53.48	21	21	0	0	36.69	25.09	0.74	4	LOS D	51.48	85.04
AVG	3300-3600	1: Whitehorse Junction - 21@62.5 - 13@19.3		53.85	21	21	0	0	30.74	19.22	0.69	3	LOS C	51.48	85.04
AVG	3600-3900	1: Whitehorse Junction - 21@62.5 - 13@19.3		49.81	20	20	0	0	35.46	23.59	0.75	4	LOS D	51.48	85.04
AVG	3900-4200	1: Whitehorse Junction - 21@62.5 - 13@19.3		51.61	22	22	0	0	33.49	22.19	0.74	3	LOS C	51.48	85.04
AVG	4200-4500	1: Whitehorse Junction - 21@62.5 - 13@19.3		55.67	22	21	0	0	35.87	24.04	0.75	4	LOS D	51.48	85.04
				51	248				34.44	22.82	0.7	4.0	LOS D	51	85

Royston Road - Left Only - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Ave.Max)
AVG	900-1200	1: Whitehorse Junction - 21@62.5 - 17@8.3	4.14	28.99	6	6	0	0	31.01	21.59	0.70	3	LOS C	37.57	78.05
AVG	1200-1500	1: Whitehorse Junction - 21@62.5 - 17@8.3	4.97	36.20	7	6	0	0	31.41	20.97	0.70	3	LOS C	37.57	78.05
AVG	1500-1800	1: Whitehorse Junction - 21@62.5 - 17@8.3	5.32	35.07	6	6	0	0	41.42	28.95	0.78	4	LOS D	37.57	78.05
AVG	1800-2100	1: Whitehorse Junction - 21@62.5 - 17@8.3	5.54	42.37	6	5	0	0	30.81	21.78	0.69	3	LOS C	37.57	78.05
AVG	2100-2400	1: Whitehorse Junction - 21@62.5 - 17@8.3	5.66	37.06	7	7	0	0	33.18	22.86	0.76	3	LOS C	37.57	78.05
AVG	2400-2700	1: Whitehorse Junction - 21@62.5 - 17@8.3	4.72	35.21	6	6	0	0	34.23	21.75	0.71	3	LOS C	37.57	78.05
AVG	2700-3000	1: Whitehorse Junction - 21@62.5 - 17@8.3	4.95	38.99	6	6	0	0	31.39	19.63	0.75	3	LOS C	37.57	78.05
AVG	3000-3300	1: Whitehorse Junction - 21@62.5 - 17@8.3	7.27	46.15	7	7	0	0	33.81	24.27	0.73	3	LOS C	37.57	78.05
AVG	3300-3600	1: Whitehorse Junction - 21@62.5 - 17@8.3	5.51	38.36	7	6	0	0	37.24	25.84	0.71	4	LOS D	37.57	78.05
AVG	3600-3900	1: Whitehorse Junction - 21@62.5 - 17@8.3	6.88	39.91	7	7	0	0	32.26	21.88	0.67	3	LOS C	37.57	78.05
AVG	3900-4200	1: Whitehorse Junction - 21@62.5 - 17@8.3	6.09	38.24	7	7	0	0	38.29	25.27	0.81	4	LOS D	37.57	78.05
AVG	4200-4500	1: Whitehorse Junction - 21@62.5 - 17@8.3	5.05	34.34	7	7	0	0	34.66	23.86	0.80	3	LOS C	37.57	78.05
				38	79				34.14	23.22	0.7	3.0	LOS C	38	78

Clothall Road - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg_Max)
AVG	900-1200	1: Whitehorse Junction - 15@456.3 - 23@57.7	27.12	73.33	14	14	0	0	52.54	42.28	1.01	4	LOS D	98.13	151.41
AVG	1200-1500	1: Whitehorse Junction - 15@456.3 - 23@57.7	43.37	89.86	15	15	0	0	75.14	62.39	1.25	5	LOS E	98.13	151.41
AVG	1500-1800	1: Whitehorse Junction - 15@456.3 - 23@57.7	53.76	98.97	17	16	0	0	88.49	73.86	1.48	5	LOS E	98.13	151.41
AVG	1800-2100	1: Whitehorse Junction - 15@456.3 - 23@57.7	48.23	97.48	15	15	0	1	89.03	72.89	1.51	5	LOS E	98.13	151.41
AVG	2100-2400	1: Whitehorse Junction - 15@456.3 - 23@57.7	55.13	96.52	16	15	0	0	94.64	77.55	1.72	5	LOS E	98.13	151.41
AVG	2400-2700	1: Whitehorse Junction - 15@456.3 - 23@57.7	50.88	99.11	17	16	0	0	89.77	74.51	1.51	5	LOS E	98.13	151.41
AVG	2700-3000	1: Whitehorse Junction - 15@456.3 - 23@57.7	51.39	93.52	16	16	0	0	86.31	72.27	1.42	5	LOS E	98.13	151.41
AVG	3000-3300	1: Whitehorse Junction - 15@456.3 - 23@57.7	58.41	104.88	17	16	0	0	93.27	78.26	1.58	5	LOS E	98.13	151.41
AVG	3300-3600	1: Whitehorse Junction - 15@456.3 - 23@57.7	59.97	108.22	17	17	0	0	102.43	86.55	1.66	5	LOS E	98.13	151.41
AVG	3600-3900	1: Whitehorse Junction - 15@456.3 - 23@57.7	54.51	102.00	16	15	0	0	98.58	82.77	1.64	5	LOS E	98.13	151.41
AVG	3900-4200	1: Whitehorse Junction - 15@456.3 - 23@57.7	64.10	108.32	16	16	1	0	99.24	83.95	1.60	5	LOS E	98.13	151.41
AVG	4200-4500	1: Whitehorse Junction - 15@456.3 - 23@57.7	59.73	105.32	17	16	0	0	104.37	88.13	1.71	5	LOS E	98.13	151.41
				98	193				89.48	74.62	1.5	5.0	LOS E	98	151

Whitehorse Road - Ahead & Left Turn - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg_Max)
AVG	900-1200	1: Whitehorse Junction - 11@281.7 - 19@52.5		113.97	22	22	0	0	33.67	24.22	0.85	3	LOS C	157.13	263.28
AVG	1200-1500	1: Whitehorse Junction - 11@281.7 - 19@52.5		174.21	24	24	0	0	57.29	41.16	1.56	5	LOS E	157.13	263.28
AVG	1500-1800	1: Whitehorse Junction - 11@281.7 - 19@52.5		155.71	26	26	0	0	52.72	40.11	1.23	4	LOS D	157.13	263.28
AVG	1800-2100	1: Whitehorse Junction - 11@281.7 - 19@52.5		169.89	25	25	0	0	60.49	45.04	1.51	5	LOS E	157.13	263.28
AVG	2100-2400	1: Whitehorse Junction - 11@281.7 - 19@52.5		119.92	27	27	0	0	45.67	34.20	1.04	4	LOS D	157.13	263.28
AVG	2400-2700	1: Whitehorse Junction - 11@281.7 - 19@52.5		178.36	26	26	0	0	66.04	49.20	1.70	5	LOS E	157.13	263.28
AVG	2700-3000	1: Whitehorse Junction - 11@281.7 - 19@52.5		142.04	28	28	0	0	47.28	35.86	1.07	4	LOS D	157.13	263.28
AVG	3000-3300	1: Whitehorse Junction - 11@281.7 - 19@52.5		173.73	24	24	0	0	59.58	43.55	1.56	5	LOS E	157.13	263.28
AVG	3300-3600	1: Whitehorse Junction - 11@281.7 - 19@52.5		159.88	28	28	0	0	55.50	42.25	1.24	4	LOS D	157.13	263.28
AVG	3600-3900	1: Whitehorse Junction - 11@281.7 - 19@52.5		169.39	25	24	0	0	58.27	42.92	1.58	5	LOS E	157.13	263.28
AVG	3900-4200	1: Whitehorse Junction - 11@281.7 - 19@52.5		134.76	25	25	0	0	48.24	36.44	1.08	4	LOS D	157.13	263.28
AVG	4200-4500	1: Whitehorse Junction - 11@281.7 - 19@52.5		193.72	25	24	0	0	66.44	48.85	1.81	5	LOS E	157.13	263.28
				157	305				54.27	40.32	1.4	4.0	LOS D	157	263

Whitehorse Road - Right Turn - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg_Max)
AVG	900-1200	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.23	8.20	3	3	0	0	31.05	20.41	1.29	3	LOS C	9.02	34.05
AVG	1200-1500	1: Whitehorse Junction - 11@469.2 - 17@8.3	2.85	15.53	3	3	0	0	61.45	44.46	2.25	5	LOS E	9.02	34.05
AVG	1500-1800	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.07	8.26	3	3	0	0	55.42	40.51	1.65	4	LOS D	9.02	34.05
AVG	1800-2100	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.59	12.15	3	3	0	0	66.11	49.10	2.16	5	LOS E	9.02	34.05
AVG	2100-2400	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.95	12.10	4	4	0	0	50.03	37.34	1.72	4	LOS D	9.02	34.05
AVG	2400-2700	1: Whitehorse Junction - 11@469.2 - 17@8.3	0.63	4.48	3	3	0	0	68.04	50.05	2.19	5	LOS E	9.02	34.05
AVG	2700-3000	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.32	6.59	3	3	0	0	54.00	40.54	1.53	4	LOS D	9.02	34.05
AVG	3000-3300	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.57	10.93	3	3	0	0	59.62	42.41	2.27	5	LOS E	9.02	34.05
AVG	3300-3600	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.57	10.14	4	4	0	0	63.93	47.77	1.78	5	LOS E	9.02	34.05
AVG	3600-3900	1: Whitehorse Junction - 11@469.2 - 17@8.3	1.19	8.78	3	3	0	0	64.59	47.67	2.18	5	LOS E	9.02	34.05
AVG	3900-4200	1: Whitehorse Junction - 11@469.2 - 17@8.3	0.89	5.85	3	3	0	0	45.38	32.62	1.25	4	LOS D	9.02	34.05
AVG	4200-4500	1: Whitehorse Junction - 11@469.2 - 17@8.3	0.90	5.16	3	3	0	0	61.65	43.86	2.07	5	LOS E	9.02	34.05
				9	38				56.77	41.39	1.9	5.0	LOS E	9	34

A507 (N) - Left Turn - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg_Max)
AVG	900-1200	6: A507 - Northern Access - 118@17.6 - 120@94.2		38.7	20.0	20.0	0.0	0.0	16.4	9.5	0.5	2	LOS B	44.96	79.48
AVG	1200-1500	6: A507 - Northern Access - 118@17.6 - 120@94.2		41.4	23.0	23.0	0.0	0.0	14.7	8.0	0.5	2	LOS B	44.96	79.48
AVG	1500-1800	6: A507 - Northern Access - 118@17.6 - 120@94.2		42.1	21.0	21.0	0.0	0.0	15.6	8.3	0.5	2	LOS B	44.96	79.48
AVG	1800-2100	6: A507 - Northern Access - 118@17.6 - 120@94.2		39.8	22.0	21.0	1.0	0.0	16.4	9.5	0.5	2	LOS B	44.96	79.48
AVG	2100-2400	6: A507 - Northern Access - 118@17.6 - 120@94.2		43.5	24.0	24.0	0.0	0.0	12.3	5.9	0.4	2	LOS B	44.96	79.48
AVG	2400-2700	6: A507 - Northern Access - 118@17.6 - 120@94.2		46.0	22.0	21.0	0.0	0.0	15.4	8.4	0.4	2	LOS B	44.96	79.48
AVG	2700-3000	6: A507 - Northern Access - 118@17.6 - 120@94.2		47.4	23.0	23.0	0.0	0.0	15.6	8.4	0.5	2	LOS B	44.96	79.48
AVG	3000-3300	6: A507 - Northern Access - 118@17.6 - 120@94.2		48.9	22.0	22.0	0.0	0.0	14.7	7.3	0.4	2	LOS B	44.96	79.48
AVG	3300-3600	6: A507 - Northern Access - 118@17.6 - 120@94.2		45.4	21.0	21.0	0.0	0.0	12.7	6.3	0.4	2	LOS B	44.96	79.48
AVG	3600-3900	6: A507 - Northern Access - 118@17.6 - 120@94.2		49.0	22.0	21.0	0.0	0.0	16.9	9.4	0.5	2	LOS B	44.96	79.48
AVG	3900-4200	6: A507 - Northern Access - 118@17.6 - 120@94.2		49.5	24.0	23.0	0.0	0.0	14.0	7.1	0.4	2	LOS B	44.96	79.48
AVG	4200-4500	6: A507 - Northern Access - 118@17.6 - 120@94.2		47.7	21.0	21.0	0.0	0.0	13.7	6.8	0.4	2	LOS B	44.96	79.48
				45.0	265				14.86	7.92	0.5	2.0	LOS B	45	79

A507 (N) - Ahead - 20 sim runs (5 minute Segments) Average

$MO	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg_Max)
AVG	900-1200	6: A507 - Northern Access - 118@17.6 - 117@61.5		38.7	15.0	15.0	0.0	0.0	47.7	34.1	1.0	4	LOS D	44.96	79.48
AVG	1200-1500	6: A507 - Northern Access - 118@17.6 - 117@61.5		41.4	19.0	19.0	0.0	0.0	56.2	39.5	1.1	5	LOS E	44.96	79.48
AVG	1500-1800	6: A507 - Northern Access - 118@17.6 - 117@61.5		42.1	15.0	15.0	0.0	0.0	47.2	31.7	0.9	4	LOS D	44.96	79.48
AVG	1800-2100	6: A507 - Northern Access - 118@17.6 - 117@61.5		39.8	18.0	18.0	0.0	0.0	47.2	32.9	0.9	4	LOS D	44.96	79.48
AVG	2100-2400	6: A507 - Northern Access - 118@17.6 - 117@61.5		43.5	18.0	18.0	0.0	0.0	46.8	32.1	0.9	4	LOS D	44.96	79.48
AVG	2400-2700	6: A507 - Northern Access - 118@17.6 - 117@61.5		46.0	16.0	16.0	0.0	0.0	55.9	39.3	1.1	4	LOS D	44.96	79.48
AVG	2700-3000	6: A507 - Northern Access - 118@17.6 - 117@61.5		47.4	18.0	18.0	0.0	0.0	67.2	49.5	1.3	5	LOS E	44.96	79.48
AVG	3000-3300	6: A507 - Northern Access - 118@17.6 - 117@61.5		48.9	19.0	18.0	0.0	0.0	73.6	54.1	1.4	5	LOS E	44.96	79.48
AVG	3300-3600	6: A507 - Northern Access - 118@17.6 - 117@61.5		45.4	17.0	17.0	0.0	0.0	59.9	42.7	1.1	5	LOS E	44.96	79.48
AVG	3600-3900	6: A507 - Northern Access - 118@17.6 - 117@61.5		49.0	17.0	17.0	0.0	0.0	51.9	36.8	1.0	4	LOS D	44.96	79.48
AVG	3900-4200	6: A507 - Northern Access - 118@17.6 - 117@61.5		49.5	20.0	20.0	0.0	0.0	51.5	35.1	1.0	4	LOS D	44.96	79.48

AVG	4200-4500	6: A507 - Northern Access - 118@17.6 - 117@61.5		18.7	47.7	17.0	17.0	0.0	0.0	53.5	36.8	1.0	4	LOS D	44.96	79.48
					45.0	209				54.89	38.72	1.1	4.0	LOS D	45	79

Northern Access (E) - Right Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 121@369.8 - 107@69.0		14.9	51.9	23.0	23.0	0.0	0.0	29.1	22.0	0.7	3	LOS C	60.06	93.73
AVG	1200-1500	6: A507 - Northern Access - 121@369.8 - 107@69.0		18.7	62.9	33.0	32.0	0.0	0.0	34.5	26.5	0.8	3	LOS C	60.06	93.73
AVG	1500-1800	6: A507 - Northern Access - 121@369.8 - 107@69.0		17.5	61.0	28.0	28.0	0.0	0.0	31.0	23.1	0.8	3	LOS C	60.06	93.73
AVG	1800-2100	6: A507 - Northern Access - 121@369.8 - 107@69.0		16.8	56.1	24.0	24.0	0.0	0.0	30.6	23.2	0.8	3	LOS C	60.06	93.73
AVG	2100-2400	6: A507 - Northern Access - 121@369.8 - 107@69.0		19.2	65.0	32.0	32.0	1.0	0.0	34.4	26.2	0.8	4	LOS D	60.06	93.73
AVG	2400-2700	6: A507 - Northern Access - 121@369.8 - 107@69.0		18.3	64.7	28.0	28.0	0.0	0.0	33.4	25.2	0.8	3	LOS C	60.06	93.73
AVG	2700-3000	6: A507 - Northern Access - 121@369.8 - 107@69.0		16.9	58.4	27.0	26.0	0.0	0.0	29.7	21.9	0.8	3	LOS C	60.06	93.73
AVG	3000-3300	6: A507 - Northern Access - 121@369.8 - 107@69.0		17.7	63.7	32.0	31.0	0.0	0.0	32.5	24.6	0.8	3	LOS C	60.06	93.73
AVG	3300-3600	6: A507 - Northern Access - 121@369.8 - 107@69.0		14.2	56.3	28.0	28.0	0.0	0.0	28.6	20.9	0.7	3	LOS C	60.06	93.73
AVG	3600-3900	6: A507 - Northern Access - 121@369.8 - 107@69.0		16.3	58.0	24.0	24.0	0.0	0.0	30.8	23.1	0.8	3	LOS C	60.06	93.73
AVG	3900-4200	6: A507 - Northern Access - 121@369.8 - 107@69.0		18.3	63.8	31.0	31.0	0.0	0.0	33.9	25.9	0.8	4	LOS D	60.06	93.73
AVG	4200-4500	6: A507 - Northern Access - 121@369.8 - 107@69.0		15.7	58.9	29.0	29.0	0.0	0.0	29.7	22.0	0.8	3	LOS C	60.06	93.73
					60	339				31.52	23.73	0.8	3.0	LOS C	60	94

Northern Access (E) - Left Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 121@369.5 - 117@61.5		1.5	10.9	3	3	0	0	27.232308	19.649156	0.788333	3	LOS C	12.37	40.38
AVG	1200-1500	6: A507 - Northern Access - 121@369.5 - 117@61.5		1.7	13.5	4.0	4.0	0.0	0.0	45.4	34.6	1.3	4	LOS D	12.37	40.38
AVG	1500-1800	6: A507 - Northern Access - 121@369.5 - 117@61.5		2.3	17.3	4.0	4.0	0.0	0.0	34.0	25.2	0.9	3	LOS C	12.37	40.38
AVG	1800-2100	6: A507 - Northern Access - 121@369.5 - 117@61.5		1.2	8.1	3.0	3.0	0.0	0.0	27.9	20.4	0.7	3	LOS C	12.37	40.38
AVG	2100-2400	6: A507 - Northern Access - 121@369.5 - 117@61.5		1.9	12.7	4.0	4.0	0.0	0.0	32.0	23.6	0.9	3	LOS C	12.37	40.38
AVG	2400-2700	6: A507 - Northern Access - 121@369.5 - 117@61.5		1.4	10.8	3.0	3.0	0.0	0.0	35.9	26.9	0.9	4	LOS D	12.37	40.38
AVG	2700-3000	6: A507 - Northern Access - 121@369.5 - 117@61.5		2.5	17.6	4.0	4.0	0.0	0.0	48.8	37.0	1.4	4	LOS D	12.37	40.38
AVG	3000-3300	6: A507 - Northern Access - 121@369.5 - 117@61.5		1.0	10.2	3.0	3.0	0.0	0.0	52.2	41.3	1.3	4	LOS D	12.37	40.38
AVG	3300-3600	6: A507 - Northern Access - 121@369.5 - 117@61.5		1.1	9.3	4.0	4.0	0.0	0.0	33.1	23.9	1.0	3	LOS C	12.37	40.38
AVG	3600-3900	6: A507 - Northern Access - 121@369.5 - 117@61.5		1.0	9.7	2.0	2.0	0.0	0.0	27.7	20.5	0.8	3	LOS C	12.37	40.38
AVG	3900-4200	6: A507 - Northern Access - 121@369.5 - 117@61.5		2.2	14.3	4.0	4.0	0.0	0.0	34.4	26.5	0.9	4	LOS D	12.37	40.38
AVG	4200-4500	6: A507 - Northern Access - 121@369.5 - 117@61.5		1.8	14.0	3.0	3.0	0.0	0.0	29.2	21.9	0.7	3	LOS C	12.37	40.38
					12	41				35.65	26.77	1.0	3.0	LOS C	12	40

A507 (S) - Ahead Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 1@138.2 - 107@49.7		15.9	61.0	33	33	0	0	24.1	17.4	0.7	3	LOS C	69.39	120.21
AVG	1200-1500	6: A507 - Northern Access - 1@138.2 - 107@49.7		13.2	61.4	20	19	0	0	21.8	15.6	0.6	3	LOS C	69.39	120.21
AVG	1500-1800	6: A507 - Northern Access - 1@138.2 - 107@49.7		30.7	98.3	35	35	0	0	28.0	21.0	0.6	3	LOS C	69.39	120.21
AVG	1800-2100	6: A507 - Northern Access - 1@138.2 - 107@49.7		12.3	44.8	25	25	0	0	22.8	17.0	0.5	3	LOS C	69.39	120.21
AVG	2100-2400	6: A507 - Northern Access - 1@138.2 - 107@49.7		25.1	74.7	36	36	0	0	25.5	19.0	0.6	3	LOS C	69.39	120.21
AVG	2400-2700	6: A507 - Northern Access - 1@138.2 - 107@49.7		14.2	66.6	19	19	0	0	21.2	15.0	0.6	3	LOS C	69.39	120.21
AVG	2700-3000	6: A507 - Northern Access - 1@138.2 - 107@49.7		25.0	72.4	42	42	0	0	26.4	19.1	0.7	3	LOS C	69.39	120.21
AVG	3000-3300	6: A507 - Northern Access - 1@138.2 - 107@49.7		15.6	63.1	21	21	0	0	22.0	15.8	0.6	3	LOS C	69.39	120.21
AVG	3300-3600	6: A507 - Northern Access - 1@138.2 - 107@49.7		32.1	93.9	36	35	0	0	29.4	22.1	0.7	3	LOS C	69.39	120.21
AVG	3600-3900	6: A507 - Northern Access - 1@138.2 - 107@49.7		10.7	47.2	25	24	0	0	25.5	19.1	0.6	3	LOS C	69.39	120.21
AVG	3900-4200	6: A507 - Northern Access - 1@138.2 - 107@49.7		28.6	86.7	37	36	0	0	26.4	19.6	0.6	3	LOS C	69.39	120.21
AVG	4200-4500	6: A507 - Northern Access - 1@138.2 - 107@49.7		13.0	62.5	20	20	0	0	21.6	15.4	0.6	3	LOS C	69.39	120.21
					69	349				24.56	18.00	0.6	3.0	LOS C	69	120

A507 (S) - Right Only - 20 sim runs (5 minute Segments) Average

$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)		LOS	QLenMax(A	QLenMax(Avg,Max)
MAX	900-1200	6: A507 - Northern Access - 1@138.2 - 120@94.2		15.9	61.0	7	7	0	0	55.0	45.7	1.1	4	LOS D	69.39	120.21
MAX	1200-1500	6: A507 - Northern Access - 1@138.2 - 120@94.2		13.2	61.4	6	6	0	0	61.8	51.6	1.2	5	LOS E	69.39	120.21
MAX	1500-1800	6: A507 - Northern Access - 1@138.2 - 120@94.2		30.7	98.3	8	8	0	0	76.5	64.8	1.4	5	LOS E	69.39	120.21
MAX	1800-2100	6: A507 - Northern Access - 1@138.2 - 120@94.2		12.3	44.8	9	9	0	0	64.7	55.0	1.1	5	LOS E	69.39	120.21
MAX	2100-2400	6: A507 - Northern Access - 1@138.2 - 120@94.2		25.1	74.7	8	8	0	0	70.9	59.7	1.3	5	LOS E	69.39	120.21
MAX	2400-2700	6: A507 - Northern Access - 1@138.2 - 120@94.2		14.2	66.6	7	7	0	0	61.3	51.6	1.1	5	LOS E	69.39	120.21
MAX	2700-3000	6: A507 - Northern Access - 1@138.2 - 120@94.2		25.0	72.4	10	10	0	0	67.1	56.4	1.3	5	LOS E	69.39	120.21
MAX	3000-3300	6: A507 - Northern Access - 1@138.2 - 120@94.2		15.6	63.1	7	7	0	0	71.9	60.6	1.4	5	LOS E	69.39	120.21
MAX	3300-3600	6: A507 - Northern Access - 1@138.2 - 120@94.2		32.1	93.9	8	8	0	0	75.1	63.5	1.3	5	LOS E	69.39	120.21
MAX	3600-3900	6: A507 - Northern Access - 1@138.2 - 120@94.2		10.7	47.2	8	8	0	0	63.4	53.6	1.1	5	LOS E	69.39	120.21
MAX	3900-4200	6: A507 - Northern Access - 1@138.2 - 120@94.2		28.6	86.7	9	9	0	0	76.0	64.7	1.3	5	LOS E	69.39	120.21
MAX	4200-4500	6: A507 - Northern Access - 1@138.2 - 120@94.2		13.0	62.5	7	7	0	0	55.4	45.7	1.1	5	LOS E	69.39	120.21
					69	94				66.59	56.08	1.2	5.0	LOS E	69	120

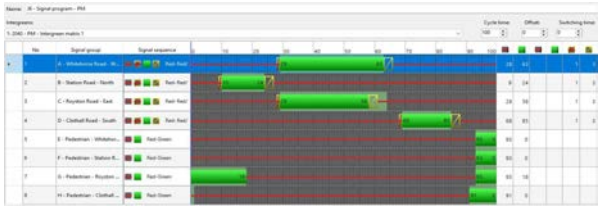
A507 (S) - Northbound - Bus Priority - 20 sim runs (5 minute Segments) Average

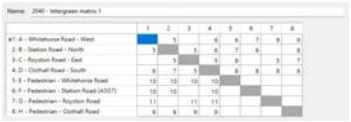
$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Avg,Max)
AVG	900-1200	7: Bus Priority Junction - 1@37.7 - 1@101.2		3.0	40.0	34	34	0	0	11.5	4.6	0.4	2	LOS B	55.07	118.59
AVG	1200-1500	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.4	18.3	35	35	0	0	17.6	9.4	0.6	2	LOS B	55.07	118.59
AVG	1500-1800	7: Bus Priority Junction - 1@37.7 - 1@101.2		4.3	47.6	38	38	0	0	12.3	4.5	0.3	2	LOS B	55.07	118.59
AVG	1800-2100	7: Bus Priority Junction - 1@37.7 - 1@101.2		8.8	88.9	34	33	0	0	22.3	11.6	0.9	3	LOS C	55.07	118.59
AVG	2100-2400	7: Bus Priority Junction - 1@37.7 - 1@101.2		5.9	72.0	43	42	0	0	17.7	8.2	0.6	2	LOS B	55.07	118.59
AVG	2400-2700	7: Bus Priority Junction - 1@37.7 - 1@101.2		3.2	44.3	32	32	0	0	21.0	11.0	0.7	3	LOS C	55.07	118.59
AVG	2700-3000	7: Bus Priority Junction - 1@37.7 - 1@101.2		4.9	54.7	44	44	0	0	12.3	4.6	0.4	2	LOS B	55.07	118.59
AVG	3000-3300	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.3	15.8	37	37	0	0	16.7	8.3	0.5	2	LOS B	55.07	118.59
AVG	3300-3600	7: Bus Priority Junction - 1@37.7 - 1@101.2		4.9	48.9	39	39	0	0	11.8	4.2	0.3	2	LOS B	55.07	118.59
AVG	3600-3900	7: Bus Priority Junction - 1@37.7 - 1@101.2		8.9	99.3	32	32	0	0	22.8	11.8	0.9	3	LOS C	55.07	118.59
AVG	3900-4200	7: Bus Priority Junction - 1@37.7 - 1@101.2		6.3	93.1	44	44	0	0	15.9	7.3	0.6	2	LOS B	55.07	118.59
AVG	4200-4500	7: Bus Priority Junction - 1@37.7 - 1@101.2		3.0	38.0	32	32	0	0	19.4	10.2	0.7	2	LOS B	55.07	118.59
					55	444				16.78	7.98	0.6	2.0	LOS B	55	119

A507 (N) Southbound - Bus Priority - 20 sim runs (5 minute Segments) Average

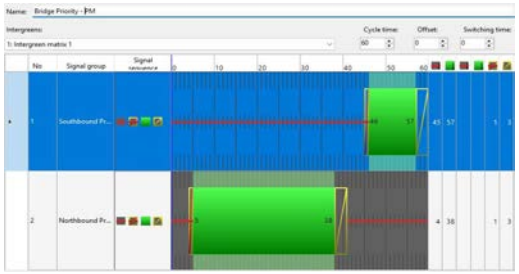
$MOI	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(A	QLenMax(Ave,Max)
AVG	900-1200	7: Bus Priority Junction - 117@99.1 - 4@21.0		14.5	49.5	19	19	0	0	47.0	38.5	1.0	4	LOS D	58.00	89.97
AVG	1200-1500	7: Bus Priority Junction - 117@99.1 - 4@21.0		35.7	75.5	17	17	0	0	81.1	72.1	1.1	6	LOS F	58.00	89.97
AVG	1500-1800	7: Bus Priority Junction - 117@99.1 - 4@21.0		13.4	56.1	27	26	0	0	35.6	27.0	1.0	4	LOS D	58.00	89.97
AVG	1800-2100	7: Bus Priority Junction - 117@99.1 - 4@21.0		10.3	43.4	19	19	0	0	30.6	22.3	1.0	3	LOS C	58.00	89.97
AVG	2100-2400	7: Bus Priority Junction - 117@99.1 - 4@21.0		14.7	53.6	18	18	0	0	29.4	21.0	1.0	3	LOS C	58.00	89.97
AVG	2400-2700	7: Bus Priority Junction - 117@99.1 - 4@21.0		18.1	53.9	19	19	0	0	37.8	29.0	1.0	3	LOS C	58.00	89.97
AVG	2700-3000	7: Bus Priority Junction - 117@99.1 - 4@21.0		35.8	78.0	25	25	0	0	68.2	59.0	1.1	5	LOS E	58.00	89.97
AVG	3000-3300	7: Bus Priority Junction - 117@99.1 - 4@21.0		44.8	82.6	17	17	0	0	87.7	78.6	1.1	6	LOS F	58.00	89.97
AVG	3300-3600	7: Bus Priority Junction - 117@99.1 - 4@21.0		18.7	62.9	29	29	0	0	42.2	33.6	1.0	4	LOS D	58.00	89.97
AVG	3600-3900	7: Bus Priority Junction - 117@99.1 - 4@21.0		9.4	44.6	17	17	0	0	29.7	21.2	1.0	3	LOS C	58.00	89.97
AVG	3900-4200	7: Bus Priority Junction - 117@99.1 - 4@21.0		13.4	47.2	20	20	0	0	29.5	21.2	1.0	3	LOS C	58.00	89.97
AVG	4200-4500	7: Bus Priority Junction - 117@99.1 - 4@21.0		14.3	48.6	21	21	0	0	29.6	21.3	1.0	3	LOS C	58.00	89.97
					58	248				45.69	37.07	1.0	4.0	LOS D	58	90

A507 / Whitehorse Road / Clothall Road / Royston Road



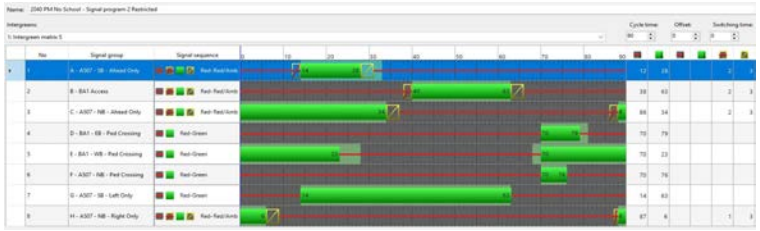


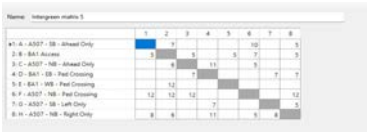
Bridge Priority



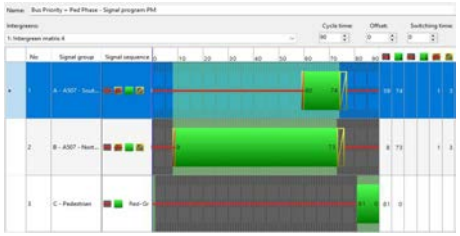


Northern Access Junction





Bus Priority + Ped Phase - Bus Priority signals work on detectors. Called only when required.



2040 AM - With School

Junction - 100 Sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Station Road	24	110.74	162.97	64.69	1.2	LOS_E
Royston Road - Ahead	21	73.10	128.74	55.21	1.0	LOS_D
Royston Road - Left	21	64.36	120.88	57.62	1.1	LOS_E
Clothall Road	15	345.42	505.42	280.63	4.7	LOS_F
Whitehorse Street - Ahead & LeftTurn	11	321.25	481.30	205.25	4.3	LOS_F
Whitehorse Street - Right Turn	11	196.46	456.15	221.87	5.1	LOS_F

Priority Working - 60 Sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
Railway Underpass - Southbound	31	70.67	101.16	33.25	1.22	LOS_C
Railway Underpass - Northbound	32	35.41	58.44	17.12	0.00	LOS_B

Northern Junction - 90 sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Station Road (N) - Left Turn	118	37.31	54.27	15.41	0.5	LOS_B
A507 - Station Road (N) - Ahead Only	118	37.31	54.27	48.36	1.0	LOS_D
BA1 - Access - Left Turn	121	35.51	75.86	24.11	0.7	LOS_C
BA1 - Access - Right Turn	121	63.15	100.69	25.36	0.8	LOS_C
A507 - Station Road (S) - Ahead	1	44.29	75.74	38.27	0.9	LOS_D
A507 - Station Road (S) - Right Turn	1	44.29	75.74	61.93	1.2	LOS_E

Bus Priority Working - 90 Sec Cycle Time 1 ped phase every cycle. Signals for Buses only called when required.	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Northbound	1	23.38	54.20	11.95	0.41	LOS_B
A507 - Southbound	117	54.20	92.09	31	0.94	LOS_C









Notes

20 Simulation Runs
Qlen Ave Max (every 5mins), (Qlen Max, Avg)
Time periods indicative
Vissim Qlen Ave MAX (5mins) to compare with Linsig MMQ Outputs
Veh Delay (Delay of all vehicles. The delay of a vehicle in leaving a travel time measurement is obtained by subtracting the theoretical (ideal) travel time from the actual travel time. The theoretical travel time is the travel time which could be achieved if there were no other vehicles and/or no signal controls or other reasons for stops.

1	LOS_A
2	LOS_B
3	LOS_C
4	LOS_D
5	LOS_E
6	LOS_F

Southbound - 20 sim runs (5 minute Segments) Average

SIMO!	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 31@2.1 - 31@108.8	10.70	59.51	20	20	0	0	22.79	12.37	0.89	3	LOS_C	70.67	101.16
AVG	1200-1500	2: Railway Bridge Priority - 31@2.1 - 31@108.8	18.05	73.88	28	26	1	1	35.07	21.57	1.07	4	LOS_D	70.67	101.16
AVG	1500-1800	2: Railway Bridge Priority - 31@2.1 - 31@108.8	14.87	70.16	23	22	1	0	30.48	18.67	1.09	3	LOS_C	70.67	101.16
AVG	1800-2100	2: Railway Bridge Priority - 31@2.1 - 31@108.8	16.69	76.76	26	24	1	1	36.35	19.18	1.59	3	LOS_C	70.67	101.16
AVG	2100-2400	2: Railway Bridge Priority - 31@2.1 - 31@108.8	15.55	66.25	28	28	1	0	33.27	20.42	1.26	3	LOS_C	70.67	101.16
AVG	2400-2700	2: Railway Bridge Priority - 31@2.1 - 31@108.8	22.26	78.41	27	25	1	1	38.80	24.05	1.29	4	LOS_D	70.67	101.16
AVG	2700-3000	2: Railway Bridge Priority - 31@2.1 - 31@108.8	12.80	65.29	24	23	0	0	26.87	15.41	1.15	3	LOS_C	70.67	101.16
AVG	3000-3300	2: Railway Bridge Priority - 31@2.1 - 31@108.8	16.68	70.00	27	25	1	1	34.30	21.33	1.09	3	LOS_C	70.67	101.16
AVG	3300-3600	2: Railway Bridge Priority - 31@2.1 - 31@108.8	15.14	66.52	25	24	1	0	31.40	19.38	1.10	3	LOS_C	70.67	101.16
AVG	3600-3900	2: Railway Bridge Priority - 31@2.1 - 31@108.8	17.33	73.12	27	24	1	2	33.54	16.30	1.45	3	LOS_C	70.67	101.16
AVG	3900-4200	2: Railway Bridge Priority - 31@2.1 - 31@108.8	17.46	69.02	28	28	1	0	34.27	21.24	1.26	3	LOS_C	70.67	101.16
AVG	4200-4500	2: Railway Bridge Priority - 31@2.1 - 31@108.8	23.16	79.17	26	25	1	1	41.87	26.40	1.43	4	LOS_D	70.67	101.16
				71	309				33.25	19.69	1.22	3.0	LOS_C	71	101

Northbound - 20 sim runs (5 minute Segments) Average

SIMO!	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 32@67.4 - 32@173.4	3.08	31.47	16	15	1	0	13.56	6.61	0.54	2	LOS_B	35.41	58.44
AVG	1200-1500	2: Railway Bridge Priority - 32@67.4 - 32@173.4	6.42	48.20	20	18	1	1	19.83	9.73	0.68	2	LOS_B	35.41	58.44
AVG	1500-1800	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.06	33.84	20	19	1	0	15.62	7.61	0.62	2	LOS_B	35.41	58.44
AVG	1800-2100	2: Railway Bridge Priority - 32@67.4 - 32@173.4	5.29	44.20	20	18	1	1	19.28	8.00	0.77	2	LOS_B	35.41	58.44
AVG	2100-2400	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.31	31.06	19	17	1	1	18.47	8.48	0.77	2	LOS_B	35.41	58.44
AVG	2400-2700	2: Railway Bridge Priority - 32@67.4 - 32@173.4	5.14	36.40	20	18	1	1	19.00	8.34	0.78	2	LOS_B	35.41	58.44
AVG	2700-3000	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.33	35.77	19	18	1	0	16.59	8.01	0.62	2	LOS_B	35.41	58.44
AVG	3000-3300	2: Railway Bridge Priority - 32@67.4 - 32@173.4	3.34	27.60	18	16	1	0	14.88	6.89	0.59	2	LOS_B	35.41	58.44
AVG	3300-3600	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.08	30.53	20	18	1	1	17.10	7.24	0.63	2	LOS_B	35.41	58.44
AVG	3600-3900	2: Railway Bridge Priority - 32@67.4 - 32@173.4	3.82	32.67	19	19	1	0	15.39	7.43	0.61	2	LOS_B	35.41	58.44
AVG	3900-4200	2: Railway Bridge Priority - 32@67.4 - 32@173.4	5.09	37.84	20	18	1	1	19.60	8.99	0.73	2	LOS_B	35.41	58.44
AVG	4200-4500	2: Railway Bridge Priority - 32@67.4 - 32@173.4	4.56	35.37	20	19	1	0	16.07	8.03	0.64	2	LOS_B	35.41	58.44
				35	231				17.12	7.95	0.66	2.0	LOS_B	35	58

A507 - Station Road - 20 sim runs (5 minute Segments) Average

SIMO!	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 24@44.5 - 13@19.3	22.1	81.8	1	1	0	0	41.98	32.97	0.94	4	LOS_D	110.74	162.97
AVG	1200-1500	1: Whitehorse Junction - 24@44.5 - 13@19.3	31.9	97.6	2	0	0	1	56.90	33.77	1.05	5	LOS_E	110.74	162.97
AVG	1500-1800	1: Whitehorse Junction - 24@44.5 - 13@19.3	42.4	108.7	1	0	1	0	63.40	49.33	1.27	5	LOS_E	110.74	162.97
AVG	1800-2100	1: Whitehorse Junction - 24@44.5 - 13@19.3	48.2	121.2	2	1	1	1	61.80	37.88	1.10	5	LOS_E	110.74	162.97
AVG	2100-2400	1: Whitehorse Junction - 24@44.5 - 13@19.3	50.3	114.8	1	1	1	0	79.39	64.54	1.58	5	LOS_E	110.74	162.97
AVG	2400-2700	1: Whitehorse Junction - 24@44.5 - 13@19.3	43.7	117.0	2	1	0	1	64.89	41.75	1.24	5	LOS_E	110.74	162.97
AVG	2700-3000	1: Whitehorse Junction - 24@44.5 - 13@19.3	49.7	118.7	1	1	0	0	71.89	58.50	1.31	5	LOS_E	110.74	162.97
AVG	3000-3300	1: Whitehorse Junction - 24@44.5 - 13@19.3	34.1	96.1	2	1	0	1	56.59	33.94	1.02	5	LOS_E	110.74	162.97
AVG	3300-3600	1: Whitehorse Junction - 24@44.5 - 13@19.3	47.2	113.1	1	1	1	0	69.95	57.93	1.25	5	LOS_E	110.74	162.97
AVG	3600-3900	1: Whitehorse Junction - 24@44.5 - 13@19.3	52.5	129.6	2	1	1	1	65.85	42.80	1.26	5	LOS_E	110.74	162.97
AVG	3900-4200	1: Whitehorse Junction - 24@44.5 - 13@19.3	50.3	114.8	1	1	1	0	73.81	59.96	1.55	5	LOS_E	110.74	162.97
AVG	4200-4500	1: Whitehorse Junction - 24@44.5 - 13@19.3	46.9	115.4	2	0	0	1	69.86	45.30	1.28	5	LOS_E	110.74	162.97
				111	18				64.69	46.56	1.2	5.0	LOS_E	111	163

Royston Road - Ahead Only - 20 sim runs (5 minute Segments) Average

$MO\ TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVA	LOSAI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG 900-1200	1: Whitehorse Junction - 21@62.5 - 13@19.3		17.25	58.13	16	16	1	0	43.93	31.91	0.89	4	LOS_D	73.10	128.74
AVG 1200-1500	1: Whitehorse Junction - 21@62.5 - 13@19.3		26.44	72.63	20	19	1	0	57.87	43.50	1.06	4	LOS_D	73.10	128.74
AVG 1500-1800	1: Whitehorse Junction - 21@62.5 - 13@19.3		26.15	72.54	20	19	1	0	56.86	42.96	1.04	4	LOS_D	73.10	128.74
AVG 1800-2100	1: Whitehorse Junction - 21@62.5 - 13@19.3		20.24	68.19	20	19	1	0	50.03	36.39	0.94	4	LOS_D	73.10	128.74
AVG 2100-2400	1: Whitehorse Junction - 21@62.5 - 13@19.3		19.29	63.71	19	18	1	0	49.25	36.48	0.95	4	LOS_D	73.10	128.74
AVG 2400-2700	1: Whitehorse Junction - 21@62.5 - 13@19.3		20.14	65.71	19	18	1	0	48.62	35.39	0.89	4	LOS_D	73.10	128.74
AVG 2700-3000	1: Whitehorse Junction - 21@62.5 - 13@19.3		28.52	75.07	19	18	1	0	57.47	43.42	1.05	4	LOS_D	73.10	128.74
AVG 3000-3300	1: Whitehorse Junction - 21@62.5 - 13@19.3		29.10	72.74	19	18	1	0	61.87	48.10	1.06	5	LOS_E	73.10	128.74
AVG 3300-3600	1: Whitehorse Junction - 21@62.5 - 13@19.3		37.01	93.79	21	20	1	0	65.84	49.84	1.18	5	LOS_E	73.10	128.74
AVG 3600-3900	1: Whitehorse Junction - 21@62.5 - 13@19.3		27.39	80.75	19	18	1	0	60.46	45.20	1.08	5	LOS_E	73.10	128.74
AVG 3900-4200	1: Whitehorse Junction - 21@62.5 - 13@19.3		27.57	74.38	21	19	1	0	54.23	41.50	1.05	4	LOS_D	73.10	128.74
AVG 4200-4500	1: Whitehorse Junction - 21@62.5 - 13@19.3		27.55	79.60	20	19	1	0	56.06	41.86	1.01	4	LOS_D	73.10	128.74
				73	233				55.21	41.38	1.0	4.0	LOS_D	73	129

Royston Road - Left Only - 20 sim runs (5 minute Segments) Average

$MO\ TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVA	LOSAI	LOS	QLenMax(	QLenMax(Avg,Max)
MAX 900-1200	1: Whitehorse Junction - 21@62.5 - 17@8.3		10.94	51.04	7	7	0	0	47.03	36.63	0.92	4	LOS_D	64.3643	120.8798
MAX 1200-1500	1: Whitehorse Junction - 21@62.5 - 17@8.3		17.99	68.06	9	8	1	0	56.80	44.04	1.08	4	LOS_D	64.3643	120.8798
MAX 1500-1800	1: Whitehorse Junction - 21@62.5 - 17@8.3		13.03	58.48	8	7	0	0	59.42	45.69	1.07	5	LOS_E	64.3643	120.8798
MAX 1800-2100	1: Whitehorse Junction - 21@62.5 - 17@8.3		14.24	61.46	7	7	0	0	52.98	41.69	0.99	4	LOS_D	64.3643	120.8798
MAX 2100-2400	1: Whitehorse Junction - 21@62.5 - 17@8.3		13.00	55.76	8	8	0	0	52.85	40.80	0.98	4	LOS_D	64.3643	120.8798
MAX 2400-2700	1: Whitehorse Junction - 21@62.5 - 17@8.3		13.52	60.29	8	8	0	0	51.53	37.81	0.94	4	LOS_D	64.3643	120.8798
MAX 2700-3000	1: Whitehorse Junction - 21@62.5 - 17@8.3		14.94	58.76	9	8	1	0	60.20	45.22	1.12	5	LOS_E	64.3643	120.8798
MAX 3000-3300	1: Whitehorse Junction - 21@62.5 - 17@8.3		22.73	67.37	9	8	1	0	60.26	47.42	1.03	5	LOS_E	64.3643	120.8798
MAX 3300-3600	1: Whitehorse Junction - 21@62.5 - 17@8.3		21.55	77.30	9	8	1	0	67.87	52.72	1.20	5	LOS_E	64.3643	120.8798
MAX 3600-3900	1: Whitehorse Junction - 21@62.5 - 17@8.3		21.73	73.72	9	8	1	0	63.44	50.21	1.10	5	LOS_E	64.3643	120.8798
MAX 3900-4200	1: Whitehorse Junction - 21@62.5 - 17@8.3		18.72	72.05	8	8	1	0	59.83	44.82	1.13	5	LOS_E	64.3643	120.8798
MAX 4200-4500	1: Whitehorse Junction - 21@62.5 - 17@8.3		18.72	68.06	9	9	1	0	59.31	45.13	1.12	5	LOS_E	64.3643	120.8798
				64	100				57.62	44.35	1.1	5.0	LOS_E	64	121

Clothall Road - 20 sim runs (5 minute Segments) Average

$MO\ TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVA	LOSAI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG 900-1200	1: Whitehorse Junction - 15@456.3 - 23@57.7		42.31	114.73	19	19	0	0	58.33	45.66	1.11	5	LOS_E	345.42	505.42
AVG 1200-1500	1: Whitehorse Junction - 15@456.3 - 23@57.7		99.39	166.83	21	20	0	0	106.79	88.20	1.69	6	LOS_F	345.42	505.42
AVG 1500-1800	1: Whitehorse Junction - 15@456.3 - 23@57.7		147.13	212.76	22	22	0	0	144.22	120.86	2.39	6	LOS_F	345.42	505.42
AVG 1800-2100	1: Whitehorse Junction - 15@456.3 - 23@57.7		193.86	261.88	21	21	0	0	189.80	160.04	3.14	6	LOS_F	345.42	505.42
AVG 2100-2400	1: Whitehorse Junction - 15@456.3 - 23@57.7		231.84	290.90	20	19	0	1	231.92	191.53	4.29	6	LOS_F	345.42	505.42
AVG 2400-2700	1: Whitehorse Junction - 15@456.3 - 23@57.7		280.02	348.00	22	22	0	0	264.37	224.82	4.62	6	LOS_F	345.42	505.42
AVG 2700-3000	1: Whitehorse Junction - 15@456.3 - 23@57.7		323.20	385.09	20	20	0	0	306.72	261.20	5.11	6	LOS_F	345.42	505.42
AVG 3000-3300	1: Whitehorse Junction - 15@456.3 - 23@57.7		359.83	413.11	20	20	0	0	338.80	290.50	5.49	6	LOS_F	345.42	505.42
AVG 3300-3600	1: Whitehorse Junction - 15@456.3 - 23@57.7		399.35	458.28	21	20	0	0	380.67	325.36	6.32	6	LOS_F	345.42	505.42
AVG 3600-3900	1: Whitehorse Junction - 15@456.3 - 23@57.7		438.05	486.39	22	22	0	0	410.96	352.42	6.71	6	LOS_F	345.42	505.42
AVG 3900-4200	1: Whitehorse Junction - 15@456.3 - 23@57.7		464.85	502.16	21	21	0	0	450.54	385.30	7.47	6	LOS_F	345.42	505.42
AVG 4200-4500	1: Whitehorse Junction - 15@456.3 - 23@57.7		479.40	504.91	20	20	0	0	484.47	414.62	7.95	6	LOS_F	345.42	505.42
				345	249				280.63	238.37	4.7	6.0	LOS_F	345	505

Whitehorse Road - Ahead & Left Turn - 20 sim runs (5 minute Segments) Average

$MO\ TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVA	LOSAI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG 900-1200	1: Whitehorse Junction - 11@281.7 - 19@52.5		49.70	116.44	30	29	1	0	57.16	45.76	1.14	5	LOS_E	321.25	481.30
AVG 1200-1500	1: Whitehorse Junction - 11@281.7 - 19@52.5		104.38	181.16	28	27	1	0	89.45	70.41	1.86	5	LOS_E	321.25	481.30
AVG 1500-1800	1: Whitehorse Junction - 11@281.7 - 19@52.5		136.23	212.65	31	30	1	0	121.06	99.48	2.21	6	LOS_F	321.25	481.30
AVG 1800-2100	1: Whitehorse Junction - 11@281.7 - 19@52.5		171.41	252.85	30	29	1	0	145.67	118.58	2.88	6	LOS_F	321.25	481.30
AVG 2100-2400	1: Whitehorse Junction - 11@281.7 - 19@52.5		201.08	274.69	32	31	1	0	168.97	138.26	3.42	6	LOS_F	321.25	481.30
AVG 2400-2700	1: Whitehorse Junction - 11@281.7 - 19@52.5		242.25	320.15	30	29	1	0	192.33	156.08	3.99	6	LOS_F	321.25	481.30
AVG 2700-3000	1: Whitehorse Junction - 11@281.7 - 19@52.5		267.87	342.11	33	31	2	0	225.39	183.09	4.82	6	LOS_F	321.25	481.30
AVG 3000-3300	1: Whitehorse Junction - 11@281.7 - 19@52.5		312.90	389.66	32	31	1	0	243.69	200.47	4.82	6	LOS_F	321.25	481.30
AVG 3300-3600	1: Whitehorse Junction - 11@281.7 - 19@52.5		345.24	409.17	32	31	1	0	272.68	219.82	6.00	6	LOS_F	321.25	481.30
AVG 3600-3900	1: Whitehorse Junction - 11@281.7 - 19@52.5		376.14	445.38	31	29	1	0	297.58	245.01	5.89	6	LOS_F	321.25	481.30
AVG 3900-4200	1: Whitehorse Junction - 11@281.7 - 19@52.5		375.30	437.18	30	29	1	0	326.03	259.15	8.02	6	LOS_F	321.25	481.30
AVG 4200-4500	1: Whitehorse Junction - 11@281.7 - 19@52.5		411.19	473.59	32	31	1	0	322.99	262.80	7.05	6	LOS_F	321.25	481.30
				321	371				205.25	166.58	4.3	6.0	LOS_F	321	481

Whitehorse Road - Right Turn - 20 sim runs (5 minute Segments) Average

$MO\ TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVA	LOSAI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG 900-1200	1: Whitehorse Junction - 11@555.6 - 17@8.3		4.23	21.36	5	5	0	0	66.31	52.37	1.74	5	LOS_E	196.46	456.15
AVG 1200-1500	1: Whitehorse Junction - 11@555.6 - 17@8.3		14.29	43.13	5	5	0	0	105.31	83.68	2.69	6	LOS_F	196.46	456.15
AVG 1500-1800	1: Whitehorse Junction - 11@555.6 - 17@8.3		34.31	68.08	6	6	0	0	138.57	113.29	3.01	6	LOS_F	196.46	456.15
AVG 1800-2100	1: Whitehorse Junction - 11@555.6 - 17@8.3		40.52	74.14	4	4	0	0	152.31	122.80	3.50	6	LOS_F	196.46	456.15
AVG 2100-2400	1: Whitehorse Junction - 11@555.6 - 17@8.3		52.32	81.96	5	5	0	0	174.57	142.54	3.95	6	LOS_F	196.46	456.15
AVG 2400-2700	1: Whitehorse Junction - 11@555.6 - 17@8.3		67.98	122.76	4	4	0	0	199.42	161.21	4.55	6	LOS_F	196.46	456.15
AVG 2700-3000	1: Whitehorse Junction - 11@555.6 - 17@8.3		137.06	209.61	5	5	0	0	245.84	201.56	5.52	6	LOS_F	196.46	456.15
AVG 3000-3300	1: Whitehorse Junction - 11@555.6 - 17@8.3		187.97	239.71	5	5	0	0	259.14	213.56	5.46	6	LOS_F	196.46	456.15
AVG 3300-3600	1: Whitehorse Junction - 11@555.6 - 17@8.3		212.58	275.20	5	5	0	0	297.67	240.30	7.12	6	LOS_F	196.46	456.15
AVG 3600-3900	1: Whitehorse Junction - 11@555.6 - 17@8.3		290.95	377.19	6	5	0	0	321.32	263.58	6.84	6	LOS_F	196.46	456.15
AVG 3900-4200	1: Whitehorse Junction - 11@555.6 - 17@8.3		332.56	395.62	6	5	0	0	349.36	278.99	9.00	6	LOS_F	196.46	456.15
AVG 4200-4500	1: Whitehorse Junction - 11@555.6 - 17@8.3		388.90	448.72	6	6	0	0	352.63	286.97	8.26	6	LOS_F	196.46	456.15
				196	62				221.87	180.07	5.1	6.0	LOS_F	196	456

A507 (N) - Left Turn - 20 sim runs (5 minute Segments) Average

$MO\ TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVA	LOSAI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG 900-1200	6: A507 - Northern Access - 118@17.6 - 120@94.2		9.33	36.20	31	30	1	0	17.49	9.51	0.52	2	LOS_B	37.31	54.27
AVG 1200-1500	6: A507 - Northern Access - 118@17.6 - 120@94.2		10.91	37.54	32	31	1	0	16.48	8.82	0.49	2	LOS_B	37.31	54.27
AVG 1500-1800	6: A507 - Northern Access - 118@17.6 - 120@94.2		10.29	38.53	30	29	2	0	15.11	7.62	0.47	2	LOS_B	37.31	54.27
AVG 1800-2100	6: A507 - Northern Access - 118@17.6 - 120@94.2		10.01	39.40	33	31	1	0	15.47	7.79	0.51	2	LOS_B	37.31	54.27
AVG 2100-2400	6: A507 - Northern Access - 118@17.6 - 120@94.2		8.76	34.56	34	33	1	0	13.59	6.35	0.42	2	LOS_B	37.31	54.27
AVG 2400-2700	6: A507 - Northern Access - 118@17.6 - 120@94.2		9.55	33.65	31	29	1	0	13.80	6.45	0.39	2	LOS_B	37.31	54.27
AVG 2700-3000	6: A507 - Northern Access - 118@17.6 - 120@94.2		10.76	38.88	34	32	1	0	17.52	9.65	0.56	2	LOS_B	37.31	54.27
AVG 3000-3300	6: A507 - Northern Access - 118@17.6 - 120@94.2		9.38	35.54	33	32	1	0	14.93	7.25	0.43	2	LOS_B	37.31	54.27
AVG 3300-3600	6: A507 - Northern Access - 118@17.6 - 120@94.2		10.99	37.13	30	29	1	0	14.58	7.22	0.43	2	LOS_B	37.31	54.27
AVG 3600-3900	6: A507 - Northern Access - 118@17.6 - 120@94.2		10.24	41.63	32	30	1	0	16.46	8.81	0.52	2	LOS_B	37.31	54.27
AVG 3900-4200	6: A507 - Northern Access - 118@17.6 - 120@94.2		10.35	36.13	33	32	1	0	13.43	6.51	0.39	2	LOS_B	37.31	54.27
AVG 4200-4500	6: A507 - Northern Access - 118@17.6 - 120@94.2		10.71	38.50	31	31	1	0	16.04	8.23	0.48	2	LOS_B	37.31	54.27
				37	384				15.41	7.85	0.5	2.0	LOS_B	37	54

A507 (N) - Ahead - 20 sim runs (5 minute Segments) Average

$MO\ TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVA	LOSAI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG 900-1200	6: A507 - Northern Access - 118@17.6 - 117@61.5		9.33	36.20	8	7	1	0	44.81	30.22	0.96	4	LOS_D	37.31	54.27
AVG 1200-1500	6: A507 - Northern Access - 118@17.6 - 117@61.5		10.91	37.54	7	5	1	0	50.87	36.33	0.98	4	LOS_D	37.31	54.27
AVG 1500-1800	6: A507 - Northern Access - 118@17.6 - 117@61.5		10.29	38.53	6	5	1	0	45.77	30.65	1.04	4	LOS_D	37.31	54.27
AVG 1800-2100	6: A507 - Northern Access - 118@17.6 - 117@61.5		10.01	39.40	8	7	1	0	49.05	35.22	0.94	4	LOS_D	37.31	54.27
AVG 2100-2400	6: A507 - Northern Access - 118@17.6 - 117@61.5		8.76	34.56	6	6	1	0	46.08	31.96	0.94	4	LOS_D	37.31	54.27
AVG 2400-2700	6: A507 - Northern Access - 118@17.6 - 117@61.5		9.55	33.65	6	6	1	0	49.38	34.71	1.00	4	LOS_D	37.31	54.27
AVG 2700-3000	6: A507 - Northern Access - 118@17.6 - 117@61.5		10.76	38.88	8	7	1	0	47.08	33.42	1.00	4	LOS_D	37.31	54.27
AVG 3000-3300	6: A507 - Northern Access - 118@17.6 - 117@61.5		9.38	35.54	7	6	1	0	46.46	32.11	0.92	4	LOS_D	37.31	54.27
AVG 3300-3600	6: A507 - Northern Access - 118@17.6 - 117@61.5		10.99	37.13	8	7	1	0	52.21	37.10	1.00	4	LOS_D	37.31	54.27
AVG 3600-3900	6: A507 - Northern Access - 118@17.6 - 117@61.5		10.24	41.63	7	6	1	0	45.76	31.52	1.00	4	LOS_D	37.31	54.27
AVG 3900-4200	6: A507 - Northern Access - 118@17.6 - 117@61.5		10.35	36.13	8	7	1	0	49.36	34.34	1.01	4	LOS_D	37.31	54.27
AVG 4200-4500	6: A507 - Northern Access - 118@17.6 - 117@61.5		10.71	38.50	7	6	1	0	53.47	37.99	1.09	4	LOS_D	37.31	54.27
				37	86				48.36	33.80	1.0	4.0	LOS_D	37	54

BA1 Access (E) - Right Turn - 20 sim runs (5 minute Segments) Average

$MO\ TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVA	LOSAI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG 900-1200	6: A507 - Northern Access - 121@369.5 - 107@49.7		13.53	59.82	24	23	1	0	22.40	15.96	0.62	3	LOS_C	63.15	100.69
AVG 1200-1500	6: A507 - Northern Access - 121@369.5 - 107@49.7		15.42	76.56	35	34	2	0	26.19	18.38	0.73	3	LOS_C	63.15	100.69
AVG 1500-1800	6: A507 - Northern Access - 121@369.5 - 107@49.7		13.45	63.86	29	28	1	0	22.75	15.53	0.65	3	LOS_C	63.15	100.69
AVG 1800-2100	6: A507 - Northern Access - 121@369.5 - 107@49.7		14.03	57.99	25	24	1	0	22.62	15.63	0.64	3	LOS_C	63.15	100.69
AVG 2100-2400	6: A507 - Northern Access - 121@369.5 - 107@49.7		14.32	67.81	34	33	1	0	25.37	17.73	0.68	3	LOS_C	63.15	100.69

AVG	2400-2700	6: A507 - Northern Access - 121@369.5 - 107@49.7		16.47	68.21	29	28	1	0	25.86	17.88	0.73	3	LOS_C	63.15	100.69
AVG	2700-3000	6: A507 - Northern Access - 121@369.5 - 107@49.7		16.49	67.08	28	27	1	0	23.72	16.38	0.67	3	LOS_C	63.15	100.69
AVG	3000-3300	6: A507 - Northern Access - 121@369.5 - 107@49.7		12.38	61.64	33	31	1	0	24.57	17.37	0.68	3	LOS_C	63.15	100.69
AVG	3300-3600	6: A507 - Northern Access - 121@369.5 - 107@49.7		11.35	54.83	27	26	1	0	22.12	15.05	0.62	3	LOS_C	63.15	100.69
AVG	3600-3900	6: A507 - Northern Access - 121@369.5 - 107@49.7		13.96	56.15	25	25	1	0	23.78	16.87	0.66	3	LOS_C	63.15	100.69
AVG	3900-4200	6: A507 - Northern Access - 121@369.5 - 107@49.7		13.62	63.16	34	33	1	0	25.22	17.59	0.69	3	LOS_C	63.15	100.69
AVG	4200-4500	6: A507 - Northern Access - 121@369.5 - 107@49.7		14.35	60.66	27	26	1	0	24.67	17.50	0.67	3	LOS_C	63.15	100.69
					63	350				24.11	16.82	0.7	3.0	LOS_C	63	101

BA1 Access (E) - Left Turn - 20 sim runs (5 minute Segments) Average

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.47	35.72	9	9	0	0	23.29	16.09	0.67	3	LOS_C	35.51	75.86
AVG	1200-1500	6: A507 - Northern Access - 121@369.5 - 117@61.5		5.24	42.08	14	14	0	0	29.01	19.93	0.87	3	LOS_C	35.51	75.86
AVG	1500-1800	6: A507 - Northern Access - 121@369.5 - 117@61.5		5.09	37.81	12	12	0	0	28.36	19.05	0.89	3	LOS_C	35.51	75.86
AVG	1800-2100	6: A507 - Northern Access - 121@369.5 - 117@61.5		5.17	31.06	11	11	0	0	23.71	16.53	0.64	3	LOS_C	35.51	75.86
AVG	2100-2400	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.90	30.26	15	15	0	0	24.38	16.36	0.75	3	LOS_C	35.51	75.86
AVG	2400-2700	6: A507 - Northern Access - 121@369.5 - 117@61.5		5.08	36.88	12	12	0	0	25.94	17.70	0.78	3	LOS_C	35.51	75.86
AVG	2700-3000	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.91	36.13	11	11	0	0	23.27	15.89	0.69	3	LOS_C	35.51	75.86
AVG	3000-3300	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.71	37.17	14	14	0	0	28.55	19.94	0.88	3	LOS_C	35.51	75.86
AVG	3300-3600	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.98	34.64	13	13	0	0	25.72	17.45	0.78	3	LOS_C	35.51	75.86
AVG	3600-3900	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.17	29.72	9	9	0	0	21.22	14.14	0.63	3	LOS_C	35.51	75.86
AVG	3900-4200	6: A507 - Northern Access - 121@369.5 - 117@61.5		5.52	44.55	15	15	0	0	25.54	17.35	0.76	3	LOS_C	35.51	75.86
AVG	4200-4500	6: A507 - Northern Access - 121@369.5 - 117@61.5		4.23	30.10	12	12	0	0	25.30	17.37	0.73	3	LOS_C	35.51	75.86
					36	147				25.36	17.32	0.8	3.0	LOS_C	36	76

A507 (S) - Ahead - 20 sim runs (5 minute Segments) Average

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 1@138.2 - 107@49.7		14.13	44.93	12	10	2	0	37.96	28.87	0.92	4	LOS_D	44.29	75.74
AVG	1200-1500	6: A507 - Northern Access - 1@138.2 - 107@49.7		8.62	32.42	9	8	1	0	30.14	22.34	0.77	3	LOS_C	44.29	75.74
AVG	1500-1800	6: A507 - Northern Access - 1@138.2 - 107@49.7		17.51	48.55	13	11	2	0	40.62	32.10	0.87	4	LOS_D	44.29	75.74
AVG	1800-2100	6: A507 - Northern Access - 1@138.2 - 107@49.7		12.09	44.28	15	13	2	0	34.25	25.96	0.86	3	LOS_C	44.29	75.74
AVG	2100-2400	6: A507 - Northern Access - 1@138.2 - 107@49.7		15.69	47.26	12	10	1	0	42.48	33.68	0.92	4	LOS_D	44.29	75.74
AVG	2400-2700	6: A507 - Northern Access - 1@138.2 - 107@49.7		17.89	48.61	11	10	2	0	44.80	36.02	0.90	4	LOS_D	44.29	75.74
AVG	2700-3000	6: A507 - Northern Access - 1@138.2 - 107@49.7		13.66	47.03	15	14	1	0	35.48	26.80	0.90	4	LOS_D	44.29	75.74
AVG	3000-3300	6: A507 - Northern Access - 1@138.2 - 107@49.7		11.64	38.07	10	9	1	0	33.83	26.03	0.77	3	LOS_C	44.29	75.74
AVG	3300-3600	6: A507 - Northern Access - 1@138.2 - 107@49.7		17.30	48.73	11	9	1	0	47.52	37.87	0.98	4	LOS_D	44.29	75.74
AVG	3600-3900	6: A507 - Northern Access - 1@138.2 - 107@49.7		12.49	47.16	15	14	1	0	35.57	26.72	0.90	4	LOS_D	44.29	75.74
AVG	3900-4200	6: A507 - Northern Access - 1@138.2 - 107@49.7		11.63	38.66	10	9	1	0	35.98	28.41	0.76	4	LOS_D	44.29	75.74
AVG	4200-4500	6: A507 - Northern Access - 1@138.2 - 107@49.7		16.05	45.78	11	10	1	0	40.55	32.31	0.85	4	LOS_D	44.29	75.74
					44	144				38.27	29.76	0.9	4.0	LOS_D	44	76

A507 (S) - Right Turn - 20 sim runs (5 minute Segments) Maximum

$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	6: A507 - Northern Access - 1@138.2 - 120@94.2		14.13	44.93	7	7	0	0	56.04	46.16	1.13	4	LOS_D	44.29	75.74
AVG	1200-1500	6: A507 - Northern Access - 1@138.2 - 120@94.2		8.62	32.42	5	5	0	0	58.22	48.70	1.14	5	LOS_E	44.29	75.74
AVG	1500-1800	6: A507 - Northern Access - 1@138.2 - 120@94.2		17.51	48.55	7	7	0	0	56.53	46.92	1.12	5	LOS_E	44.29	75.74
AVG	1800-2100	6: A507 - Northern Access - 1@138.2 - 120@94.2		12.09	44.28	7	7	0	0	65.24	54.59	1.30	5	LOS_E	44.29	75.74
AVG	2100-2400	6: A507 - Northern Access - 1@138.2 - 120@94.2		15.69	47.26	7	7	0	0	66.79	56.68	1.22	5	LOS_E	44.29	75.74
AVG	2400-2700	6: A507 - Northern Access - 1@138.2 - 120@94.2		17.89	48.61	6	6	0	0	65.58	55.53	1.17	5	LOS_E	44.29	75.74
AVG	2700-3000	6: A507 - Northern Access - 1@138.2 - 120@94.2		13.66	47.03	8	8	0	0	67.42	56.62	1.32	5	LOS_E	44.29	75.74
AVG	3000-3300	6: A507 - Northern Access - 1@138.2 - 120@94.2		11.64	38.07	6	6	0	0	57.82	48.10	1.13	5	LOS_E	44.29	75.74
AVG	3300-3600	6: A507 - Northern Access - 1@138.2 - 120@94.2		17.30	48.73	6	6	0	0	64.53	54.61	1.18	5	LOS_E	44.29	75.74
AVG	3600-3900	6: A507 - Northern Access - 1@138.2 - 120@94.2		12.49	47.16	9	9	0	0	60.70	50.08	1.24	5	LOS_E	44.29	75.74
AVG	3900-4200	6: A507 - Northern Access - 1@138.2 - 120@94.2		11.63	38.66	5	5	0	0	63.62	53.72	1.21	5	LOS_E	44.29	75.74
AVG	4200-4500	6: A507 - Northern Access - 1@138.2 - 120@94.2		16.05	45.78	7	7	0	0	60.64	51.46	1.09	5	LOS_E	44.29	75.74
					44	80				61.93	51.93	1.2	5.0	LOS_E	44	76

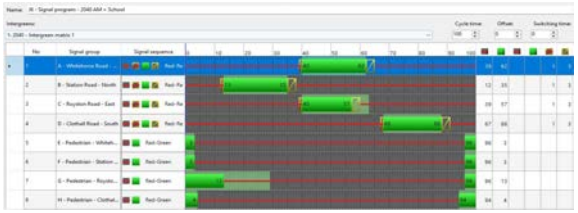
A507 (S) - Northbound - Bus Priority - 20 sim runs (5 minute Segments) Average

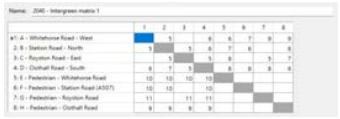
$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.80	28.18	20	18	2	0	14.62	7.10	0.53	2	LOS_B	23.38	54.20
AVG	1200-1500	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.32	20.25	17	16	1	0	14.68	6.87	0.53	2	LOS_B	23.38	54.20
AVG	1500-1800	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.72	26.96	21	19	2	0	10.46	3.91	0.35	2	LOS_B	23.38	54.20
AVG	1800-2100	7: Bus Priority Junction - 1@37.7 - 1@101.2		0.89	19.02	19	18	2	0	11.17	4.51	0.39	2	LOS_B	23.38	54.20
AVG	2100-2400	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.99	24.39	20	18	1	0	15.55	7.23	0.58	2	LOS_B	23.38	54.20
AVG	2400-2700	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.82	28.96	18	16	1	0	9.20	3.21	0.33	1	LOS_A	23.38	54.20
AVG	2700-3000	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.90	26.22	20	19	1	0	15.36	7.76	0.49	2	LOS_B	23.38	54.20
AVG	3000-3300	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.89	26.08	18	17	2	0	10.20	3.62	0.41	1	LOS_A	23.38	54.20
AVG	3300-3600	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.13	19.66	19	17	1	0	13.57	5.76	0.44	2	LOS_B	23.38	54.20
AVG	3600-3900	7: Bus Priority Junction - 1@37.7 - 1@101.2		0.85	15.03	20	19	1	0	6.19	1.68	0.13	1	LOS_A	23.38	54.20
AVG	3900-4200	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.12	21.58	19	18	1	0	13.65	5.54	0.50	2	LOS_B	23.38	54.20
AVG	4200-4500	7: Bus Priority Junction - 1@37.7 - 1@101.2		1.47	24.28	20	18	2	0	8.74	2.71	0.29	1	LOS_A	23.38	54.20
					23	231				11.95	4.99	0.4	2.0	LOS_B	23	54

A507 (N) Southbound - Bus Priority - 20 sim runs (5 minute Segments) Average

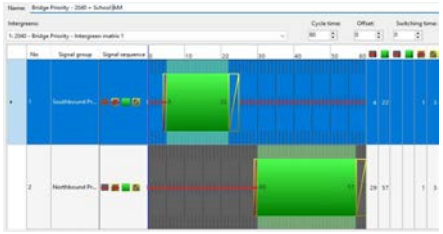
$MO\	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AI	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	7: Bus Priority Junction - 117@99.1 - 4@21.0		6.87	41.67	15	14	1	0	23.90	15.73	0.90	3	LOS_C	54.20	92.09
AVG	1200-1500	7: Bus Priority Junction - 117@99.1 - 4@21.0		22.48	65.77	18	17	1	0	49.81	40.27	1.12	4	LOS_D	54.20	92.09
AVG	1500-1800	7: Bus Priority Junction - 117@99.1 - 4@21.0		18.33	68.02	23	21	2	0	38.31	29.91	0.96	4	LOS_D	54.20	92.09
AVG	1800-2100	7: Bus Priority Junction - 117@99.1 - 4@21.0		8.73	47.20	18	17	1	0	23.00	15.01	0.87	3	LOS_C	54.20	92.09
AVG	2100-2400	7: Bus Priority Junction - 117@99.1 - 4@21.0		10.92	48.57	18	17	1	0	25.07	16.95	0.90	3	LOS_C	54.20	92.09
AVG	2400-2700	7: Bus Priority Junction - 117@99.1 - 4@21.0		10.10	54.36	24	23	1	0	27.06	18.82	0.89	3	LOS_C	54.20	92.09
AVG	2700-3000	7: Bus Priority Junction - 117@99.1 - 4@21.0		9.03	48.58	17	17	1	0	28.00	19.88	0.91	3	LOS_C	54.20	92.09
AVG	3000-3300	7: Bus Priority Junction - 117@99.1 - 4@21.0		19.79	60.79	17	15	1	0	44.10	34.87	1.07	4	LOS_D	54.20	92.09
AVG	3300-3600	7: Bus Priority Junction - 117@99.1 - 4@21.0		13.85	62.05	25	24	1	0	32.14	23.70	0.96	3	LOS_C	54.20	92.09
AVG	3600-3900	7: Bus Priority Junction - 117@99.1 - 4@21.0		7.09	41.93	15	14	1	0	23.87	15.91	0.88	3	LOS_C	54.20	92.09
AVG	3900-4200	7: Bus Priority Junction - 117@99.1 - 4@21.0		11.45	52.41	19	18	1	0	23.77	15.80	0.90	3	LOS_C	54.20	92.09
AVG	4200-4500	7: Bus Priority Junction - 117@99.1 - 4@21.0		13.59	59.01	24	23	1	0	30.81	22.61	0.92	3	LOS_C	54.20	92.09
					54	233				30.82	22.45	0.9	3.0	LOS_C	54	92

A507 / Whitehorse Road / Clothall Road / Royston Road



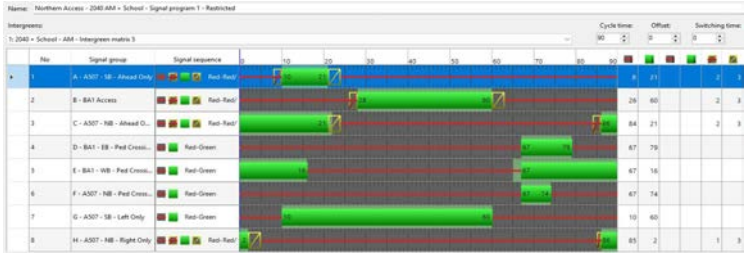


Bridge Priority



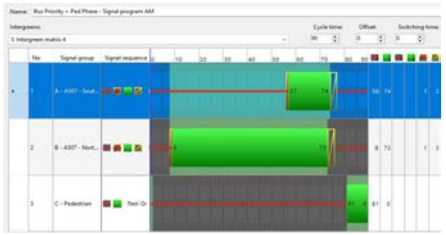


Northern Access Junction





Bus Priority + Ped Phase - Bus Priority signals work on detectors. Called only when required.



2040 PM - No School

Junction - 100 Sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Station Road	24	73.58	109.33	92.24	1.5	LOS_E
Royston Road - Ahead	21	53.34	90.42	36.83	0.8	LOS_D
Royston Road - Left	21	40.07	85.54	37.74	0.8	LOS_D
Clothall Road	15	107.39	165.77	73.68	1.3	LOS_E
Whitehorse Street - Ahead & LeftTurn	11	140.35	226.89	52.87	1.3	LOS_D
Whitehorse Street - Right Turn	11	8.82	43.08	55.11	1.7	LOS_D

Priority Working - 60 Sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
Railway Underpass - Southbound	31	72.09	114.46	71.46	1.82	LOS_E
Railway Underpass - Northbound	32	73.54	121.88	15.12	0.00	LOS_B

Northern Junction - 90 sec Cycle Time	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Station Road (N) - Left Turn	118	58.03	123.86	20.09	0.6	LOS_B
A507 - Station Road (N) - Ahead Only	118	58.03	123.86	86.48	1.5	LOS_E
BA1 - Access - Left Turn	121	12.31	41.40	33.05	0.8	LOS_C
BA1 - Access - Right Turn	121	61.63	95.20	35.69	0.9	LOS_C
A507 - Station Road (S) - Ahead	1	75.66	126.22	26.66	0.7	LOS_C
A507 - Station Road (S) - Right Turn	1	75.66	126.22	62.57	1.2	LOS_E

Bus Priority Working - 90 Sec Cycle Time 1 ped phase every cycle. Signals for Buses only called when required.	Link	Qlen Ave Max (5mins) (m) (Avg, Avg)	Qlen Maximum Queues (m) (Avg, Max)	Veh Delay (s)	Vehicle Stops	LOS
A507 - Northbound	1	62.02	122.88	17.68	0.62	LOS_B
A507 - Southbound	117	49.96	81.52	49	1.05	LOS_D









Notes

20 Simulation Runs
Qlen Ave Max (every 5mins), (Qlen Max, Avg)
Time periods indicative
Vissim Qlen Ave MAX (5mins) to compare with Linsig MMQ Outputs
Veh Delay (Delay of all vehicles. The delay of a vehicle in leaving a travel time measurement is obtained by subtracting the theoretical (ideal) travel time from the actual travel time. The theoretical travel time is the travel time which could be achieved if there were no other vehicles and/or no signal controls or other reasons for stops.

1 LOS_A
2 LOS_B
3 LOS_C
4 LOS_D
5 LOS_E
6 LOS_F

Southbound - 20 sim runs (5 minute Segments) Average

SIMO*	TIMEINT	MOVEMENT	QLEN	QLENMAX		VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 31@2.1 - 31@108.8		15.88	56.36	16	16	0	0	46.94	33.44	1.28	4	LOS_D	72.09	114.46
AVG	1200-1500	2: Railway Bridge Priority - 31@2.1 - 31@108.8		17.44	58.57	17	16	0	1	46.01	31.03	1.38	4	LOS_D	72.09	114.46
AVG	1500-1800	2: Railway Bridge Priority - 31@2.1 - 31@108.8		25.06	64.46	22	22	0	0	61.27	45.87	1.49	5	LOS_E	72.09	114.46
AVG	1800-2100	2: Railway Bridge Priority - 31@2.1 - 31@108.8		25.56	64.31	20	19	0	1	63.15	44.96	1.55	5	LOS_E	72.09	114.46
AVG	2100-2400	2: Railway Bridge Priority - 31@2.1 - 31@108.8		25.42	58.56	20	20	0	0	61.77	46.15	1.57	5	LOS_E	72.09	114.46
AVG	2400-2700	2: Railway Bridge Priority - 31@2.1 - 31@108.8		29.63	67.48	21	20	0	1	60.72	43.61	1.50	5	LOS_E	72.09	114.46
AVG	2700-3000	2: Railway Bridge Priority - 31@2.1 - 31@108.8		24.46	69.46	19	19	0	0	59.98	44.35	1.54	4	LOS_D	72.09	114.46
AVG	3000-3300	2: Railway Bridge Priority - 31@2.1 - 31@108.8		22.70	65.75	19	18	0	1	59.00	41.43	1.63	5	LOS_E	72.09	114.46
AVG	3300-3600	2: Railway Bridge Priority - 31@2.1 - 31@108.8		38.12	77.53	23	22	0	0	71.10	53.77	1.71	5	LOS_E	72.09	114.46
AVG	3600-3900	2: Railway Bridge Priority - 31@2.1 - 31@108.8		50.94	90.73	20	19	0	1	96.81	72.78	2.56	5	LOS_F	72.09	114.46
AVG	3900-4200	2: Railway Bridge Priority - 31@2.1 - 31@108.8		60.97	95.46	21	20	0	1	117.22	89.52	2.96	6	LOS_F	72.09	114.46
AVG	4200-4500	2: Railway Bridge Priority - 31@2.1 - 31@108.8		60.29	96.45	22	21	0	1	113.58	87.88	2.73	5	LOS_E	72.09	114.46
				33	72	240				71.46	52.90	1.82	5.0	LOS_E	72	114

Northbound - 20 sim runs (5 minute Segments) Average

SIMO*	TIMEINT	MOVEMENT	QLEN	QLENMAX		VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	2: Railway Bridge Priority - 32@67.5 - 32@173.4		4.67	44.46	37	37	0	0	11.45	4.39	0.50	2	LOS_B	73.54	121.88
AVG	1200-1500	2: Railway Bridge Priority - 32@67.5 - 32@173.4		11.83	97.62	41	40	0	1	18.05	5.65	0.93	2	LOS_B	73.54	121.88
AVG	1500-1800	2: Railway Bridge Priority - 32@67.5 - 32@173.4		7.18	57.42	44	44	0	0	12.80	4.80	0.57	2	LOS_B	73.54	121.88
AVG	1800-2100	2: Railway Bridge Priority - 32@67.5 - 32@173.4		11.80	95.34	44	42	0	1	18.26	5.65	0.94	2	LOS_B	73.54	121.88
AVG	2100-2400	2: Railway Bridge Priority - 32@67.5 - 32@173.4		5.64	43.46	41	40	0	1	12.18	4.26	0.49	2	LOS_B	73.54	121.88
AVG	2400-2700	2: Railway Bridge Priority - 32@67.5 - 32@173.4		11.88	92.14	42	41	0	1	19.07	5.97	0.95	2	LOS_B	73.54	121.88
AVG	2700-3000	2: Railway Bridge Priority - 32@67.5 - 32@173.4		5.43	49.49	43	43	0	0	11.50	4.27	0.50	2	LOS_B	73.54	121.88
AVG	3000-3300	2: Railway Bridge Priority - 32@67.5 - 32@173.4		9.75	84.67	43	42	0	1	16.91	4.90	0.82	2	LOS_B	73.54	121.88
AVG	3300-3600	2: Railway Bridge Priority - 32@67.5 - 32@173.4		6.32	55.08	45	45	0	0	11.33	4.09	0.49	2	LOS_B	73.54	121.88
AVG	3600-3900	2: Railway Bridge Priority - 32@67.5 - 32@173.4		13.13	103.53	41	40	0	1	19.29	6.55	0.95	2	LOS_B	73.54	121.88
AVG	3900-4200	2: Railway Bridge Priority - 32@67.5 - 32@173.4		6.87	58.51	43	42	1	0	12.42	4.71	0.57	2	LOS_B	73.54	121.88
AVG	4200-4500	2: Railway Bridge Priority - 32@67.5 - 32@173.4		12.63	100.79	43	42	0	1	18.19	5.58	0.92	2	LOS_B	73.54	121.88
				9	74	507				15.12	5.07	0.72	2.0	LOS_B	74	122

A507 - Station Road - 20 sim runs (5 minute Segments) Average

SIMO*	TIMEINT	MOVEMENT	QLEN	QLENMAX		VEHS(ALL)	VEHS(10)	VEHS(20)	VEHS(160)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	LOSVAL(AL	LOS	QLenMax(	QLenMax(Avg,Max)
AVG	900-1200	1: Whitehorse Junction - 24@44.5 - 13@19.3		19.9	54.4	9	9	0	0	68.01	58.19	1.10	5	LOS_E	73.58	109.33
AVG	1200-1500	1: Whitehorse Junction - 24@44.5 - 13@19.3		23.0	58.1	10	9	0	1	60.60	48.48	1.13	5	LOS_E	73.58	109.33
AVG	1500-1800	1: Whitehorse Junction - 24@44.5 - 13@19.3		28.9	63.0	12	12	0	0	71.09	59.53	1.25	5	LOS_E	73.58	109.33
AVG	1800-2100	1: Whitehorse Junction - 24@44.5 - 13@19.3		32.3	67.1	11	10	0	1	81.89	67.53	1.46	5	LOS_E	73.58	109.33
AVG	2100-2400	1: Whitehorse Junction - 24@44.5 - 13@19.3		40.0	75.0	11	11	0	0	96.02	81.59	1.61	6	LOS_F	73.58	109.33
AVG	2400-2700	1: Whitehorse Junction - 24@44.5 - 13@19.3		39.4	71.7	11	10	0	1	88.31	74.41	1.49	5	LOS_E	73.58	109.33
AVG	2700-3000	1: Whitehorse Junction - 24@44.5 - 13@19.3		41.7	79.2	11	10	0	0	107.88	91.41	1.73	6	LOS_F	73.58	109.33
AVG	3000-3300	1: Whitehorse Junction - 24@44.5 - 13@19.3		38.7	76.9	11	10	0	1	94.32	79.32	1.57	5	LOS_E	73.58	109.33
AVG	3300-3600	1: Whitehorse Junction - 24@44.5 - 13@19.3		44.1	79.0	11	11	0	0	98.16	82.89	1.66	5	LOS_E	73.58	109.33
AVG	3600-3900	1: Whitehorse Junction - 24@44.5 - 13@19.3		43.5	76.8	11	11	0	0	100.76	86.08	1.61	5	LOS_E	73.58	109.33
AVG	3900-4200	1: Whitehorse Junction - 24@44.5 - 13@19.3		52.7	88.6	10	9	0	1	116.04	97.67	2.02	6	LOS_F	73.58	109.33
AVG	4200-4500	1: Whitehorse Junction - 24@44.5 - 13@19.3		60.9	93.2	11	11	0	0	123.76	106.47	1.98	6	LOS_F	73.58	109.33
					74	129				92.24	77.80	1.5	5.0	LOS_E	74	109

BA2 Site Access

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: Import of J8_BA2 Access_Proposed.j9
Path: C:\Users\923595\Royal HaskoningDHV\P-PC7029-Baldock-OPA - Team\WIP\02 Calculations\Junction Modelling\Models
Report generation date: 08/09/2025 17:21:56

»2033 + Dev, AM
»2033 + Dev, PM
»2040 + Dev, AM
»2040 + Dev, PM
»2040 + Dev + School, AM
»2040 + Dev + School, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC
	2033 + Dev							
Stream B-AC	0.1	0.5	5.84	0.10	0.0	0.5	5.57	0.04
Stream C-AB	0.1	0.5	4.82	0.05	0.2	0.9	4.99	0.11
Stream A-BC	0.2	0.5	2.35	0.17	0.2	0.5	2.33	0.18
	2040 + Dev							
Stream B-AC	0.1	0.5	5.82	0.09	0.0	0.5	5.58	0.04
Stream C-AB	0.1	0.5	4.79	0.04	0.2	0.9	4.99	0.11
Stream A-BC	0.2	0.5	2.37	0.17	0.2	0.5	2.34	0.19
	2040 + Dev + School							
Stream B-AC	0.1	0.5	5.82	0.09	0.0	0.5	5.57	0.04
Stream C-AB	0.1	0.5	4.81	0.04	0.2	0.9	4.97	0.11
Stream A-BC	0.2	0.5	2.37	0.17	0.2	0.5	2.33	0.18

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

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

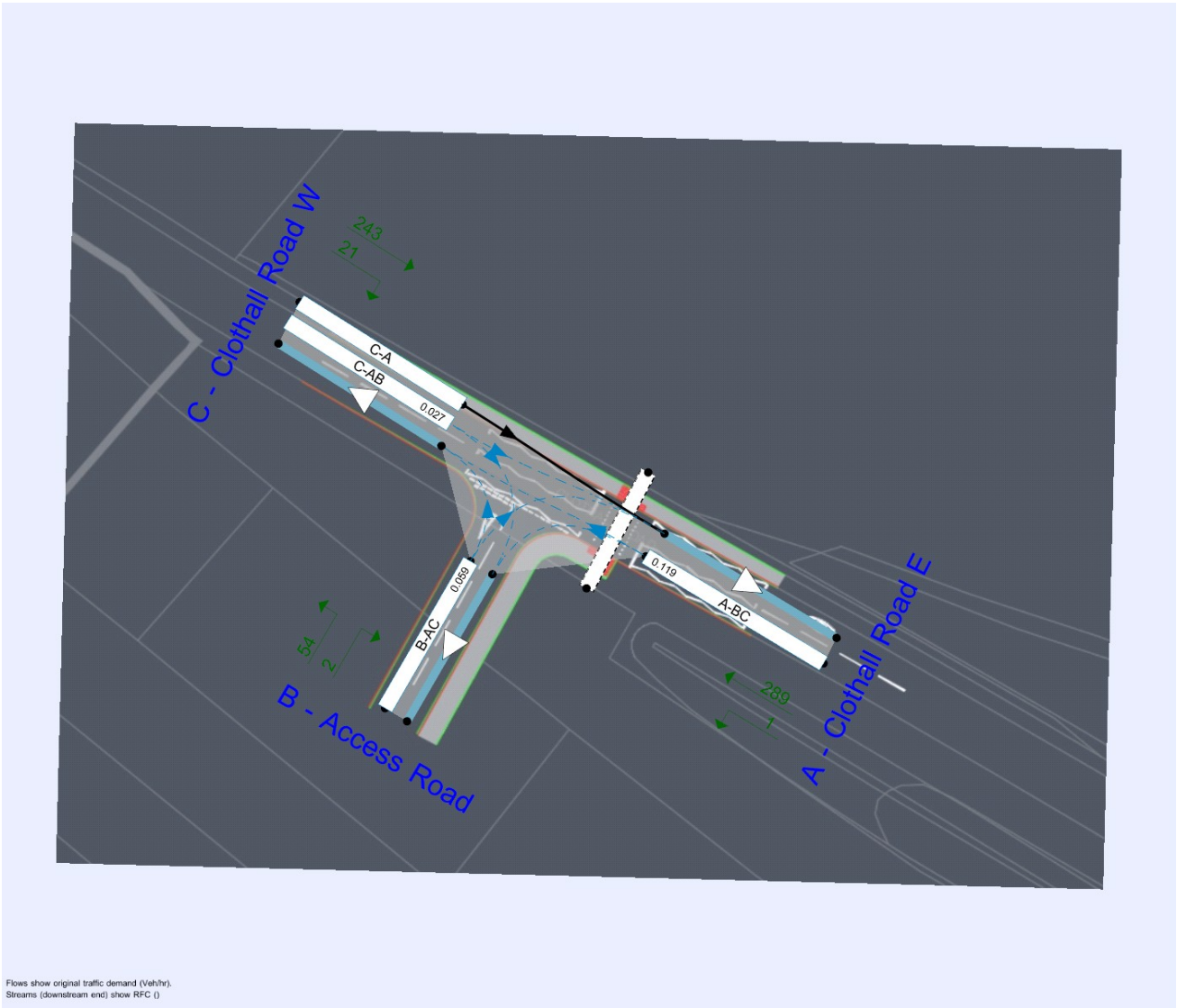
File summary

File Description

Title	BA2 Access - Clothall Road
Location	Baldock, SG7 6RB
Site number	J8
Date	23/07/2025
Version	1
Status	Draft
Identifier	
Client	Urban & Civic
Jobnumber	PC7029
Enumerator	CORPORATEROOT\926654
Description	Junction 8 - Proposed BA2 Access Junction

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033 + Dev	AM	ONE HOUR	07:45	09:15	15
D8	2033 + Dev	PM	ONE HOUR	16:45	18:15	15
D11	2040 + Dev	AM	ONE HOUR	07:45	09:15	15
D12	2040 + Dev	PM	ONE HOUR	16:45	18:15	15
D13	2040 + Dev + School	AM	ONE HOUR	07:45	09:15	15
D14	2040 + Dev + School	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2033 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	A - Clothall Road E - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA2 Access	T-Junction	Two-way		1.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Clothall Road E		Major
B	Access Road		Minor
C	Clothall Road W		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Clothall Road W	7.30			250.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Access Road	One lane	4.87	216	57

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
A - Clothall Road E	1.00	3.00	2.90	1.00	6.00	6.00	7.00

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	685	0.118	0.298	0.187	0.425
B-C	783	0.113	0.286	-	-
C-B	719	0.263	0.263	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033 + Dev	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Clothall Road E		✓	276	100.000
B - Access Road		✓	59	100.000
C - Clothall Road W		✓	258	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
A - Clothall Road E	0.00
B - Access Road	
C - Clothall Road W	

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	1	275
	B - Access Road	3	0	56
	C - Clothall Road W	236	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	0	4
	B - Access Road	0	0	0
	C - Clothall Road W	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.10	5.84	0.1	0.5	A
C-AB	0.05	4.82	0.1	0.5	A
C-A					
A-BC	0.17	2.35	0.2	0.5	A

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	44		712	0.062	44	0.1	5.384	A
C-AB	22		770	0.028	21	0.0	4.806	A
C-A	173				173			
A-BC	208	0.00	1837	0.113	207	0.1	2.209	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	53		699	0.076	53	0.1	5.568	A
C-AB	27		782	0.035	27	0.0	4.765	A
C-A	205				205			
A-BC	248	0.00	1837	0.135	248	0.2	2.265	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65		682	0.095	65	0.1	5.835	A
C-AB	36		798	0.045	36	0.1	4.716	A
C-A	248				248			
A-BC	304	0.00	1837	0.165	304	0.2	2.347	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65		682	0.095	65	0.1	5.836	A
C-AB	36		798	0.045	36	0.1	4.724	A
C-A	248				248			
A-BC	304	0.00	1837	0.165	304	0.2	2.347	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	53		699	0.076	53	0.1	5.571	A
C-AB	27		782	0.035	27	0.0	4.782	A
C-A	205				205			
A-BC	248	0.00	1837	0.135	248	0.2	2.267	A

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	44		712	0.062	44	0.1	5.394	A
C-AB	22		770	0.028	22	0.0	4.817	A
C-A	173				173			
A-BC	208	0.00	1837	0.113	208	0.1	2.211	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BC	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A
A-BC	0.16	0.00	0.00	0.16	0.16			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.07	0.03	0.26	0.46	0.49			N/A	N/A
A-BC	0.20	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A
A-BC	0.20	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A
A-BC	0.16	0.00	0.00	0.16	0.16			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BC	0.13	0.00	0.00	0.13	0.13			N/A	N/A

2033 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	A - Clothall Road E - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA2 Access	T-Junction	Two-way		1.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2033 + Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Clothall Road E		✓	314	100.000
B - Access Road		✓	25	100.000
C - Clothall Road W		✓	308	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
A - Clothall Road E	0.00
B - Access Road	
C - Clothall Road W	

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	2	312
	B - Access Road	1	0	24
	C - Clothall Road W	256	52	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	0	1
	B - Access Road	0	0	0
	C - Clothall Road W	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.04	5.57	0.0	0.5	A
C-AB	0.11	4.99	0.2	0.9	A
C-A					
A-BC	0.18	2.33	0.2	0.5	A

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19		707	0.027	19	0.0	5.229	A
C-AB	52		779	0.067	52	0.1	4.953	A
C-A	180				180			
A-BC	236	0.00	1891	0.125	236	0.1	2.174	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22		693	0.032	22	0.0	5.368	A
C-AB	66		792	0.083	66	0.1	4.963	A
C-A	211				211			
A-BC	282	0.00	1891	0.149	282	0.2	2.236	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28		674	0.041	27	0.0	5.571	A
C-AB	88		811	0.109	88	0.2	4.981	A
C-A	251				251			
A-BC	346	0.00	1891	0.183	346	0.2	2.328	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28		674	0.041	28	0.0	5.571	A
C-AB	88		811	0.109	88	0.2	4.986	A
C-A	251				251			
A-BC	346	0.00	1891	0.183	346	0.2	2.328	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22		693	0.032	23	0.0	5.371	A
C-AB	66		792	0.084	66	0.1	4.968	A
C-A	211				211			
A-B-C	282	0.00	1891	0.149	282	0.2	2.237	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19		707	0.027	19	0.0	5.233	A
C-AB	52		778	0.067	52	0.1	4.959	A
C-A	180				180			
A-B-C	236	0.00	1891	0.125	237	0.1	2.176	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A
A-B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.13	0.03	0.25	0.45	0.48			N/A	N/A
A-B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.19	0.03	0.27	0.48	0.87			N/A	N/A
A-B-C	0.22	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A
A-B-C	0.22	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A
A-B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A
A-B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2040 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	A - Clothall Road E - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA2 Access	T-Junction	Two-way		1.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2040 + Dev	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Clothall Road E		✓	291	100.000
B - Access Road		✓	56	100.000
C - Clothall Road W		✓	271	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
A - Clothall Road E	0.00
B - Access Road	
C - Clothall Road W	

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	1	290
	B - Access Road	2	0	54
	C - Clothall Road W	250	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	0	4
	B - Access Road	0	0	0
	C - Clothall Road W	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.09	5.82	0.1	0.5	A
C-AB	0.04	4.79	0.1	0.5	A
C-A					
A-BC	0.17	2.37	0.2	0.5	A

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42		711	0.059	42	0.1	5.376	A
C-AB	21		774	0.027	21	0.0	4.779	A
C-A	183				183			
A-BC	219	0.00	1837	0.119	219	0.1	2.224	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50		698	0.072	50	0.1	5.556	A
C-AB	26		786	0.034	26	0.0	4.732	A
C-A	217				217			
A-BC	262	0.00	1837	0.142	261	0.2	2.284	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	62		680	0.091	62	0.1	5.822	A
C-AB	35		804	0.044	35	0.1	4.675	A
C-A	263				263			
A-BC	320	0.00	1837	0.174	320	0.2	2.373	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	62		680	0.091	62	0.1	5.823	A
C-AB	35		804	0.044	35	0.1	4.685	A
C-A	263				263			
A-BC	320	0.00	1837	0.174	320	0.2	2.373	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50		698	0.072	50	0.1	5.559	A
C-AB	27		786	0.034	27	0.0	4.751	A
C-A	217				217			
A-BC	262	0.00	1837	0.142	262	0.2	2.285	A

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42		711	0.059	42	0.1	5.380	A
C-AB	21		774	0.027	21	0.0	4.790	A
C-A	183				183			
A-BC	219	0.00	1837	0.119	219	0.1	2.225	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BC	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A
A-BC	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.06	0.03	0.25	0.46	0.48			N/A	N/A
A-BC	0.21	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A
A-BC	0.21	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A
A-BC	0.17	0.00	0.00	0.17	0.17			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BC	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2040 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	A - Clothall Road E - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA2 Access	T-Junction	Two-way		1.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2040 + Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Clothall Road E		✓	320	100.000
B - Access Road		✓	24	100.000
C - Clothall Road W		✓	307	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
A - Clothall Road E	0.00
B - Access Road	
C - Clothall Road W	

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	2	318
	B - Access Road	1	0	23
	C - Clothall Road W	256	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	0	1
	B - Access Road	0	0	0
	C - Clothall Road W	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.04	5.58	0.0	0.5	A
C-AB	0.11	4.99	0.2	0.9	A
C-A					
A-BC	0.19	2.34	0.2	0.5	A

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18		706	0.026	18	0.0	5.236	A
C-AB	51		777	0.066	51	0.1	4.954	A
C-A	180				180			
A-BC	241	0.00	1891	0.127	240	0.1	2.180	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22		691	0.031	22	0.0	5.376	A
C-AB	65		790	0.082	65	0.1	4.963	A
C-A	211				211			
A-BC	288	0.00	1891	0.152	288	0.2	2.244	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26		671	0.039	26	0.0	5.581	A
C-AB	86		809	0.107	86	0.2	4.981	A
C-A	252				252			
A-BC	352	0.00	1891	0.186	352	0.2	2.338	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26		671	0.039	26	0.0	5.582	A
C-AB	86		809	0.107	86	0.2	4.986	A
C-A	252				252			
A-BC	352	0.00	1891	0.186	352	0.2	2.338	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22		691	0.031	22	0.0	5.377	A
C-AB	65		790	0.082	65	0.1	4.968	A
C-A	211				211			
A-B-C	288	0.00	1891	0.152	288	0.2	2.246	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18		705	0.026	18	0.0	5.238	A
C-AB	51		777	0.066	51	0.1	4.962	A
C-A	180				180			
A-B-C	241	0.00	1891	0.127	241	0.1	2.182	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A
A-B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.13	0.03	0.26	0.46	0.49			N/A	N/A
A-B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.18	0.03	0.27	0.48	0.89			N/A	N/A
A-B-C	0.23	0.03	0.25	0.45	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A
A-B-C	0.23	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A
A-B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A
A-B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A

2040 + Dev + School, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	A - Clothall Road E - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA2 Access	T-Junction	Two-way		1.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2040 + Dev + School	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Clothall Road E		✓	290	100.000
B - Access Road		✓	56	100.000
C - Clothall Road W		✓	264	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
A - Clothall Road E	0.00
B - Access Road	
C - Clothall Road W	

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	1	289
	B - Access Road	2	0	54
	C - Clothall Road W	243	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	0	4
	B - Access Road	0	0	0
	C - Clothall Road W	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.09	5.82	0.1	0.5	A
C-AB	0.04	4.81	0.1	0.5	A
C-A					
A-BC	0.17	2.37	0.2	0.5	A

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42		712	0.059	42	0.1	5.373	A
C-AB	21		771	0.027	21	0.0	4.797	A
C-A	178				178			
A-BC	218	0.00	1837	0.119	218	0.1	2.223	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50		698	0.072	50	0.1	5.553	A
C-AB	26		783	0.034	26	0.0	4.754	A
C-A	211				211			
A-BC	261	0.00	1837	0.142	261	0.2	2.283	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	62		680	0.091	62	0.1	5.818	A
C-AB	35		799	0.044	35	0.1	4.701	A
C-A	256				256			
A-BC	319	0.00	1837	0.174	319	0.2	2.371	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	62		680	0.091	62	0.1	5.819	A
C-AB	35		799	0.044	35	0.1	4.711	A
C-A	256				256			
A-BC	319	0.00	1837	0.174	319	0.2	2.371	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50		698	0.072	50	0.1	5.558	A
C-AB	26		782	0.034	26	0.0	4.770	A
C-A	211				211			
A-B-C	261	0.00	1837	0.142	261	0.2	2.284	A

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42		712	0.059	42	0.1	5.380	A
C-AB	21		771	0.027	21	0.0	4.808	A
C-A	178				178			
A-B-C	218	0.00	1837	0.119	218	0.1	2.224	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-B-C	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A
A-B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.06	0.03	0.25	0.46	0.48			N/A	N/A
A-B-C	0.21	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A
A-B-C	0.21	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A
A-B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2040 + Dev + School, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	A - Clothall Road E - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA2 Access	T-Junction	Two-way		1.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2040 + Dev + School	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Clothall Road E		✓	317	100.000
B - Access Road		✓	24	100.000
C - Clothall Road W		✓	310	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
A - Clothall Road E	0.00
B - Access Road	
C - Clothall Road W	

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	2	315
	B - Access Road	1	0	23
	C - Clothall Road W	259	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Clothall Road E	B - Access Road	C - Clothall Road W
From	A - Clothall Road E	0	0	1
	B - Access Road	0	0	0
	C - Clothall Road W	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.04	5.57	0.0	0.5	A
C-AB	0.11	4.97	0.2	0.9	A
C-A					
A-BC	0.18	2.33	0.2	0.5	A

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18		706	0.026	18	0.0	5.231	A
C-AB	51		779	0.066	51	0.1	4.942	A
C-A	182				182			
A-BC	239	0.00	1891	0.126	238	0.1	2.177	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22		692	0.031	22	0.0	5.370	A
C-AB	65		793	0.082	65	0.1	4.949	A
C-A	214				214			
A-BC	285	0.00	1891	0.151	285	0.2	2.240	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26		672	0.039	26	0.0	5.573	A
C-AB	87		812	0.107	87	0.2	4.963	A
C-A	255				255			
A-BC	349	0.00	1891	0.185	349	0.2	2.333	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26		672	0.039	26	0.0	5.574	A
C-AB	87		812	0.107	87	0.2	4.966	A
C-A	254				254			
A-BC	349	0.00	1891	0.185	349	0.2	2.333	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22		692	0.031	22	0.0	5.373	A
C-AB	65		793	0.082	65	0.1	4.954	A
C-A	214				214			
A-BC	285	0.00	1891	0.151	285	0.2	2.242	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18		706	0.026	18	0.0	5.233	A
C-AB	51		779	0.066	51	0.1	4.949	A
C-A	182				182			
A-BC	239	0.00	1891	0.126	239	0.1	2.179	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A
A-BC	0.14	0.00	0.00	0.14	0.14			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.13	0.03	0.26	0.46	0.49			N/A	N/A
A-BC	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.19	0.03	0.27	0.48	0.90			N/A	N/A
A-BC	0.23	0.03	0.25	0.45	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A
A-BC	0.23	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A
A-BC	0.18	0.00	0.00	0.18	0.18			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A
A-BC	0.14	0.00	0.00	0.14	0.14			N/A	N/A

BA3 Site Access

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: Import of J14_BA3 Access_Proposed.j9
Path: C:\Users\923595\Royal HaskoningDHV\P-PC7029-Baldock-OPA - Team\WIP\02 Calculations\Junction Modelling\Models
Report generation date: 08/09/2025 17:19:18

»2033 + Dev, AM
»2033 + Dev, PM
»2040 + Dev, AM
»2040 + Dev, PM
»2040 + Dev + School, AM
»2040 + Dev + School, PM

Summary of junction performance

	AM						PM					
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
	2033 + Dev											
Stream B-AC	0.0	~1	0.00	0.00	A	0.00	0.0	~1	0.00	0.00	A	0.00
Stream C-B	0.0	~1	0.00	0.00	A		0.0	~1	0.00	0.00	A	
	2040 + Dev											
Stream B-AC	0.2	0.5	5.90	0.15	A	2.34	0.1	0.5	5.42	0.10	A	1.40
Stream C-B	0.2	1.1	7.16	0.19	A		0.1	0.5	6.35	0.11	A	
	2040 + Dev + School											
Stream B-AC	1.7	5.9	15.86	0.64	C	28.49	0.4	1.4	6.73	0.27	A	2.10
Stream C-B	8.3	42.5	56.64	0.92	F		0.0	0.5	5.68	0.01	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.

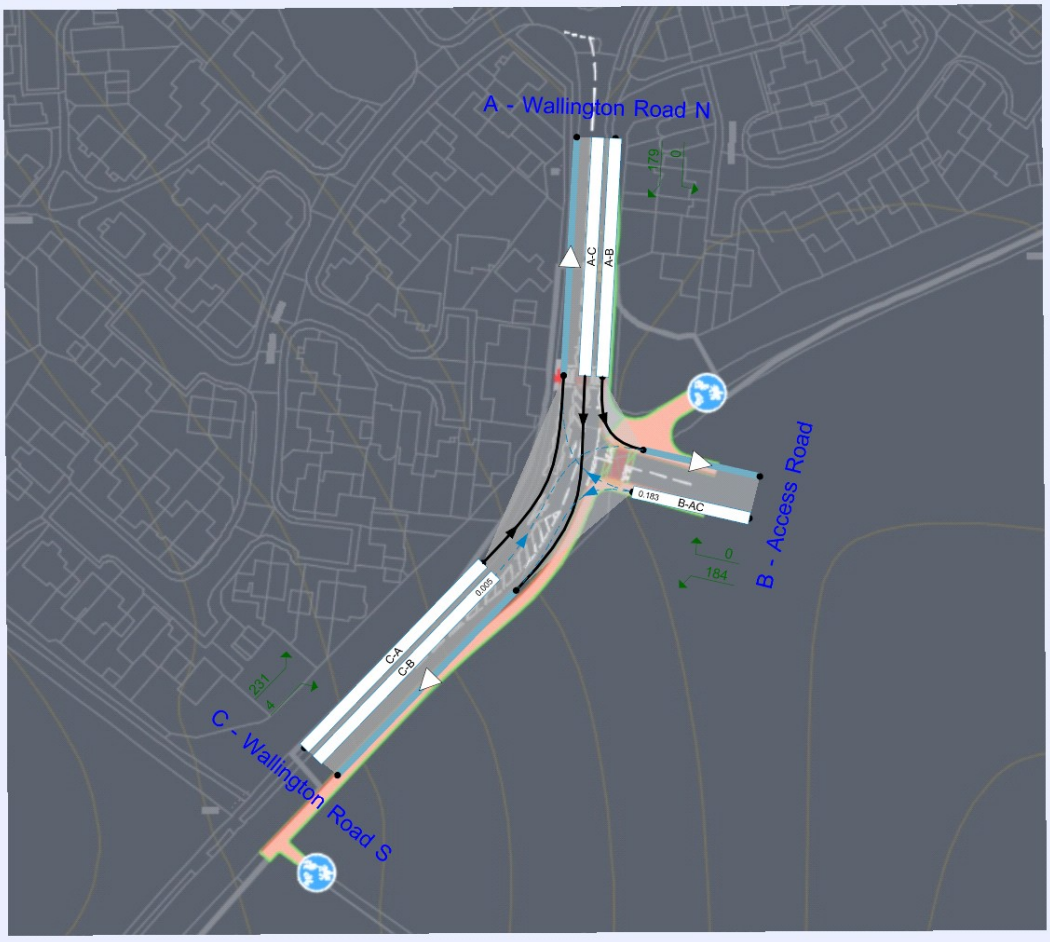
File summary

File Description

Title	BA3 Access - Wallington Road
Location	Baldock, SG7 6RY
Site number	J14
Date	23/07/2025
Version	1
Status	Draft
Identifier	
Client	Urban & Civic
Jobnumber	PC7029
Enumerator	CORPORATEROOT\926654
Description	Junction 14 - Proposed BA3 Access Junction

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033 + Dev	AM	ONE HOUR	07:45	09:15	15
D8	2033 + Dev	PM	ONE HOUR	16:45	18:15	15
D11	2040 + Dev	AM	ONE HOUR	07:45	09:15	15
D12	2040 + Dev	PM	ONE HOUR	16:45	18:15	15
D13	2040 + Dev + School	AM	ONE HOUR	07:45	09:15	15
D14	2040 + Dev + School	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2033 + Dev, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA3 Access	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Wallington Road N		Major
B	Access Road		Minor
C	Wallington Road S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Wallington Road S	7.38		✓	2.75	130.3		-

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 - Access Road	One lane	4.75	250	83

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	709	0.121	0.307	0.193	0.438
B-C	795	0.115	0.290	-	-
C-B	688	0.251	0.251	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033 + Dev	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wallington Road N		✓	252	100.000
B - Access Road		✓	0	100.000
C - Wallington Road S		✓	124	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	0	252
	B - Access Road	0	0	0
	C - Wallington Road S	124	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	0	1
	B - Access Road	0	0	0
	C - Wallington Road S	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-A					
C-B	0.00	0.00	0.0	~1	A
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	681	0.000	0	0.0	0.000	A
C-A	93			93			
C-B	0	640	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	190			190			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	668	0.000	0	0.0	0.000	A
C-A	111			111			
C-B	0	631	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	227			227			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	650	0.000	0	0.0	0.000	A
C-A	137			137			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	277			277			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	650	0.000	0	0.0	0.000	A
C-A	137			137			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	277			277			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	668	0.000	0	0.0	0.000	A
C-A	111			111			
C-B	0	631	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	227			227			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	681	0.000	0	0.0	0.000	A
C-A	93			93			
C-B	0	640	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	190			190			

Queue Variation Results for each time segment

07:45 - 08:00

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

08:00 - 08:15

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

08:15 - 08:30

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

08:30 - 08:45

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

08:45 - 09:00

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

09:00 - 09:15

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

2033 + Dev, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA3 Access	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2033 + Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wallington Road N		✓	186	100.000
B - Access Road		✓	0	100.000
C - Wallington Road S		✓	247	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	0	186
	B - Access Road	0	0	0
	C - Wallington Road S	247	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	0	1
	B - Access Road	0	0	0
	C - Wallington Road S	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-A					
C-B	0.00	0.00	0.0	~1	A
A-B					
A-C					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	686	0.000	0	0.0	0.000	A
C-A	186			186			
C-B	0	653	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	140			140			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	674	0.000	0	0.0	0.000	A
C-A	222			222			
C-B	0	646	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	167			167			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	657	0.000	0	0.0	0.000	A
C-A	272			272			
C-B	0	636	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	205			205			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	657	0.000	0	0.0	0.000	A
C-A	272			272			
C-B	0	636	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	205			205			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	674	0.000	0	0.0	0.000	A
C-A	222			222			
C-B	0	646	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	167			167			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	686	0.000	0	0.0	0.000	A
C-A	186			186			
C-B	0	653	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	140			140			

Queue Variation Results for each time segment

16:45 - 17:00

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

17:00 - 17:15

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

17:15 - 17:30

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

17:30 - 17:45

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

17:45 - 18:00

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

18:00 - 18:15

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

2040 + Dev, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA3 Access	T-Junction	Two-way		2.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2040 + Dev	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wallington Road N		✓	243	100.000
B - Access Road		✓	97	100.000
C - Wallington Road S		✓	227	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	0	243
	B - Access Road	0	0	97
	C - Wallington Road S	120	107	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	0	1
	B - Access Road	0	0	0
	C - Wallington Road S	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.15	5.90	0.2	0.5	A
C-A					
C-B	0.19	7.16	0.2	1.1	A
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	741	0.099	73	0.1	5.379	A
C-A	90			90			
C-B	81	642	0.126	80	0.1	6.401	A
A-B	0			0			
A-C	183			183			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	731	0.119	87	0.1	5.590	A
C-A	108			108			
C-B	96	633	0.152	96	0.2	6.705	A
A-B	0			0			
A-C	218			218			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	717	0.149	107	0.2	5.899	A
C-A	132			132			
C-B	118	620	0.190	118	0.2	7.156	A
A-B	0			0			
A-C	268			268			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	717	0.149	107	0.2	5.902	A
C-A	132			132			
C-B	118	620	0.190	118	0.2	7.162	A
A-B	0			0			
A-C	268			268			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	731	0.119	87	0.1	5.593	A
C-A	108			108			
C-B	96	633	0.152	96	0.2	6.716	A
A-B	0			0			
A-C	218			218			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	741	0.099	73	0.1	5.387	A
C-A	90			90			
C-B	81	642	0.126	81	0.1	6.419	A
A-B	0			0			
A-C	183			183			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-B	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-B	0.18	0.00	0.00	0.18	0.18			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.03	0.26	0.46	0.49			N/A	N/A
C-B	0.23	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.23	0.03	0.28	0.62	1.07			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-B	0.18	0.00	0.00	0.18	0.18			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-B	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2040 + Dev, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA3 Access	T-Junction	Two-way		1.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2040 + Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wallington Road N		✓	179	100.000
B - Access Road		✓	66	100.000
C - Wallington Road S		✓	303	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	0	179
	B - Access Road	0	0	66
	C - Wallington Road S	238	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	0	1
	B - Access Road	0	0	0
	C - Wallington Road S	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.10	5.42	0.1	0.5	A
C-A					
C-B	0.11	6.35	0.1	0.5	A
A-B					
A-C					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	756	0.066	49	0.1	5.094	A
C-A	179			179			
C-B	49	654	0.075	49	0.1	5.944	A
A-B	0			0			
A-C	135			135			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	748	0.079	59	0.1	5.228	A
C-A	214			214			
C-B	58	647	0.090	58	0.1	6.112	A
A-B	0			0			
A-C	161			161			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	737	0.099	73	0.1	5.416	A
C-A	262			262			
C-B	72	638	0.112	71	0.1	6.352	A
A-B	0			0			
A-C	197			197			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	737	0.099	73	0.1	5.416	A
C-A	262			262			
C-B	72	638	0.112	72	0.1	6.352	A
A-B	0			0			
A-C	197			197			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	748	0.079	59	0.1	5.229	A
C-A	214			214			
C-B	58	647	0.090	59	0.1	6.116	A
A-B	0			0			
A-C	161			161			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	756	0.066	50	0.1	5.100	A
C-A	179			179			
C-B	49	654	0.075	49	0.1	5.953	A
A-B	0			0			
A-C	135			135			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.26	0.47	0.50			N/A	N/A
C-B	0.10	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.13	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-B	0.13	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.10	0.00	0.00	0.10	0.10			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2040 + Dev + School, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA3 Access	T-Junction	Two-way		28.49	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2040 + Dev + School	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wallington Road N		✓	254	100.000
B - Access Road		✓	368	100.000
C - Wallington Road S		✓	602	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	51	203
	B - Access Road	51	0	317
	C - Wallington Road S	87	515	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	0	1
	B - Access Road	0	0	0
	C - Wallington Road S	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.64	15.86	1.7	5.9	C
C-A					
C-B	0.92	56.64	8.3	42.5	F
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	691	0.401	274	0.7	8.590	A
C-A	65			65			
C-B	388	640	0.606	382	1.5	13.660	B
A-B	38			38			
A-C	153			153			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	331	669	0.495	330	1.0	10.577	B
C-A	78			78			
C-B	463	630	0.734	459	2.6	20.430	C
A-B	46			46			
A-C	182			182			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	405	635	0.638	402	1.7	15.283	C
C-A	96			96			
C-B	567	617	0.918	549	7.1	43.855	E
A-B	56			56			
A-C	224			224			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	405	631	0.642	405	1.7	15.862	C
C-A	96			96			
C-B	567	617	0.918	562	8.3	56.637	F
A-B	56			56			
A-C	224			224			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	331	665	0.498	334	1.0	10.977	B
C-A	78			78			
C-B	463	630	0.734	484	3.0	27.404	D
A-B	46			46			
A-C	182			182			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	689	0.402	278	0.7	8.788	A
C-A	65			65			
C-B	388	640	0.606	393	1.6	14.925	B
A-B	38			38			
A-C	153			153			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.66	0.55	1.00	1.40	1.45			N/A	N/A
C-B	1.48	0.59	1.40	1.79	1.90			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.96	0.12	0.95	1.41	1.77			N/A	N/A
C-B	2.56	0.09	1.42	6.10	8.59			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.69	0.03	0.28	1.69	5.94			N/A	N/A
C-B	7.07	0.08	1.54	19.95	30.55			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.74	0.03	0.28	1.74	4.99			N/A	N/A
C-B	8.31	0.05	0.62	24.01	42.51			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.01	0.06	0.79	1.89	2.66			N/A	N/A
C-B	3.00	0.04	0.42	8.24	15.20			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.68	0.04	0.43	1.37	1.95			N/A	N/A
C-B	1.60	0.03	0.32	3.14	8.33			N/A	N/A

2040 + Dev + School, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA3 Access	T-Junction	Two-way		2.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2040 + Dev + School	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wallington Road N		✓	179	100.000
B - Access Road		✓	184	100.000
C - Wallington Road S		✓	235	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	0	179
	B - Access Road	0	0	184
	C - Wallington Road S	231	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wallington Road N	B - Access Road	C - Wallington Road S
From	A - Wallington Road N	0	0	1
	B - Access Road	0	0	0
	C - Wallington Road S	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.27	6.73	0.4	1.4	A
C-A					
C-B	0.01	5.68	0.0	0.5	A
A-B					
A-C					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	756	0.183	138	0.2	5.818	A
C-A	174			174			
C-B	3	654	0.005	3	0.0	5.529	A
A-B	0			0			
A-C	135			135			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	165	748	0.221	165	0.3	6.175	A
C-A	208			208			
C-B	4	647	0.006	4	0.0	5.591	A
A-B	0			0			
A-C	161			161			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	203	737	0.275	202	0.4	6.724	A
C-A	254			254			
C-B	4	638	0.007	4	0.0	5.679	A
A-B	0			0			
A-C	197			197			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	203	737	0.275	203	0.4	6.731	A
C-A	254			254			
C-B	4	638	0.007	4	0.0	5.679	A
A-B	0			0			
A-C	197			197			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	165	748	0.221	166	0.3	6.187	A
C-A	208			208			
C-B	4	647	0.006	4	0.0	5.593	A
A-B	0			0			
A-C	161			161			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	756	0.183	139	0.2	5.841	A
C-A	174			174			
C-B	3	654	0.005	3	0.0	5.531	A
A-B	0			0			
A-C	135			135			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	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-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	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-B	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.03	0.25	0.46	0.48			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.03	0.31	1.25	1.43			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	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-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	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-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

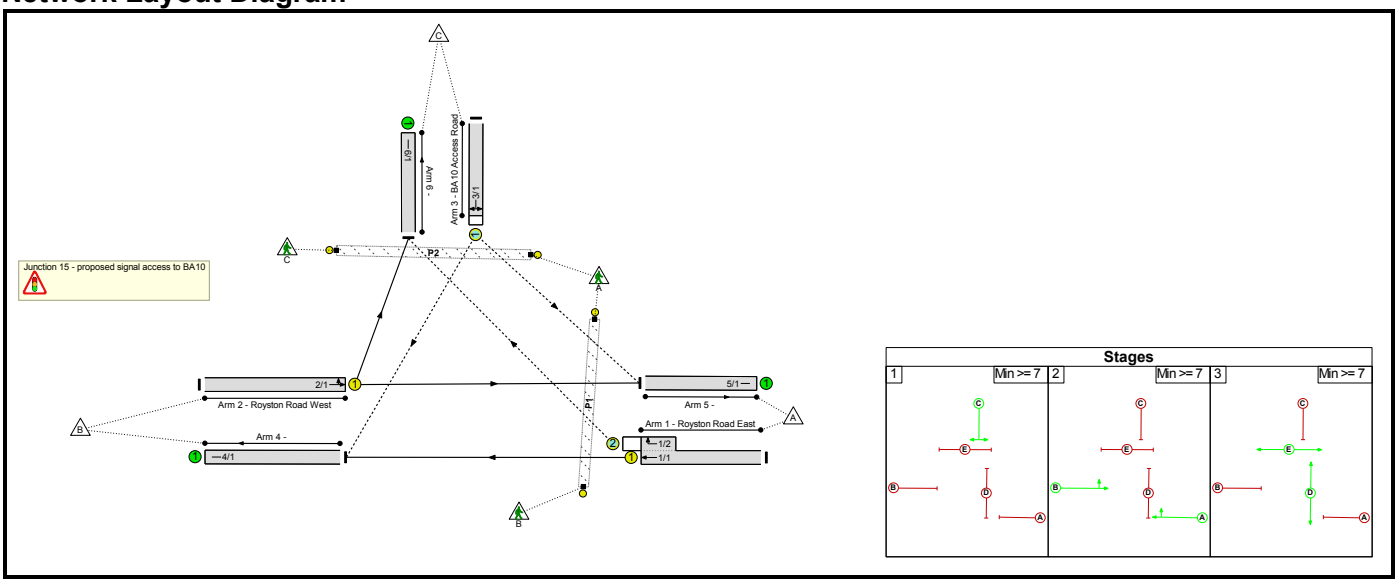
BA10 Site Access

Detailed Input Data And Results

User and Project Details

Project:	**BA10 Access - Royston Road (signalised)**
Title:	**Growing Baldock**
Location:	Baldock, SG7 6QZ
Client:	Urban & Civic
Site Ref(s):	J15
Design Layout Ref:	PC7209-RHD-CE-GB-DR-D-0113
Date Started:	20/03/2025
Date Completed:	-
Checked By:	ZT
Checked By Date:	-
Additional detail:	
File name:	J15_BA10 Access_Proposed_AllRed.lsg3x
Author:	Jay James
Company:	ITP by Haskoning
Address:	B
Linsig Version:	3, 3, 0, 6

Network Layout Diagram



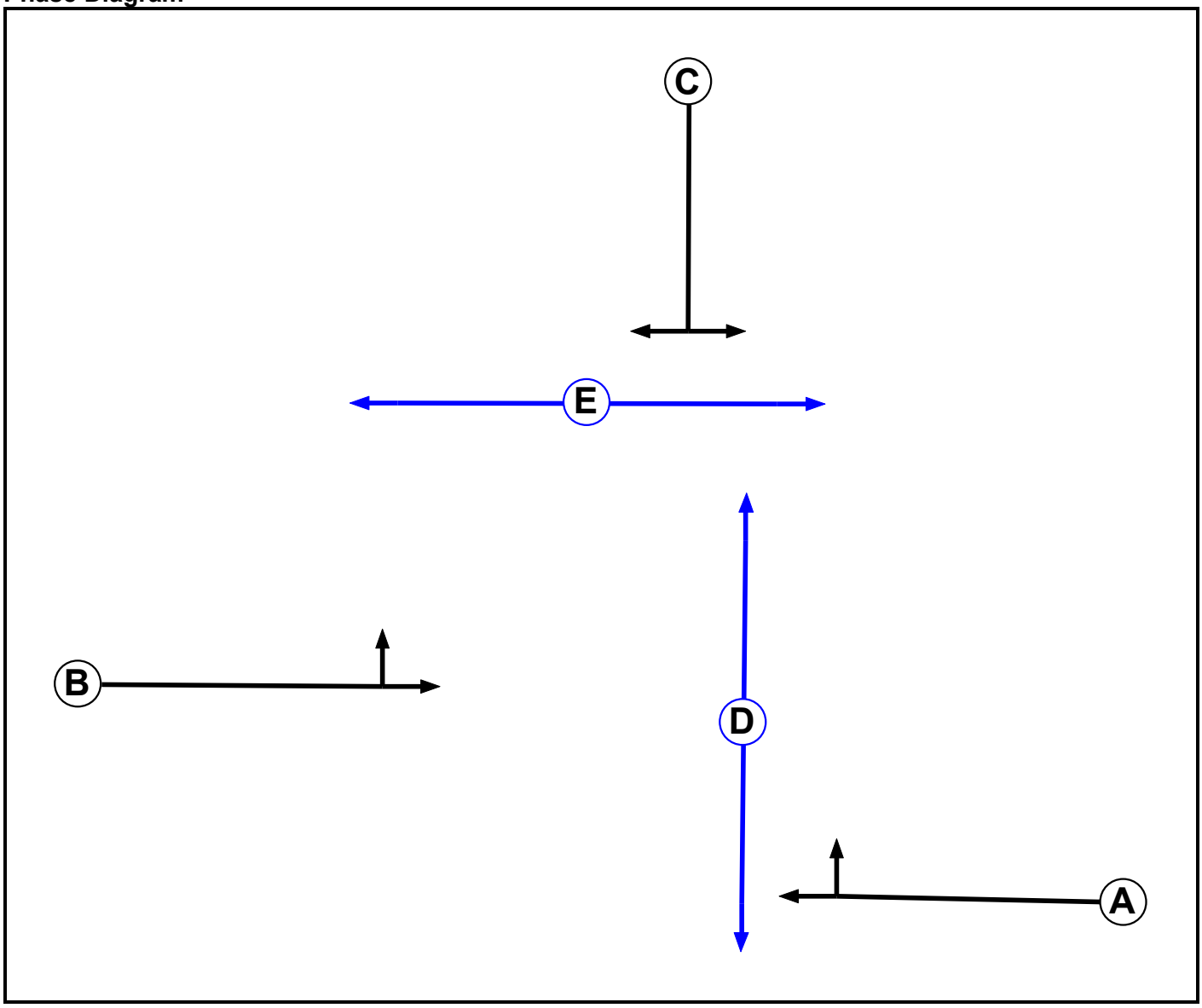
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2033 Interim Year AM	2033 Rerouted+Development AM	With Pedestrians	08:00 - 09:00	90	74.8	3.75
2	2033 Interim Year PM	2033 Rerouted+Development PM	With Pedestrians	17:00 - 18:00	90	123.9	3.87
3	2040 No School AM	2040 Rerouted+Development NO SCHOOL AM	With Pedestrians	08:00 - 09:00	90	117.7	4.97
4	2040 No School PM	2040 Rerouted+Development NO SCHOOL PM	With Pedestrians	17:00 - 18:00	90	147.7	3.46
5	2040 With School AM	2040 Rerouted+Development WITH SCHOOL AM	With Pedestrians	08:00 - 09:00	90	87.7	5.28
6	2040 With School PM	2040 Rerouted+Development WITH SCHOOL PM	With Pedestrians	17:00 - 18:00	90	147.7	3.44

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1	Gen		Stage Stream 1	5	3	Junction 15 - proposed signal access to BA10	

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Pedestrian		7	7
E	Pedestrian		7	7

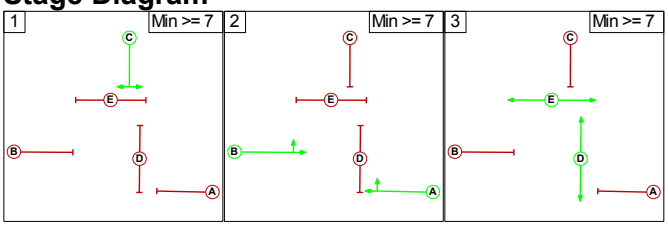
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		-	6	6	7
	B	-		6	7	-
	C	6	6		6	5
	D	6	7	6		-
	E	7	-	5	-	

Phases in Stage

Stage No.	Phases in Stage
1	C
2	A B
3	D E

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage		
	1	2	3
1		6	6
2	6		7
3	6	7	

Lane Input Data

Junction: Junction 15 - proposed signal access to BA10												
Lane	**Lane Type**	**Phases**	**Start Disp. (s)**	**End Disp. (s)**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (Royston Road East)	U	A	2	3	60.0	Geom	-	3.08	0.00	Y	Arm 4 Ahead	Inf
1/2 (Royston Road East)	O	A	2	3	3.8	Geom	-	2.99	0.00	N	Arm 6 Right	Inf
2/1 (Royston Road West)	U	B	2	3	60.0	Geom	-	3.71	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Left	Inf
3/1 (BA10 Access Road)	O	C	2	3	60.0	Geom	-	3.93	0.00	Y	Arm 4 Right	Inf
											Arm 5 Left	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: Junction 15 - proposed signal access to BA10

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (Royston Road East)	6/1 (Right)	1439	0	2/1	1.09	All	2.00	-	0.50	2	2.00
3/1 (BA10 Access Road)	4/1 (Right)	1439	0	1/1	1.09	To 4/1 (Ahead)	1.00	-	0.50	1	1.00
	5/1 (Left)	1439	0	2/1	1.09	To 5/1 (Ahead)					

Lane Connector Input Data

Junction: Junction 15 - proposed signal access to BA10				
Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	4/1	Internal	5	35
1/2	6/1	Internal	5	35
2/1	5/1	Internal	5	35
2/1	6/1	Internal	5	35
3/1	4/1	Internal	5	35
3/1	5/1	Internal	5	35

Scenario 1: '2033 Interim Year AM' (FG1: '2033 Rerouted+Development AM', Plan 2: 'With Pedestrians')

Lane Saturation Flows

Junction: Junction 15 - proposed signal access to BA10								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Royston Road East)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
1/2 (Royston Road East)	2.99	0.00	N	Arm 6 Right	Inf	100.0 %	2054	2054
2/1 (Royston Road West)	3.71	0.00	Y	Arm 5 Ahead	Inf	81.6 %	1986	1986
				Arm 6 Left	Inf	18.4 %		
3/1 (BA10 Access Road)	3.93	0.00	Y	Arm 4 Right	Inf	80.4 %	2008	2008
				Arm 5 Left	Inf	19.6 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times
No Bonus Greens are defined For Scenario 1

Scenario 2: '2033 Interim Year PM' (FG2: '2033 Rerouted+Development PM', Plan 2: 'With Pedestrians')

Lane Saturation Flows

Junction: Junction 15 - proposed signal access to BA10								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Royston Road East)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
1/2 (Royston Road East)	2.99	0.00	N	Arm 6 Right	Inf	100.0 %	2054	2054
2/1 (Royston Road West)	3.71	0.00	Y	Arm 5 Ahead	Inf	93.3 %	1986	1986
				Arm 6 Left	Inf	6.7 %		
3/1 (BA10 Access Road)	3.93	0.00	Y	Arm 4 Right	Inf	84.4 %	2008	2008
				Arm 5 Left	Inf	15.6 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times
No Bonus Greens are defined For Scenario 2

Scenario 3: '2040 No School AM' (FG3: '2040 Rerouted+Development NO SCHOOL AM', Plan 2: 'With Pedestrians')

Lane Saturation Flows

Junction: Junction 15 - proposed signal access to BA10								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Royston Road East)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
1/2 (Royston Road East)	2.99	0.00	N	Arm 6 Right	Inf	100.0 %	2054	2054
2/1 (Royston Road West)	3.71	0.00	Y	Arm 5 Ahead	Inf	87.0 %	1986	1986
				Arm 6 Left	Inf	13.0 %		
3/1 (BA10 Access Road)	3.93	0.00	Y	Arm 4 Right	Inf	50.5 %	2008	2008
				Arm 5 Left	Inf	49.5 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times
No Bonus Greens are defined For Scenario 3

Scenario 4: '2040 No School PM' (FG4: '2040 Rerouted+Development NO SCHOOL PM', Plan 2: 'With Pedestrians')

Lane Saturation Flows

Junction: Junction 15 - proposed signal access to BA10								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Royston Road East)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
1/2 (Royston Road East)	2.99	0.00	N	Arm 6 Right	Inf	100.0 %	2054	2054
2/1 (Royston Road West)	3.71	0.00	Y	Arm 5 Ahead	Inf	93.8 %	1986	1986
				Arm 6 Left	Inf	6.2 %		
3/1 (BA10 Access Road)	3.93	0.00	Y	Arm 4 Right	Inf	53.3 %	2008	2008
				Arm 5 Left	Inf	46.7 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times
No Bonus Greens are defined For Scenario 4

Scenario 5: '2040 With School AM' (FG5: '2040 Rerouted+Development WITH SCHOOL AM', Plan 2: 'With Pedestrians')

Lane Saturation Flows

Junction: Junction 15 - proposed signal access to BA10								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Royston Road East)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
1/2 (Royston Road East)	2.99	0.00	N	Arm 6 Right	Inf	100.0 %	2054	2054
2/1 (Royston Road West)	3.71	0.00	Y	Arm 5 Ahead	Inf	69.5 %	1986	1986
				Arm 6 Left	Inf	30.5 %		
3/1 (BA10 Access Road)	3.93	0.00	Y	Arm 4 Right	Inf	50.5 %	2008	2008
				Arm 5 Left	Inf	49.5 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times
No Bonus Greens are defined For Scenario 5

Scenario 6: '2040 With School PM' (FG6: '2040 Rerouted+Development WITH SCHOOL PM', Plan 2: 'With Pedestrians')

Lane Saturation Flows

Junction: Junction 15 - proposed signal access to BA10								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Royston Road East)	3.08	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1923	1923
1/2 (Royston Road East)	2.99	0.00	N	Arm 6 Right	Inf	100.0 %	2054	2054
2/1 (Royston Road West)	3.71	0.00	Y	Arm 5 Ahead	Inf	93.8 %	1986	1986
				Arm 6 Left	Inf	6.2 %		
3/1 (BA10 Access Road)	3.93	0.00	Y	Arm 4 Right	Inf	53.3 %	2008	2008
				Arm 5 Left	Inf	46.7 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times
No Bonus Greens are defined For Scenario 6

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2033 Rerouted+Development AM'	08:00	09:00	01:00	
2: '2033 Rerouted+Development PM'	17:00	18:00	01:00	
3: '2040 Rerouted+Development NO SCHOOL AM'	08:00	09:00	01:00	
4: '2040 Rerouted+Development NO SCHOOL PM'	17:00	18:00	01:00	
5: '2040 Rerouted+Development WITH SCHOOL AM'	08:00	09:00	01:00	
6: '2040 Rerouted+Development WITH SCHOOL PM'	17:00	18:00	01:00	

Traffic Flows, Desired
FG1: '2033 Rerouted+Development AM'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	349	29	378
	B	538	0	121	659
	C	9	37	0	46
	Tot.	547	386	150	1083

FG2: '2033 Rerouted+Development PM'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	471	5	476
	B	362	0	26	388
	C	14	76	0	90
	Tot.	376	547	31	954

FG3: '2040 Rerouted+Development NO SCHOOL AM'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	357	160	517
	B	428	178	64	670
	C	53	54	0	107
	Tot.	481	589	224	1294

FG4: '2040 Rerouted+Development NO SCHOOL PM'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	277	24	301
	B	406	0	27	433
	C	43	49	0	92
	Tot.	449	326	51	826

FG5: '2040 Rerouted+Development WITH SCHOOL AM'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	342	160	502
	B	406	0	178	584
	C	53	54	0	107
	Tot.	459	396	338	1193

FG6: '2040 Rerouted+Development WITH SCHOOL PM'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	272	24	296
	B	406	0	27	433
	C	43	49	0	92
	Tot.	449	321	51	821

Scenario 1: '2033 Interim Year AM' (FG1: '2033 Rerouted+Development AM', Plan 2: 'With Pedestrians')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	349	29	378
	B	538	0	121	659
	C	9	37	0	46
	Tot.	547	386	150	1083

Traffic Flows, Difference

Difference :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 2: '2033 Interim Year PM' (FG2: '2033 Rerouted+Development PM', Plan 2: 'With Pedestrians')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	471	5	476
	B	362	0	26	388
	C	14	76	0	90
	Tot.	376	547	31	954

Traffic Flows, Difference

Difference :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 3: '2040 No School AM' (FG3: '2040 Rerouted+Development NO SCHOOL AM', Plan 2: 'With Pedestrians')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	357	160	517
	B	428	0	64	492
	C	53	54	0	107
	Tot.	481	411	224	1116

Traffic Flows, Difference

Difference :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	-178	0	-178
	C	0	0	0	0
	Tot.	0	-178	0	-178

Scenario 4: '2040 No School PM' (FG4: '2040 Rerouted+Development NO SCHOOL PM', Plan 2: 'With Pedestrians')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	277	24	301
	B	406	0	27	433
	C	43	49	0	92
	Tot.	449	326	51	826

Traffic Flows, Difference

Difference :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 5: '2040 With School AM' (FG5: '2040 Rerouted+Development WITH SCHOOL AM', Plan 2: 'With Pedestrians')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	342	160	502
	B	406	0	178	584
	C	53	54	0	107
	Tot.	459	396	338	1193

Traffic Flows, Difference

Difference :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 6: '2040 With School PM' (FG6: '2040 Rerouted+Development WITH SCHOOL PM', Plan 2: 'With Pedestrians')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	272	24	296
	B	406	0	27	433
	C	43	49	0	92
	Tot.	449	321	51	821

Traffic Flows, Difference

Difference :

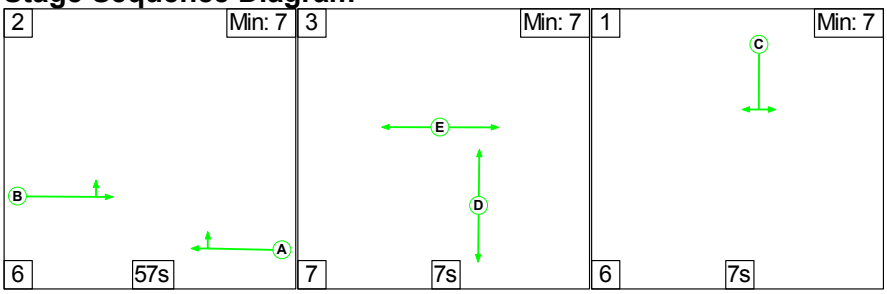
		Destination			
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Traffic Lane Flows

Lane	Scenario 1: 2033 Interim Year AM	Scenario 2: 2033 Interim Year PM	Scenario 3: 2040 No School AM	Scenario 4: 2040 No School PM	Scenario 5: 2040 With School AM	Scenario 6: 2040 With School PM
Junction: Junction 15 - proposed signal access to BA10						
1/1 (with short)	378(In) 349(Out)	476(In) 471(Out)	517(In) 357(Out)	301(In) 277(Out)	502(In) 342(Out)	296(In) 272(Out)
1/2 (short)	29	5	160	24	160	24
2/1	659	388	492	433	584	433
3/1	46	90	107	92	107	92
4/1	386	547	411	326	396	321
5/1	547	376	481	449	459	449
6/1	150	31	224	51	338	51

Scenario 1: '2033 Interim Year AM' (FG1: '2033 Rerouted+Development AM', Plan 2: 'With Pedestrians')

Stage Sequence Diagram



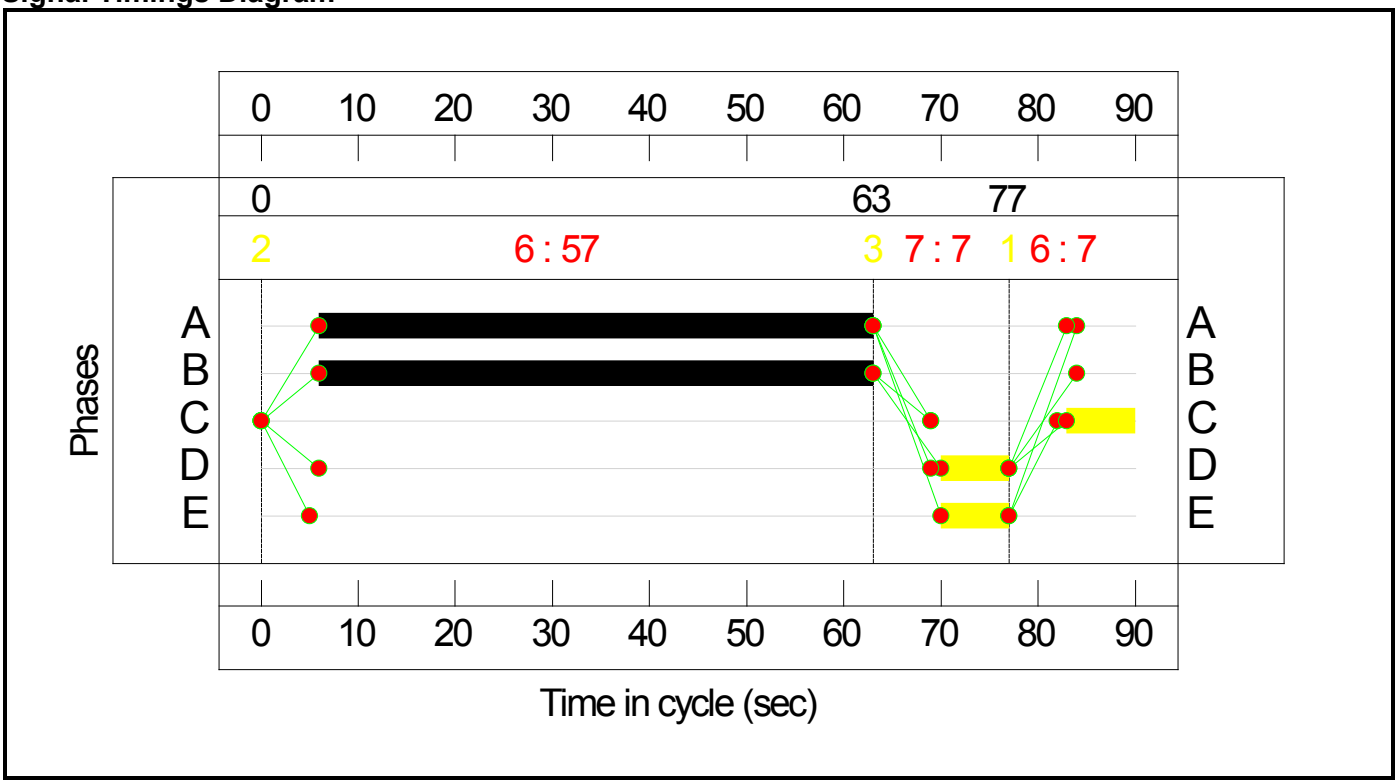
Stage Timings

Stage	2	3	1
Duration	57	7	7
Change Point	0	63	77

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Royston Road East Ahead Right	Traffic	57	6	63
B	Royston Road West Ahead Left	Traffic	57	6	63
C	BA10 Access Road Right Left	Traffic	7	83	0
D	Pedestrians across	Pedestrian	7	70	77
E	Pedestrians across	Pedestrian	7	70	77

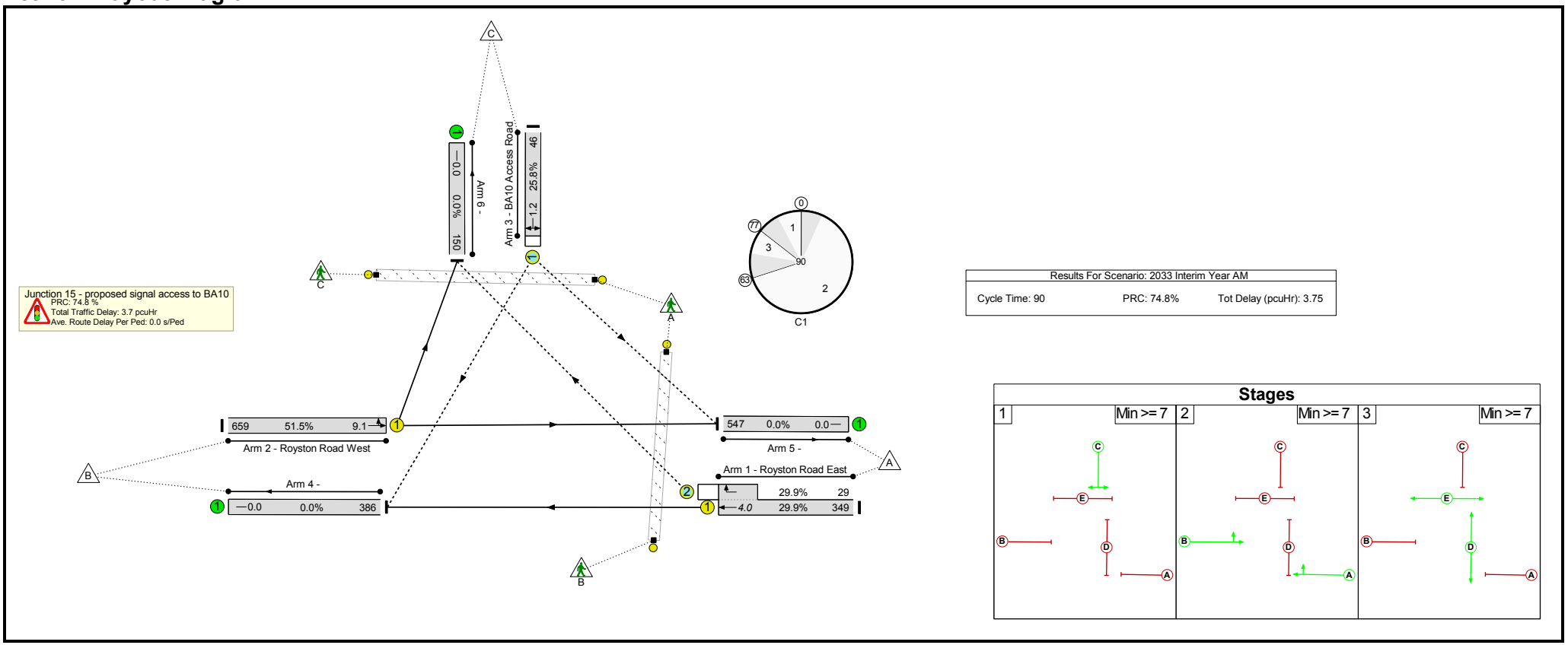
Signal Timings Diagram



Lane Green Times

Junction: Junction 15 - proposed signal access to BA10					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Royston Road East Ahead	U	A	6	63
1/2	Royston Road East Right	O	A	6	63
2/1	Royston Road West Ahead Left	U	B	6	63
3/1	BA10 Access Road Right Left	O	C	83	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Growing Baldock	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**51.5%**
Junction 15 - proposed signal access to BA10	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**51.5%**
1/1+1/2	Royston Road East Ahead Right	U+O	N/A	N/A	A		1	57	-	-	378	1923:2054	1167+97	29.9 : 29.9%
2/1	Royston Road West Ahead Left	U	N/A	N/A	B		1	57	-	-	659	1986	1280	51.5%
3/1	BA10 Access Road Right Left	O	N/A	N/A	C		1	7	-	-	46	2008	178	25.8%
4/1		U	N/A	N/A	-		-	-	-	-	386	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	-	547	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	-	150	Inf	Inf	0.0%
Ped Link: P1	North Crossing	-	N/A	-	D		1	7	-	-	0	-	5600	0.0%
Ped Link: P2	East Crossing (Access)	-	N/A	-	E		1	7	-	-	0	-	5600	0.0%

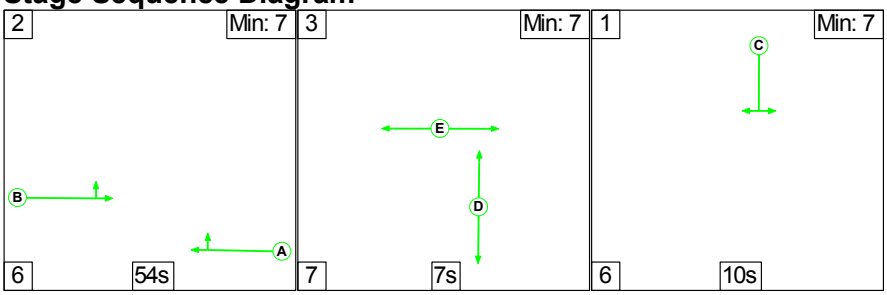
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: Growing Baldock	**-**	**-**	**29**	**45**	**1**	**2.8**	**0.9**	**0.1**	**3.7**	**-**	**-**	**-**	**-**	
Junction 15 - proposed signal access to BA10	**-**	**-**	**29**	**45**	**1**	**2.8**	**0.9**	**0.1**	**3.7**	**-**	**-**	**-**	**-**	
1/1+1/2	378	378	29	0	0	0.7	0.2	0.1	1.0	9.5	3.8	0.2	4.0	
2/1	659	659	-	-	-	1.6	0.5	-	2.1	11.4	8.6	0.5	9.1	
3/1	46	46	0	45	1	0.5	0.2	0.0	0.7	51.8	1.1	0.2	1.2	
4/1	386	386	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	547	547	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	150	150	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	

C1 PRC for Signalled Lanes (%): 74.8 Total Delay for Signalled Lanes (pcuHr): 3.75 Cycle Time (s): 90
PRC Over All Lanes (%): 74.8 Total Delay Over All Lanes(pcuHr): 3.75

Scenario 2: '2033 Interim Year PM' (FG2: '2033 Rerouted+Development PM', Plan 2: 'With Pedestrians')

Stage Sequence Diagram



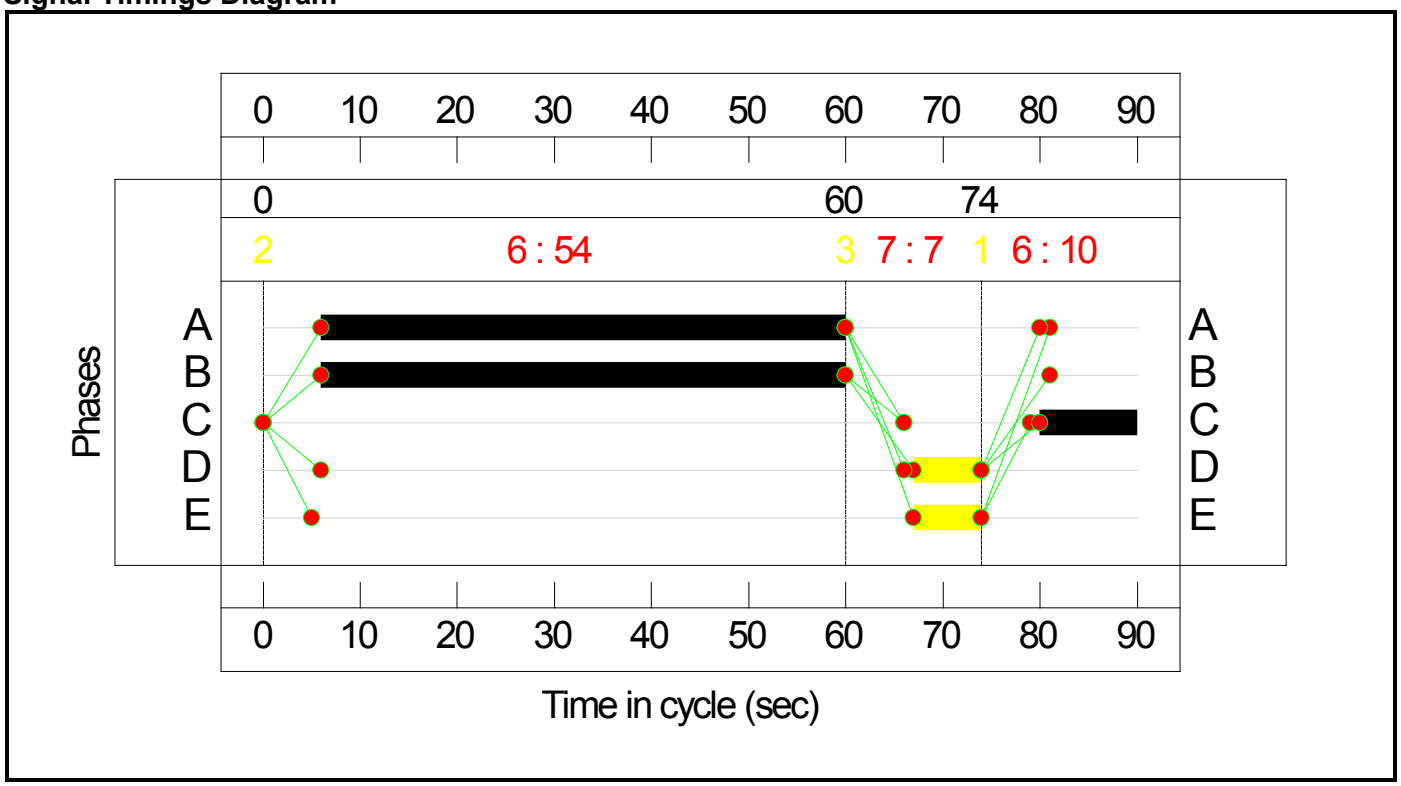
Stage Timings

Stage	2	3	1
Duration	54	7	10
Change Point	0	60	74

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Royston Road East Ahead Right	Traffic	54	6	60
B	Royston Road West Ahead Left	Traffic	54	6	60
C	BA10 Access Road Right Left	Traffic	10	80	0
D	Pedestrians across	Pedestrian	7	67	74
E	Pedestrians across	Pedestrian	7	67	74

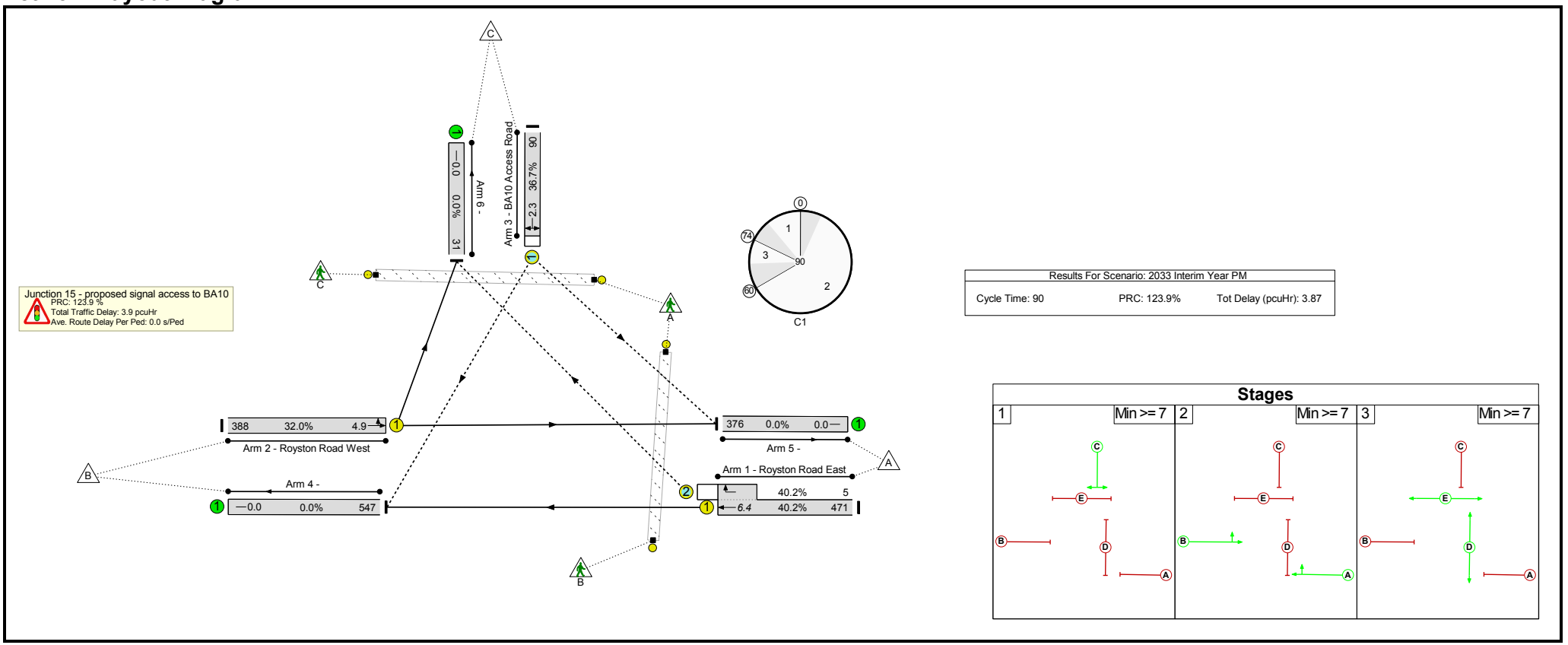
Signal Timings Diagram



Lane Green Times

Junction: Junction 15 - proposed signal access to BA10					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Royston Road East Ahead	U	A	6	60
1/2	Royston Road East Right	O	A	6	60
2/1	Royston Road West Ahead Left	U	B	6	60
3/1	BA10 Access Road Right Left	O	C	80	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Growing Baldock	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**40.2%**
Junction 15 - proposed signal access to BA10	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**40.2%**
1/1+1/2	Royston Road East Ahead Right	U+O	N/A	N/A	A		1	54	-	-	476	1923:2054	1172+12	40.2 : 40.2%
2/1	Royston Road West Ahead Left	U	N/A	N/A	B		1	54	-	-	388	1986	1214	32.0%
3/1	BA10 Access Road Right Left	O	N/A	N/A	C		1	10	-	-	90	2008	245	36.7%
4/1		U	N/A	N/A	-		-	-	-	-	547	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	-	376	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	-	31	Inf	Inf	0.0%
Ped Link: P1	North Crossing	-	N/A	-	D		1	7	-	-	0	-	5600	0.0%
Ped Link: P2	East Crossing (Access)	-	N/A	-	E		1	7	-	-	0	-	5600	0.0%

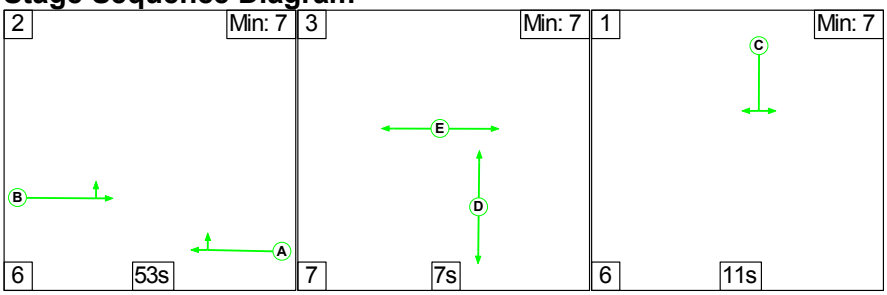
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: Growing Baldock	**-**	**-**	**5**	**89**	**1**	**3.0**	**0.9**	**0.0**	**3.9**	**-**	**-**	**-**	**-**	
Junction 15 - proposed signal access to BA10	**-**	**-**	**5**	**89**	**1**	**3.0**	**0.9**	**0.0**	**3.9**	**-**	**-**	**-**	**-**	
1/1+1/2	476	476	5	0	0	1.2	0.3	0.0	1.5	11.6	6.0	0.3	6.4	
2/1	388	388	-	-	-	0.9	0.2	-	1.1	10.6	4.6	0.2	4.9	
3/1	90	90	0	89	1	0.9	0.3	0.0	1.2	47.9	2.0	0.3	2.3	
4/1	547	547	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	376	376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	31	31	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	

C1 PRC for Signalled Lanes (%): 123.9 Total Delay for Signalled Lanes (pcuHr): 3.87 Cycle Time (s): 90
PRC Over All Lanes (%): 123.9 Total Delay Over All Lanes(pcuHr): 3.87

Scenario 3: '2040 No School AM' (FG3: '2040 Rerouted+Development NO SCHOOL AM', Plan 2: 'With Pedestrians')

Stage Sequence Diagram



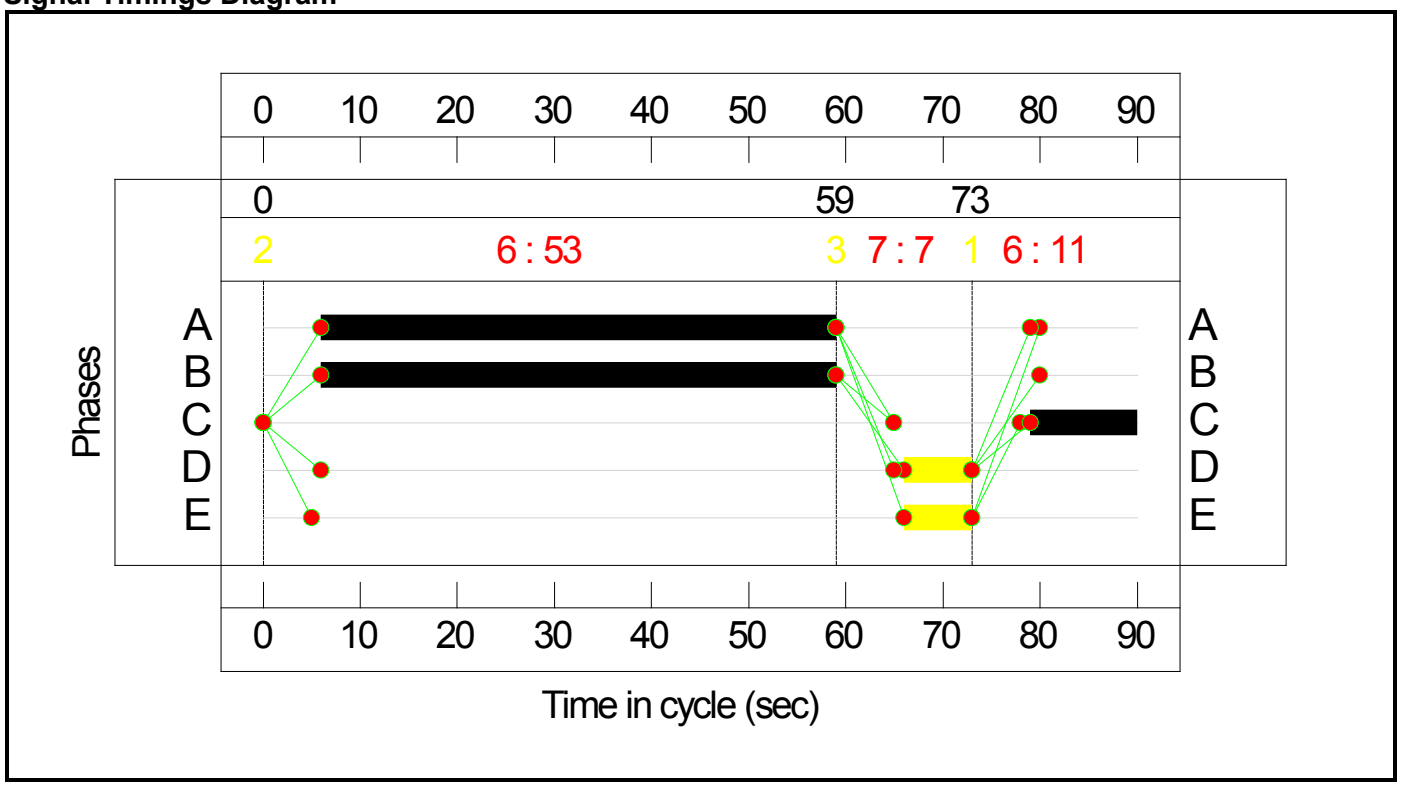
Stage Timings

Stage	2	3	1
Duration	53	7	11
Change Point	0	59	73

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Royston Road East Ahead Right	Traffic	53	6	59
B	Royston Road West Ahead Left	Traffic	53	6	59
C	BA10 Access Road Right Left	Traffic	11	79	0
D	Pedestrians across	Pedestrian	7	66	73
E	Pedestrians across	Pedestrian	7	66	73

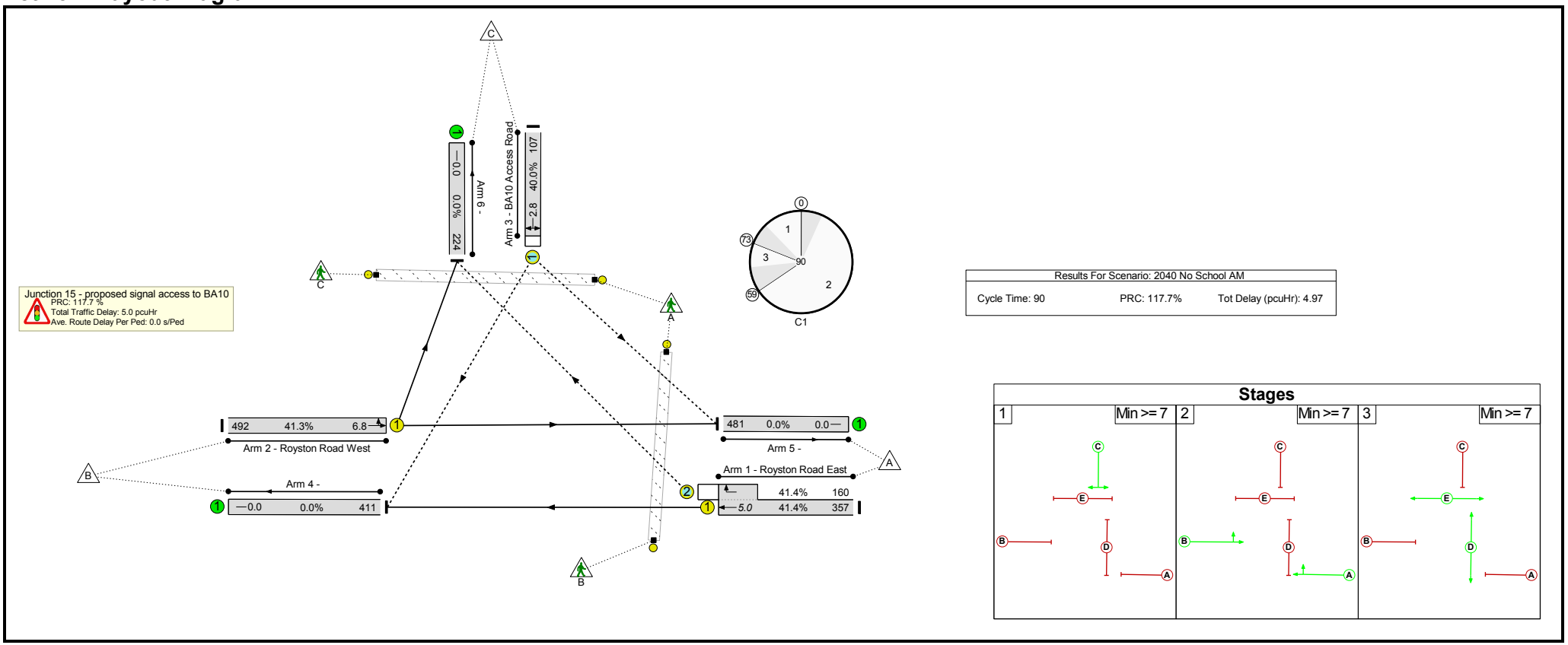
Signal Timings Diagram



Lane Green Times

Junction: Junction 15 - proposed signal access to BA10					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Royston Road East Ahead	U	A	6	59
1/2	Royston Road East Right	O	A	6	59
2/1	Royston Road West Ahead Left	U	B	6	59
3/1	BA10 Access Road Right Left	O	C	79	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Growing Baldock	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**41.4%**
Junction 15 - proposed signal access to BA10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**41.4%**
1/1+1/2	Royston Road East Ahead Right	U+O	N/A	N/A	A		1	53	-	-	517	1923:2054	863+387	41.4 : 41.4%
2/1	Royston Road West Ahead Left	U	N/A	N/A	B		1	53	-	-	492	1986	1192	41.3%
3/1	BA10 Access Road Right Left	O	N/A	N/A	C		1	11	-	-	107	2008	268	40.0%
4/1		U	N/A	N/A	-		-	-	-	-	411	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	-	481	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	-	224	Inf	Inf	0.0%
Ped Link: P1	North Crossing	-	N/A	-	D		1	7	-	-	0	-	5600	0.0%
Ped Link: P2	East Crossing (Access)	-	N/A	-	E		1	7	-	-	0	-	5600	0.0%

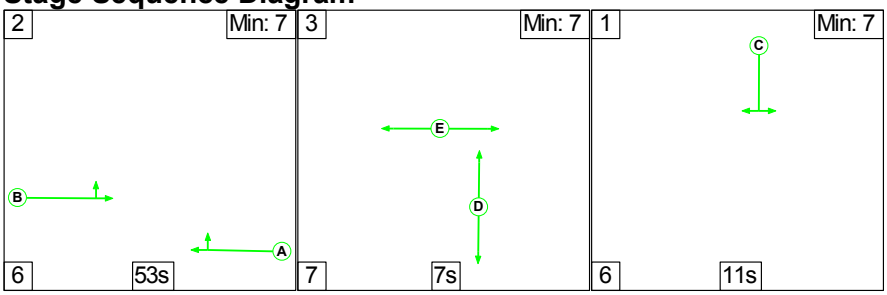
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: Growing Baldock	**-**	**-**	**160**	**106**	**1**	**3.6**	**1.0**	**0.3**	**5.0**	**-**	**-**	**-**	**-**	
Junction 15 - proposed signal access to BA10	**-**	**-**	**160**	**106**	**1**	**3.6**	**1.0**	**0.3**	**5.0**	**-**	**-**	**-**	**-**	
1/1+1/2	517	517	160	0	0	1.2	0.4	0.3	1.9	13.4	4.6	0.4	5.0	
2/1	492	492	-	-	-	1.3	0.4	-	1.7	12.1	6.4	0.4	6.8	
3/1	107	107	0	106	1	1.1	0.3	0.0	1.4	46.9	2.4	0.3	2.8	
4/1	411	411	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	481	481	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	224	224	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	

C1 PRC for Signalled Lanes (%): 117.7 Total Delay for Signalled Lanes (pcuHr): 4.97 Cycle Time (s): 90
PRC Over All Lanes (%): 117.7 Total Delay Over All Lanes(pcuHr): 4.97

Scenario 4: '2040 No School PM' (FG4: '2040 Rerouted+Development NO SCHOOL PM', Plan 2: 'With Pedestrians')

Stage Sequence Diagram



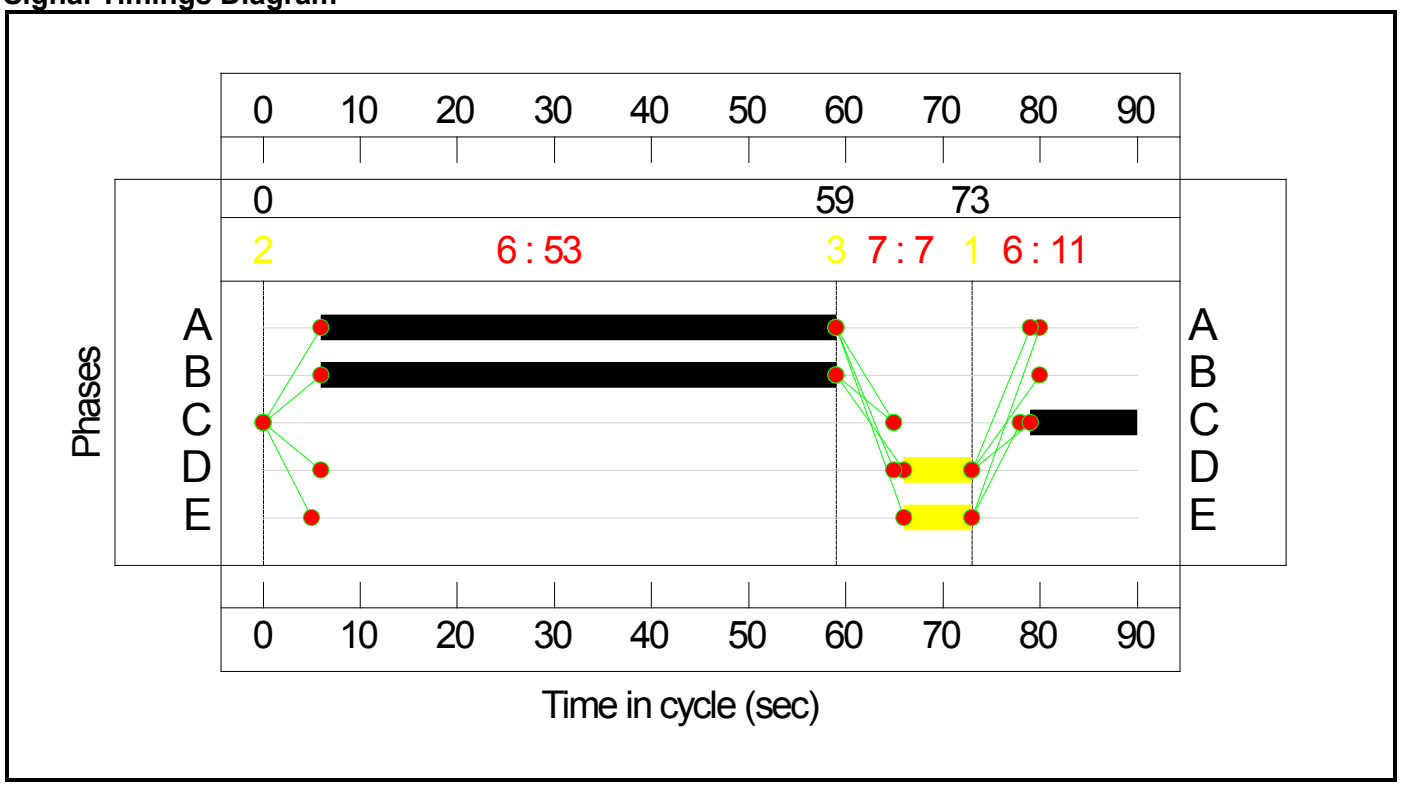
Stage Timings

Stage	2	3	1
Duration	53	7	11
Change Point	0	59	73

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Royston Road East Ahead Right	Traffic	53	6	59
B	Royston Road West Ahead Left	Traffic	53	6	59
C	BA10 Access Road Right Left	Traffic	11	79	0
D	Pedestrians across	Pedestrian	7	66	73
E	Pedestrians across	Pedestrian	7	66	73

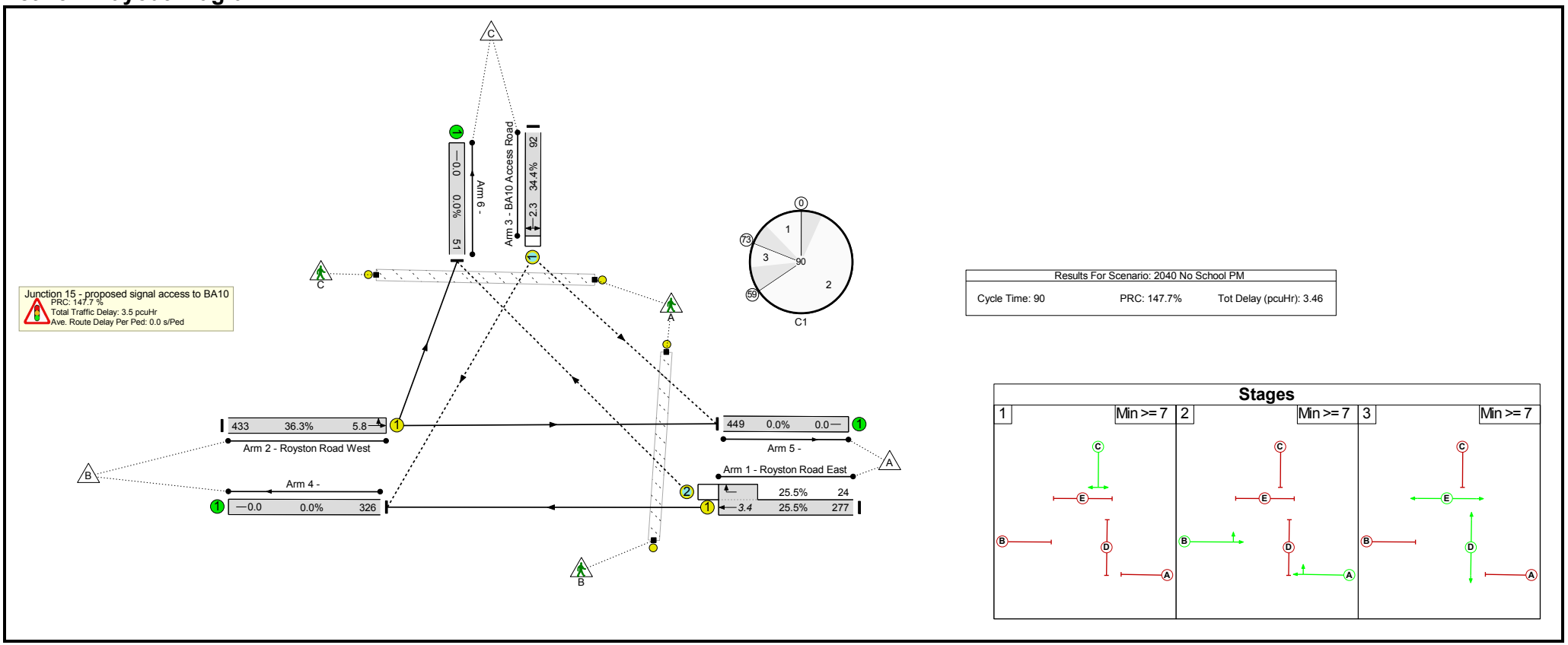
Signal Timings Diagram



Lane Green Times

Junction: Junction 15 - proposed signal access to BA10					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Royston Road East Ahead	U	A	6	59
1/2	Royston Road East Right	O	A	6	59
2/1	Royston Road West Ahead Left	U	B	6	59
3/1	BA10 Access Road Right Left	O	C	79	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Growing Baldock	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**36.3%**
Junction 15 - proposed signal access to BA10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**36.3%**
1/1+1/2	Royston Road East Ahead Right	U+O	N/A	N/A	A		1	53	-	-	301	1923:2054	1085+94	25.5 : 25.5%
2/1	Royston Road West Ahead Left	U	N/A	N/A	B		1	53	-	-	433	1986	1192	36.3%
3/1	BA10 Access Road Right Left	O	N/A	N/A	C		1	11	-	-	92	2008	268	34.4%
4/1		U	N/A	N/A	-		-	-	-	-	326	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	-	449	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	-	51	Inf	Inf	0.0%
Ped Link: P1	North Crossing	-	N/A	-	D		1	7	-	-	0	-	5600	0.0%
Ped Link: P2	East Crossing (Access)	-	N/A	-	E		1	7	-	-	0	-	5600	0.0%

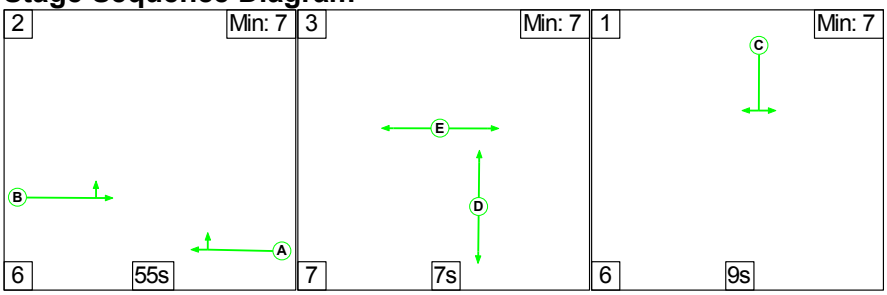
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: Growing Baldock	**-**	**-**	**24**	**91**	**1**	**2.7**	**0.7**	**0.0**	**3.5**	**-**	**-**	**-**	**-**	
Junction 15 - proposed signal access to BA10	**-**	**-**	**24**	**91**	**1**	**2.7**	**0.7**	**0.0**	**3.5**	**-**	**-**	**-**	**-**	
1/1+1/2	301	301	24	0	0	0.7	0.2	0.0	0.9	10.8	3.2	0.2	3.4	
2/1	433	433	-	-	-	1.1	0.3	-	1.4	11.6	5.5	0.3	5.8	
3/1	92	92	0	91	1	0.9	0.3	0.0	1.2	45.7	2.1	0.3	2.3	
4/1	326	326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	51	51	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	

C1 PRC for Signalled Lanes (%): 147.7 Total Delay for Signalled Lanes (pcuHr): 3.46 Cycle Time (s): 90
PRC Over All Lanes (%): 147.7 Total Delay Over All Lanes(pcuHr): 3.46

Scenario 5: '2040 With School AM' (FG5: '2040 Rerouted+Development WITH SCHOOL AM', Plan 2: 'With Pedestrians')

Stage Sequence Diagram



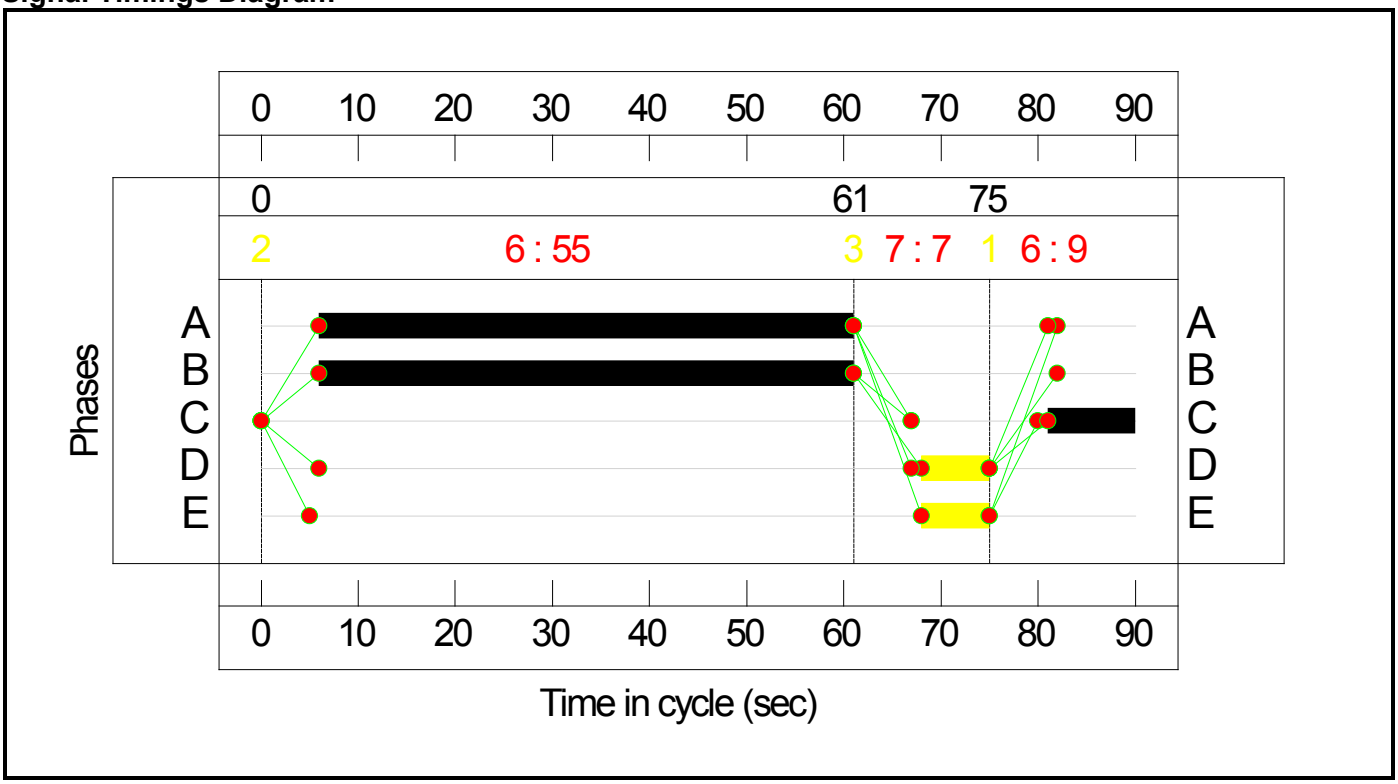
Stage Timings

Stage	2	3	1
Duration	55	7	9
Change Point	0	61	75

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Royston Road East Ahead Right	Traffic	55	6	61
B	Royston Road West Ahead Left	Traffic	55	6	61
C	BA10 Access Road Right Left	Traffic	9	81	0
D	Pedestrians across	Pedestrian	7	68	75
E	Pedestrians across	Pedestrian	7	68	75

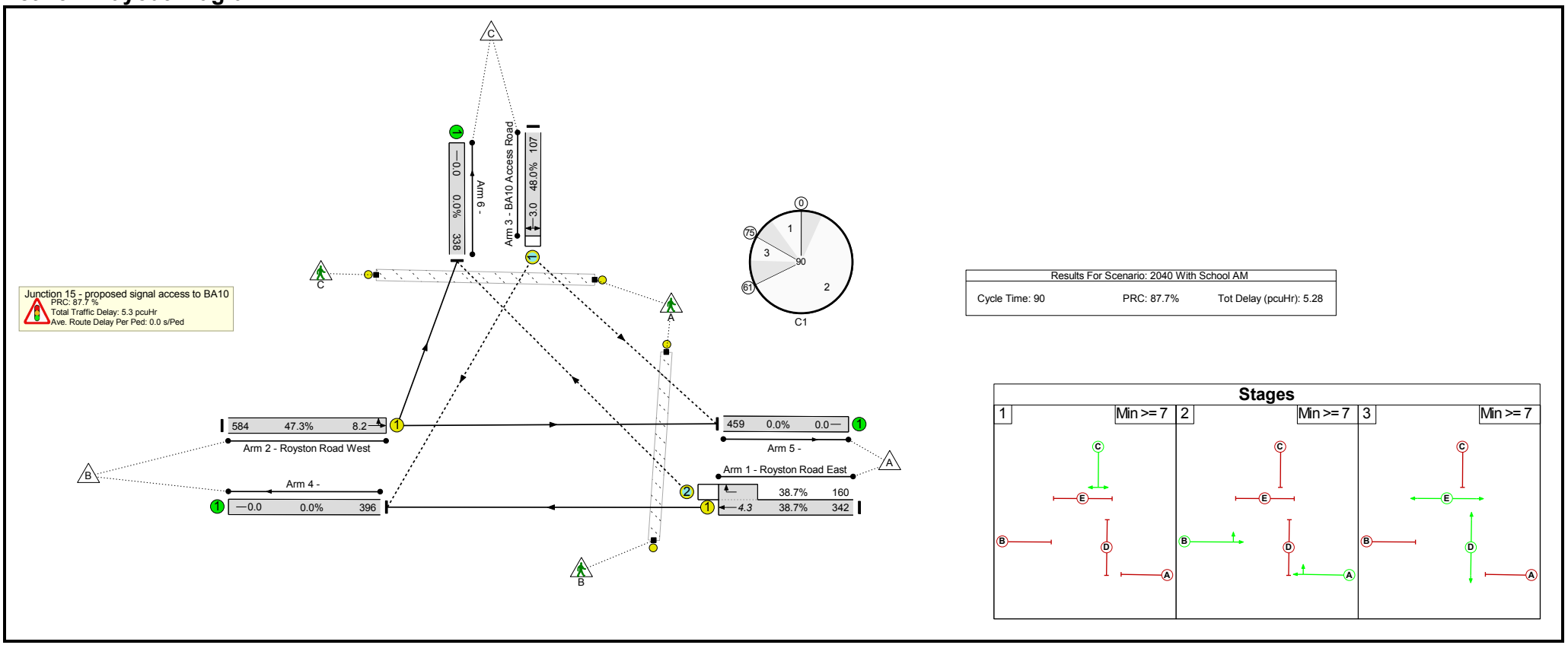
Signal Timings Diagram



Lane Green Times

Junction: Junction 15 - proposed signal access to BA10					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Royston Road East Ahead	U	A	6	61
1/2	Royston Road East Right	O	A	6	61
2/1	Royston Road West Ahead Left	U	B	6	61
3/1	BA10 Access Road Right Left	O	C	81	0

Network Layout Diagram



Network Results

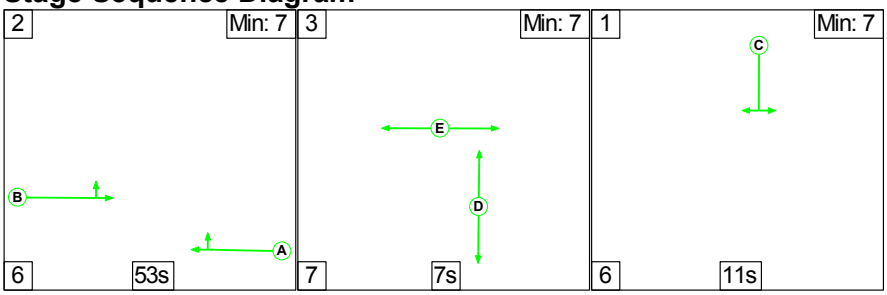
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Growing Baldock	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**48.0%**
Junction 15 - proposed signal access to BA10	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**48.0%**
1/1+1/2	Royston Road East Ahead Right	U+O	N/A	N/A	A		1	55	-	-	502	1923:2054	884+414	38.7 : 38.7%
2/1	Royston Road West Ahead Left	U	N/A	N/A	B		1	55	-	-	584	1986	1236	47.3%
3/1	BA10 Access Road Right Left	O	N/A	N/A	C		1	9	-	-	107	2008	223	48.0%
4/1		U	N/A	N/A	-		-	-	-	-	396	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	-	459	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	-	338	Inf	Inf	0.0%
Ped Link: P1	North Crossing	-	N/A	-	D		1	7	-	-	0	-	5600	0.0%
Ped Link: P2	East Crossing (Access)	-	N/A	-	E		1	7	-	-	0	-	5600	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: Growing Baldock	**-**	**-**	**160**	**106**	**1**	**3.7**	**1.2**	**0.4**	**5.3**	**-**	**-**	**-**	**-**	
Junction 15 - proposed signal access to BA10	**-**	**-**	**160**	**106**	**1**	**3.7**	**1.2**	**0.4**	**5.3**	**-**	**-**	**-**	**-**	
1/1+1/2	502	502	160	0	0	1.1	0.3	0.4	1.8	12.7	3.9	0.3	4.3	
2/1	584	584	-	-	-	1.5	0.4	-	1.9	11.9	7.8	0.4	8.2	
3/1	107	107	0	106	1	1.1	0.5	0.0	1.6	53.0	2.5	0.5	3.0	
4/1	396	396	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	459	459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	338	338	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	

C1 PRC for Signalled Lanes (%): 87.7 Total Delay for Signalled Lanes (pcuHr): 5.28 Cycle Time (s): 90
PRC Over All Lanes (%): 87.7 Total Delay Over All Lanes(pcuHr): 5.28

Scenario 6: '2040 With School PM' (FG6: '2040 Rerouted+Development WITH SCHOOL PM', Plan 2: 'With Pedestrians')

Stage Sequence Diagram



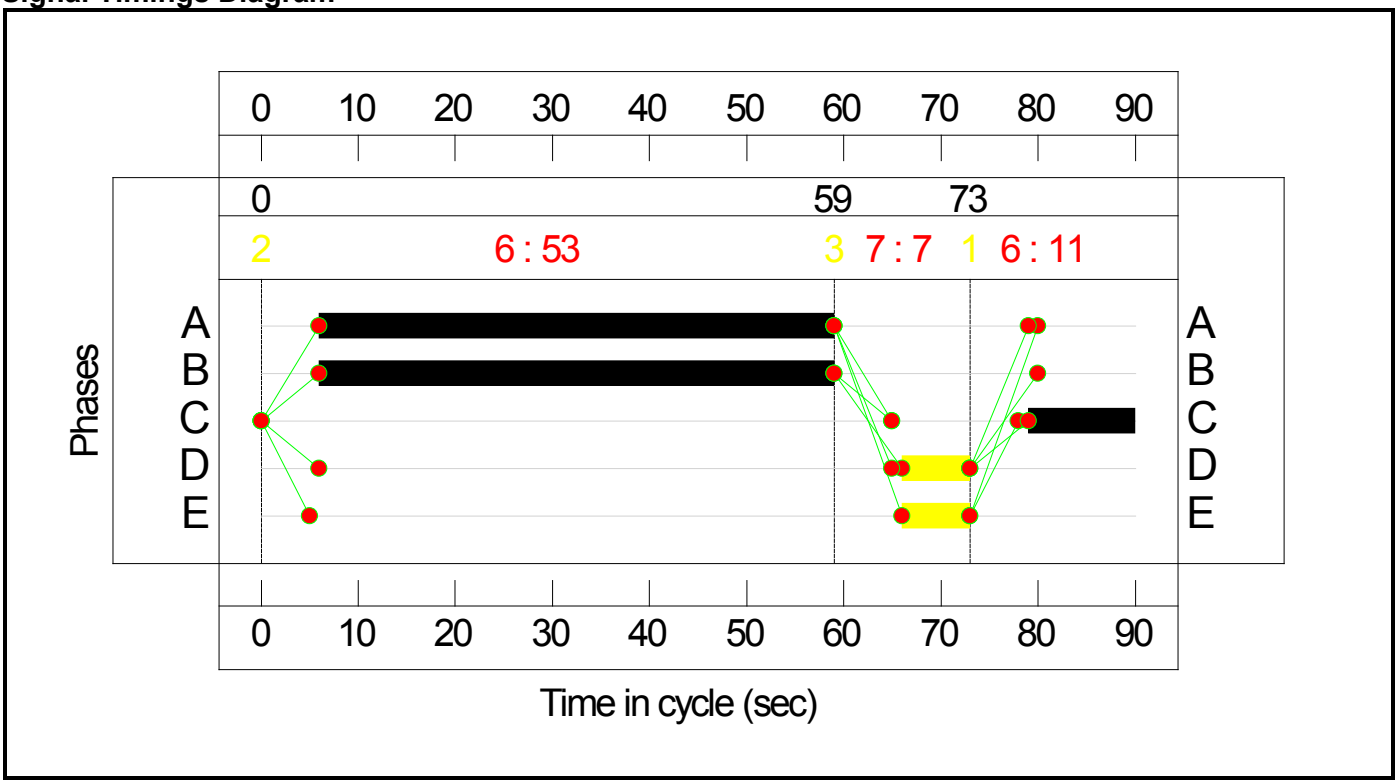
Stage Timings

Stage	2	3	1
Duration	53	7	11
Change Point	0	59	73

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Royston Road East Ahead Right	Traffic	53	6	59
B	Royston Road West Ahead Left	Traffic	53	6	59
C	BA10 Access Road Right Left	Traffic	11	79	0
D	Pedestrians across	Pedestrian	7	66	73
E	Pedestrians across	Pedestrian	7	66	73

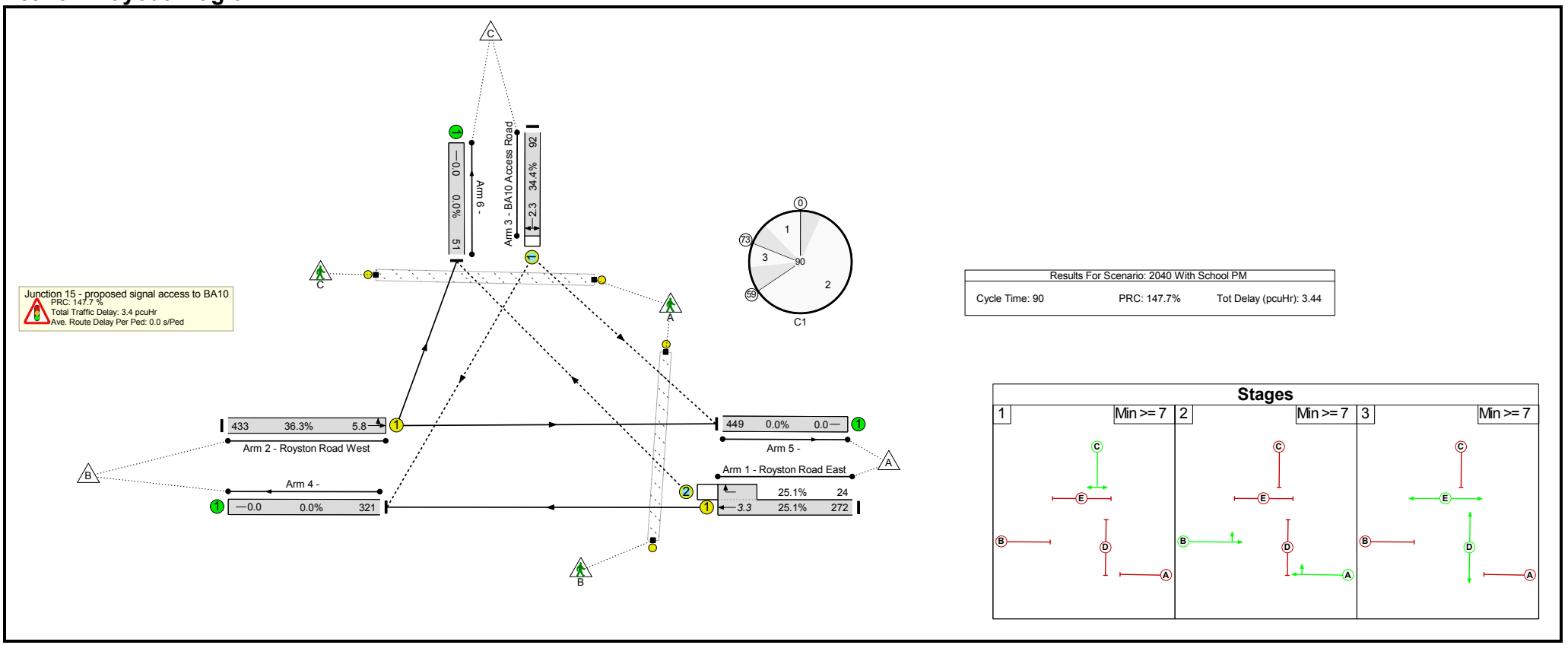
Signal Timings Diagram



Lane Green Times

Junction: Junction 15 - proposed signal access to BA10					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Royston Road East Ahead	U	A	6	59
1/2	Royston Road East Right	O	A	6	59
2/1	Royston Road West Ahead Left	U	B	6	59
3/1	BA10 Access Road Right Left	O	C	79	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Growing Baldock	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**36.3%**
Junction 15 - proposed signal access to BA10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**36.3%**
1/1+1/2	Royston Road East Ahead Right	U+O	N/A	N/A	A		1	53	-	-	296	1923:2054	1084+96	25.1 : 25.1%
2/1	Royston Road West Ahead Left	U	N/A	N/A	B		1	53	-	-	433	1986	1192	36.3%
3/1	BA10 Access Road Right Left	O	N/A	N/A	C		1	11	-	-	92	2008	268	34.4%
4/1		U	N/A	N/A	-		-	-	-	-	321	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	-	449	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	-	51	Inf	Inf	0.0%
Ped Link: P1	North Crossing	-	N/A	-	D		1	7	-	-	0	-	5600	0.0%
Ped Link: P2	East Crossing (Access)	-	N/A	-	E		1	7	-	-	0	-	5600	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: Growing Baldock	**-**	**-**	**24**	**91**	**1**	**2.7**	**0.7**	**0.0**	**3.4**	**-**	**-**	**-**	**-**	
Junction 15 - proposed signal access to BA10	**-**	**-**	**24**	**91**	**1**	**2.7**	**0.7**	**0.0**	**3.4**	**-**	**-**	**-**	**-**	
1/1+1/2	296	296	24	0	0	0.7	0.2	0.0	0.9	10.7	3.1	0.2	3.3	
2/1	433	433	-	-	-	1.1	0.3	-	1.4	11.6	5.5	0.3	5.8	
3/1	92	92	0	91	1	0.9	0.3	0.0	1.2	45.7	2.1	0.3	2.3	
4/1	321	321	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	51	51	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0	

C1 PRC for Signalled Lanes (%): 147.7 Total Delay for Signalled Lanes (pcuHr): 3.44 Cycle Time (s): 90
PRC Over All Lanes (%): 147.7 Total Delay Over All Lanes(pcuHr): 3.44

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: J16_BA10 Access_Proposed.j9
Path: C:\Users\923595\Royal HaskoningDHV\P-PC7029-Baldock-OPA - Team\WIP\02 Calculations\Junction Modelling\Models
Report generation date: 08/09/2025 17:24:05

»Core - 2033 wDev, AM
»Core - 2033 wDev, PM
»Core - 2040 wDev NOT School, AM
»Core - 2040 wDev NOT School, PM
»Core - 2040 wDev & School, AM
»Core - 2040 wDev & School, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC
	Core - 2033 wDev							
Stream B-AC	0.0	0.5	9.68	0.04	0.1	0.5	9.16	0.08
Stream C-AB	0.0	0.5	6.98	0.01	0.0	0.5	6.52	0.00
	Core - 2040 wDev NOT School							
Stream B-AC	0.1	0.5	9.34	0.09	0.1	0.5	8.08	0.07
Stream C-AB	0.1	0.5	7.53	0.11	0.0	0.5	6.52	0.02
	Core - 2040 wDev & School							
Stream B-AC	0.1	0.5	9.12	0.09	0.1	0.5	8.06	0.07
Stream C-AB	0.1	0.5	7.43	0.10	0.0	0.5	6.52	0.02

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

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

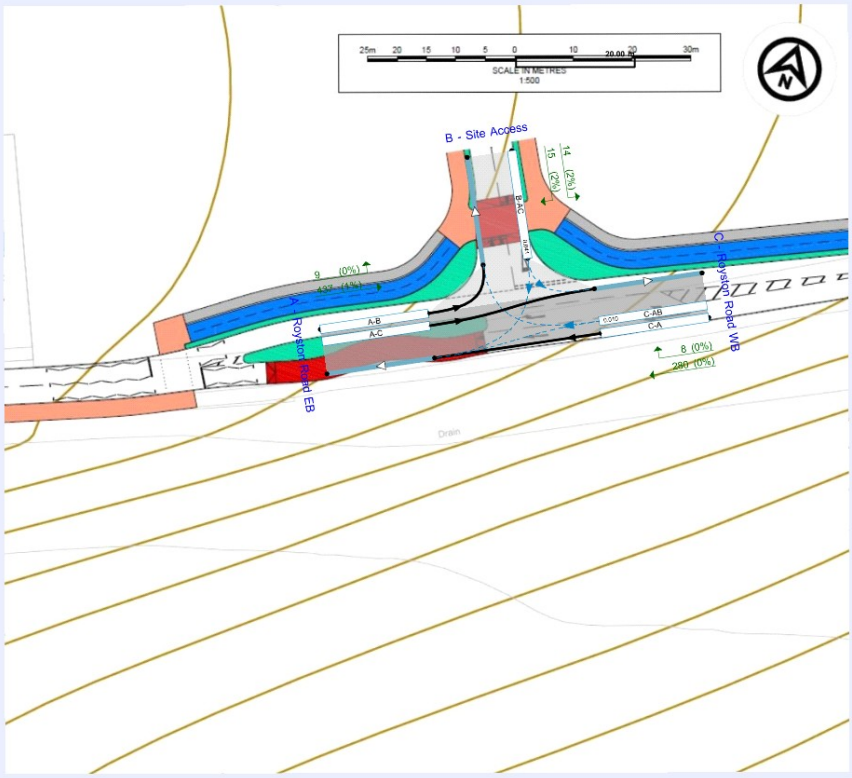
File summary

File Description

Title	BA10 Access - Royston Road (priority)
Location	Baldock, SG7 6QZ
Site number	J16
Date	23/07/2025
Version	1
Status	Draft
Identifier	
Client	Urban & Civic
Jobnumber	PC7029
Enumerator	CORPORATEROOT\923595
Description	Junction 16 - proposed priority access to BA10

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 wDev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2033 wDev	PM	ONE HOUR	16:45	18:15	15	✓
D11	2040 wDev NOT School	AM	ONE HOUR	07:45	09:15	15	✓
D12	2040 wDev NOT School	PM	ONE HOUR	16:45	18:15	15	✓
D13	2040 wDev & School	AM	ONE HOUR	07:45	09:15	15	✓
D14	2040 wDev & School	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Core - 2033 wDev, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA10 Priority access J16	T-Junction	Two-way		0.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Royston Road EB		Major
B	Site Access		Minor
C	Royston Road WB		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Royston Road WB	6.80		✓	3.45	54.8	✓	5.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	3.60	97	113

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	600	0.106	0.267	0.168	0.381
B-C	737	0.109	0.276	-	-
C-B	688	0.257	0.257	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 wDev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Royston Road EB		ONE HOUR	✓	524	100.000
B - Site Access		ONE HOUR	✓	14	100.000
C - Royston Road WB		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	39	485
	B - Site Access	12	0	2
	C - Royston Road WB	339	7	0

Proportions

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0.00	0.07	0.93
	B - Site Access	0.86	0.00	0.14
	C - Royston Road WB	0.98	0.02	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	2	4
	B - Site Access	0	0	28
	C - Royston Road WB	6	2	0

Average PCU Per Veh

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	1.000	1.020	1.040
	B - Site Access	1.000	1.000	1.280
	C - Royston Road WB	1.060	1.020	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - Royston Road EB	394	410
	B - Site Access	11	11
	C - Royston Road WB	260	276
08:00-08:15	A - Royston Road EB	471	489
	B - Site Access	13	13
	C - Royston Road WB	311	329
08:15-08:30	A - Royston Road EB	577	599
	B - Site Access	15	16
	C - Royston Road WB	381	404
08:30-08:45	A - Royston Road EB	577	599
	B - Site Access	15	16
	C - Royston Road WB	381	404
08:45-09:00	A - Royston Road EB	471	489
	B - Site Access	13	13
	C - Royston Road WB	311	329
09:00-09:15	A - Royston Road EB	394	410
	B - Site Access	11	11
	C - Royston Road WB	260	276

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.04	9.68	0.0	0.5	A	13	19
C-AB	0.01	6.98	0.0	0.5	A	6	10
C-A						311	467
A-B						36	54
A-C						445	668

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	454	0.023	10	0.0	0.0	8.112	A
C-AB	5	1	571	0.009	5	0.0	0.0	6.360	A
C-A	255	64			255				
A-B	29	7			29				
A-C	365	91			365				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	3	426	0.030	13	0.0	0.0	8.704	A
C-AB	6	2	551	0.011	6	0.0	0.0	6.606	A
C-A	305	76			305				
A-B	35	9			35				
A-C	436	109			436				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	387	0.040	15	0.0	0.0	9.679	A
C-AB	8	2	523	0.015	8	0.0	0.0	6.979	A
C-A	373	93			373				
A-B	43	11			43				
A-C	534	133			534				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	387	0.040	15	0.0	0.0	9.681	A
C-AB	8	2	523	0.015	8	0.0	0.0	6.979	A
C-A	373	93			373				
A-B	43	11			43				
A-C	534	133			534				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	3	426	0.030	13	0.0	0.0	8.706	A
C-AB	6	2	551	0.011	6	0.0	0.0	6.609	A
C-A	305	76			305				
A-B	35	9			35				
A-C	436	109			436				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	454	0.023	11	0.0	0.0	8.116	A
C-AB	5	1	571	0.009	5	0.0	0.0	6.360	A
C-A	255	64			255				
A-B	29	7			29				
A-C	365	91			365				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Core - 2033 wDev, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA10 Priority access J16	T-Junction	Two-way		0.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2033 wDev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Royston Road EB		ONE HOUR	✓	370	100.000
B - Site Access		ONE HOUR	✓	29	100.000
C - Royston Road WB		ONE HOUR	✓	451	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	8	362
	B - Site Access	24	0	5
	C - Royston Road WB	449	2	0

Proportions

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0.00	0.02	0.98
	B - Site Access	0.83	0.00	0.17
	C - Royston Road WB	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	5	1
	B - Site Access	2	0	2
	C - Royston Road WB	1	5	0

Average PCU Per Veh

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	1.000	1.050	1.010
	B - Site Access	1.020	1.000	1.020
	C - Royston Road WB	1.010	1.050	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Royston Road EB	279	282
	B - Site Access	22	22
	C - Royston Road WB	340	343
17:00-17:15	A - Royston Road EB	333	336
	B - Site Access	26	27
	C - Royston Road WB	405	410
17:15-17:30	A - Royston Road EB	407	412
	B - Site Access	32	33
	C - Royston Road WB	497	502
17:30-17:45	A - Royston Road EB	407	412
	B - Site Access	32	33
	C - Royston Road WB	497	502
17:45-18:00	A - Royston Road EB	333	336
	B - Site Access	26	27
	C - Royston Road WB	405	410
18:00-18:15	A - Royston Road EB	279	282
	B - Site Access	22	22
	C - Royston Road WB	340	343

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.08	9.16	0.1	0.5	A	27	40
C-AB	0.00	6.52	0.0	0.5	A	2	3
C-A						412	618
A-B						7	11
A-C						332	498

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	483	0.045	22	0.0	0.0	7.792	A
C-AB	2	0.38	586	0.003	1	0.0	0.0	6.155	A
C-A	338	85			338				
A-B	6	2			6				
A-C	273	68			273				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	7	459	0.057	26	0.0	0.1	8.315	A
C-AB	2	0.45	573	0.003	2	0.0	0.0	6.302	A
C-A	404	101			404				
A-B	7	2			7				
A-C	325	81			325				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	425	0.075	32	0.1	0.1	9.158	A
C-AB	2	0.55	554	0.004	2	0.0	0.0	6.518	A
C-A	494	124			494				
A-B	9	2			9				
A-C	399	100			399				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	425	0.075	32	0.1	0.1	9.162	A
C-AB	2	0.55	554	0.004	2	0.0	0.0	6.518	A
C-A	494	124			494				
A-B	9	2			9				
A-C	399	100			399				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	7	459	0.057	26	0.1	0.1	8.319	A
C-AB	2	0.45	573	0.003	2	0.0	0.0	6.305	A
C-A	404	101			404				
A-B	7	2			7				
A-C	325	81			325				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	483	0.045	22	0.1	0.0	7.800	A
C-AB	2	0.38	586	0.003	2	0.0	0.0	6.157	A
C-A	338	85			338				
A-B	6	2			6				
A-C	273	68			273				

Queue Variation Results for each time segment

16:45 - 17:00

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

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

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

Core - 2040 wDev NOT School, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA10 Priority access J16	T-Junction	Two-way		0.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2040 wDev NOT School	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Royston Road EB		ONE HOUR	✓	461	100.000
B - Site Access		ONE HOUR	✓	34	100.000
C - Royston Road WB		ONE HOUR	✓	531	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	57	404
	B - Site Access	18	0	16
	C - Royston Road WB	480	51	0

Proportions

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0.00	0.12	0.88
	B - Site Access	0.53	0.00	0.47
	C - Royston Road WB	0.90	0.10	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	3	6
	B - Site Access	0	0	10
	C - Royston Road WB	5	3	0

Average PCU Per Veh

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	1.000	1.030	1.060
	B - Site Access	1.000	1.000	1.100
	C - Royston Road WB	1.050	1.030	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - Royston Road EB	347	367
	B - Site Access	26	27
	C - Royston Road WB	400	419
08:00-08:15	A - Royston Road EB	414	438
	B - Site Access	31	32
	C - Royston Road WB	477	500
08:15-08:30	A - Royston Road EB	508	536
	B - Site Access	37	39
	C - Royston Road WB	585	613
08:30-08:45	A - Royston Road EB	508	536
	B - Site Access	37	39
	C - Royston Road WB	585	613
08:45-09:00	A - Royston Road EB	414	438
	B - Site Access	31	32
	C - Royston Road WB	477	500
09:00-09:15	A - Royston Road EB	347	367
	B - Site Access	26	27
	C - Royston Road WB	400	419

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	9.34	0.1	0.5	A	31	47
C-AB	0.11	7.53	0.1	0.5	A	47	70
C-A						440	661
A-B						52	78
A-C						371	556

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	6	492	0.052	25	0.0	0.1	7.715	A
C-AB	38	10	576	0.067	38	0.0	0.1	6.684	A
C-A	361	90			361				
A-B	43	11			43				
A-C	304	76			304				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	8	463	0.066	31	0.1	0.1	8.317	A
C-AB	46	11	559	0.082	46	0.1	0.1	7.019	A
C-A	432	108			432				
A-B	51	13			51				
A-C	363	91			363				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	423	0.089	37	0.1	0.1	9.337	A
C-AB	56	14	534	0.105	56	0.1	0.1	7.528	A
C-A	528	132			528				
A-B	63	16			63				
A-C	445	111			445				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	423	0.089	37	0.1	0.1	9.341	A
C-AB	56	14	534	0.105	56	0.1	0.1	7.531	A
C-A	528	132			528				
A-B	63	16			63				
A-C	445	111			445				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	8	463	0.066	31	0.1	0.1	8.324	A
C-AB	46	11	559	0.082	46	0.1	0.1	7.024	A
C-A	432	108			432				
A-B	51	13			51				
A-C	363	91			363				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	6	492	0.052	26	0.1	0.1	7.726	A
C-AB	38	10	576	0.067	38	0.1	0.1	6.694	A
C-A	361	90			361				
A-B	43	11			43				
A-C	304	76			304				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.09	0.03	0.25	0.46	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.12	0.03	0.26	0.47	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.12	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

Core - 2040 wDev NOT School, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA10 Priority access J16	T-Junction	Two-way		0.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2040 wDev NOT School	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Royston Road EB		ONE HOUR	✓	446	100.000
B - Site Access		ONE HOUR	✓	29	100.000
C - Royston Road WB		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	9	437
	B - Site Access	15	0	14
	C - Royston Road WB	286	8	0

Proportions

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0.00	0.02	0.98
	B - Site Access	0.52	0.00	0.48
	C - Royston Road WB	0.97	0.03	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	0	1
	B - Site Access	2	0	2
	C - Royston Road WB	0	0	0

Average PCU Per Veh

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	1.000	1.000	1.010
	B - Site Access	1.020	1.000	1.020
	C - Royston Road WB	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Royston Road EB	336	339
	B - Site Access	22	22
	C - Royston Road WB	221	221
17:00-17:15	A - Royston Road EB	401	405
	B - Site Access	26	27
	C - Royston Road WB	264	264
17:15-17:30	A - Royston Road EB	491	496
	B - Site Access	32	33
	C - Royston Road WB	324	324
17:30-17:45	A - Royston Road EB	491	496
	B - Site Access	32	33
	C - Royston Road WB	324	324
17:45-18:00	A - Royston Road EB	401	405
	B - Site Access	26	27
	C - Royston Road WB	264	264
18:00-18:15	A - Royston Road EB	336	339
	B - Site Access	22	22
	C - Royston Road WB	221	221

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	8.08	0.1	0.5	A	27	40
C-AB	0.02	6.52	0.0	0.5	A	7	11
C-A						262	394
A-B						8	12
A-C						401	601

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	532	0.041	22	0.0	0.0	7.055	A
C-AB	6	2	601	0.010	6	0.0	0.0	6.051	A
C-A	215	54			215				
A-B	7	2			7				
A-C	329	82			329				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	7	509	0.051	26	0.0	0.1	7.451	A
C-AB	7	2	584	0.012	7	0.0	0.0	6.241	A
C-A	257	64			257				
A-B	8	2			8				
A-C	393	98			393				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	478	0.067	32	0.1	0.1	8.077	A
C-AB	9	2	560	0.016	9	0.0	0.0	6.524	A
C-A	315	79			315				
A-B	10	2			10				
A-C	481	120			481				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	478	0.067	32	0.1	0.1	8.079	A
C-AB	9	2	560	0.016	9	0.0	0.0	6.524	A
C-A	315	79			315				
A-B	10	2			10				
A-C	481	120			481				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	7	509	0.051	26	0.1	0.1	7.453	A
C-AB	7	2	584	0.012	7	0.0	0.0	6.241	A
C-A	257	64			257				
A-B	8	2			8				
A-C	393	98			393				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	532	0.041	22	0.1	0.0	7.062	A
C-AB	6	2	601	0.010	6	0.0	0.0	6.054	A
C-A	215	54			215				
A-B	7	2			7				
A-C	329	82			329				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Core - 2040 wDev & School, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA10 Priority access J16	T-Junction	Two-way		0.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2040 wDev & School	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Royston Road EB		ONE HOUR	✓	439	100.000
B - Site Access		ONE HOUR	✓	34	100.000
C - Royston Road WB		ONE HOUR	✓	515	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	57	382
	B - Site Access	18	0	16
	C - Royston Road WB	464	51	0

Proportions

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0.00	0.13	0.87
	B - Site Access	0.53	0.00	0.47
	C - Royston Road WB	0.90	0.10	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	3	6
	B - Site Access	0	0	10
	C - Royston Road WB	5	3	0

Average PCU Per Veh

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	1.000	1.030	1.060
	B - Site Access	1.000	1.000	1.100
	C - Royston Road WB	1.050	1.030	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - Royston Road EB	331	349
	B - Site Access	26	27
	C - Royston Road WB	388	406
08:00-08:15	A - Royston Road EB	395	417
	B - Site Access	31	32
	C - Royston Road WB	463	485
08:15-08:30	A - Royston Road EB	483	510
	B - Site Access	37	39
	C - Royston Road WB	567	594
08:30-08:45	A - Royston Road EB	483	510
	B - Site Access	37	39
	C - Royston Road WB	567	594
08:45-09:00	A - Royston Road EB	395	417
	B - Site Access	31	32
	C - Royston Road WB	463	485
09:00-09:15	A - Royston Road EB	331	349
	B - Site Access	26	27
	C - Royston Road WB	388	406

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	9.12	0.1	0.5	A	31	47
C-AB	0.10	7.43	0.1	0.5	A	47	70
C-A						426	639
A-B						52	78
A-C						351	526

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	6	498	0.051	25	0.0	0.1	7.614	A
C-AB	38	10	581	0.066	38	0.0	0.1	6.630	A
C-A	349	87			349				
A-B	43	11			43				
A-C	288	72			288				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	8	471	0.065	31	0.1	0.1	8.176	A
C-AB	46	11	564	0.081	46	0.1	0.1	6.948	A
C-A	417	104			417				
A-B	51	13			51				
A-C	343	86			343				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	432	0.087	37	0.1	0.1	9.115	A
C-AB	56	14	541	0.104	56	0.1	0.1	7.428	A
C-A	511	128			511				
A-B	63	16			63				
A-C	421	105			421				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	432	0.087	37	0.1	0.1	9.119	A
C-AB	56	14	541	0.104	56	0.1	0.1	7.431	A
C-A	511	128			511				
A-B	63	16			63				
A-C	421	105			421				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	8	471	0.065	31	0.1	0.1	8.183	A
C-AB	46	11	564	0.081	46	0.1	0.1	6.953	A
C-A	417	104			417				
A-B	51	13			51				
A-C	343	86			343				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	6	498	0.051	26	0.1	0.1	7.623	A
C-AB	38	10	581	0.066	38	0.1	0.1	6.640	A
C-A	349	87			349				
A-B	43	11			43				
A-C	288	72			288				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.09	0.03	0.26	0.46	0.49			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.11	0.03	0.26	0.47	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.12	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

Core - 2040 wDev & School, 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	BA10 Priority access J16	T-Junction	Two-way		0.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2040 wDev & School	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Royston Road EB		ONE HOUR	✓	446	100.000
B - Site Access		ONE HOUR	✓	29	100.000
C - Royston Road WB		ONE HOUR	✓	288	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	9	437
	B - Site Access	15	0	14
	C - Royston Road WB	280	8	0

Proportions

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0.00	0.02	0.98
	B - Site Access	0.52	0.00	0.48
	C - Royston Road WB	0.97	0.03	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	0	0	1
	B - Site Access	2	0	2
	C - Royston Road WB	0	0	0

Average PCU Per Veh

		To		
		A - Royston Road EB	B - Site Access	C - Royston Road WB
From	A - Royston Road EB	1.000	1.000	1.010
	B - Site Access	1.020	1.000	1.020
	C - Royston Road WB	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Royston Road EB	336	339
	B - Site Access	22	22
	C - Royston Road WB	217	217
17:00-17:15	A - Royston Road EB	401	405
	B - Site Access	26	27
	C - Royston Road WB	259	259
17:15-17:30	A - Royston Road EB	491	496
	B - Site Access	32	33
	C - Royston Road WB	317	317
17:30-17:45	A - Royston Road EB	491	496
	B - Site Access	32	33
	C - Royston Road WB	317	317
17:45-18:00	A - Royston Road EB	401	405
	B - Site Access	26	27
	C - Royston Road WB	259	259
18:00-18:15	A - Royston Road EB	336	339
	B - Site Access	22	22
	C - Royston Road WB	217	217

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	8.06	0.1	0.5	A	27	40
C-AB	0.02	6.52	0.0	0.5	A	7	11
C-A						257	385
A-B						8	12
A-C						401	601

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	532	0.041	22	0.0	0.0	7.048	A
C-AB	6	2	601	0.010	6	0.0	0.0	6.051	A
C-A	211	53			211				
A-B	7	2			7				
A-C	329	82			329				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	7	510	0.051	26	0.0	0.1	7.441	A
C-AB	7	2	584	0.012	7	0.0	0.0	6.241	A
C-A	252	63			252				
A-B	8	2			8				
A-C	393	98			393				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	478	0.067	32	0.1	0.1	8.063	A
C-AB	9	2	560	0.016	9	0.0	0.0	6.524	A
C-A	308	77			308				
A-B	10	2			10				
A-C	481	120			481				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	478	0.067	32	0.1	0.1	8.064	A
C-AB	9	2	560	0.016	9	0.0	0.0	6.524	A
C-A	308	77			308				
A-B	10	2			10				
A-C	481	120			481				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	7	510	0.051	26	0.1	0.1	7.443	A
C-AB	7	2	584	0.012	7	0.0	0.0	6.241	A
C-A	252	63			252				
A-B	8	2			8				
A-C	393	98			393				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	532	0.041	22	0.1	0.0	7.052	A
C-AB	6	2	601	0.010	6	0.0	0.0	6.051	A
C-A	211	53			211				
A-B	7	2			7				
A-C	329	82			329				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Clothall Road / Wallington Road / South Road

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: J7_Wallington Rd Rdbt.j9
Path: C:\Users\923595\Royal HaskoningDHV\P-PC7029-Baldock-OPA - Team\WIP\02 Calculations\Junction Modelling\Models
Report generation date: 08/09/2025 17:30:35

»2022, AM
»2022, PM
»2028, AM
»2028, PM
»2033, AM
»2033, PM
»2033 w Dev, AM
»2033 w Dev, PM
»2040, AM
»2040, PM
»2040 w Dev no School, AM
»2040 w Dev no School, PM
»2040 w Dev&School, AM
»2040 w Dev&School, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC
	2022							
1 - A507 Clothall Road South	0.4	1.1	3.48	0.27	0.4	1.6	3.38	0.30
2 - South Road	0.5	2.0	5.18	0.32	0.8	2.7	6.28	0.43
3 - A507 Clothall Road North	0.2	0.5	2.65	0.16	0.2	0.5	2.68	0.17
4 - Wallington Road	0.3	1.3	4.10	0.23	0.2	0.5	3.79	0.17
	2028							
1 - A507 Clothall Road South	0.4	1.4	3.58	0.29	0.4	1.8	3.45	0.31
2 - South Road	0.5	2.3	5.33	0.34	0.8	2.5	6.58	0.46
3 - A507 Clothall Road North	0.2	0.5	2.69	0.16	0.2	0.5	2.74	0.18
4 - Wallington Road	0.3	1.3	4.22	0.24	0.2	0.5	3.86	0.18
	2033							
1 - A507 Clothall Road South	0.4	1.5	3.53	0.29	0.5	2.0	3.53	0.32
2 - South Road	0.5	2.3	5.23	0.34	0.9	2.4	6.78	0.47
3 - A507 Clothall Road North	0.2	0.5	2.72	0.17	0.2	0.5	2.77	0.19
4 - Wallington Road	0.3	1.1	4.06	0.21	0.2	0.5	3.92	0.18
	2033 w Dev							
1 - A507 Clothall Road South	0.4	1.5	3.52	0.26	0.3	1.4	3.26	0.25
2 - South Road	0.6	2.7	5.55	0.38	0.9	2.0	6.53	0.48
3 - A507 Clothall Road North	0.2	0.5	2.54	0.14	0.2	0.5	2.73	0.17
4 - Wallington Road	0.3	1.3	4.13	0.24	0.2	0.5	3.89	0.18
	2040							
1 - A507 Clothall Road South	0.4	1.3	3.54	0.28	0.4	1.8	3.44	0.31
2 - South Road	0.5	2.2	5.29	0.33	0.8	2.6	6.47	0.45
3 - A507 Clothall Road North	0.2	0.5	2.68	0.16	0.2	0.5	2.71	0.18
4 - Wallington Road	0.3	1.3	4.18	0.24	0.2	0.5	3.84	0.17
	2040 w Dev no School							
1 - A507 Clothall Road South	0.4	1.6	3.97	0.30	0.4	1.5	3.42	0.26
2 - South Road	1.5	1.8	8.93	0.60	1.3	1.6	7.94	0.56
3 - A507 Clothall Road North	0.3	1.4	3.05	0.25	0.3	1.2	2.95	0.23
4 - Wallington Road	0.5	2.4	4.97	0.34	0.3	1.3	4.26	0.24
	2040 w Dev&School							
1 - A507 Clothall Road South	0.5	2.1	4.63	0.33	0.4	1.2	3.71	0.28
2 - South Road	3.1	15.1	16.62	0.77	1.3	1.9	8.32	0.56
3 - A507 Clothall Road North	0.9	2.3	4.44	0.46	0.2	0.5	2.79	0.20
4 - Wallington Road	1.1	2.0	6.68	0.52	0.6	2.6	5.04	0.36

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

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

File summary

File Description

Title	Wallington Rd / Clothall Rd / South Road
Location	Baldock, SG7 6BZ
Site number	J7
Date	23/07/2025
Version	1
Status	Draft
Identifier	
Client	Urban&Civic
Jobnumber	PC7029
Enumerator	CORPORATEROOT\923595
Description	Junction 7 - Existing Layout

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	07:45	09:15	15
D2	2022	PM	ONE HOUR	16:45	18:15	15
D3	2028	AM	ONE HOUR	07:45	09:15	15
D4	2028	PM	ONE HOUR	16:45	18:15	15
D5	2033	AM	ONE HOUR	07:45	09:15	15
D6	2033	PM	ONE HOUR	16:45	18:15	15
D7	2033 w Dev	AM	ONE HOUR	07:45	09:15	15
D8	2033 w Dev	PM	ONE HOUR	16:45	18:15	15
D9	2040	AM	ONE HOUR	07:45	09:15	15
D10	2040	PM	ONE HOUR	16:45	18:15	15
D11	2040 w Dev no School	AM	ONE HOUR	07:45	09:15	15
D12	2040 w Dev no School	PM	ONE HOUR	16:45	18:15	15
D13	2040 w Dev&School	AM	ONE HOUR	07:45	09:15	15
D14	2040 w Dev&School	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	3.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A507 Clothall Road South	
2	South Road	
3	A507 Clothall Road North	
4	Wallington Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A507 Clothall Road South	3.56	6.06	15.7	32.3	32.0	11.0	
2 - South Road	2.86	5.60	3.7	18.9	32.0	14.0	
3 - A507 Clothall Road North	3.78	6.30	25.0	52.3	32.0	3.0	
4 - Wallington Road	3.73	8.06	2.8	15.0	32.0	12.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A507 Clothall Road South	0.685	1714
2 - South Road	0.564	1172
3 - A507 Clothall Road North	0.742	1936
4 - Wallington Road	0.611	1413

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	349	100.000
2 - South Road		✓	296	100.000
3 - A507 Clothall Road North		✓	228	100.000
4 - Wallington Road		✓	235	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	212	130	7
	2 - South Road	170	0	46	80
	3 - A507 Clothall Road North	123	76	0	29
	4 - Wallington Road	9	181	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	4	6	0
	2 - South Road	5	0	0	1
	3 - A507 Clothall Road North	11	0	0	7
	4 - Wallington Road	0	1	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A507 Clothall Road South	263	275
	2 - South Road	223	230
	3 - A507 Clothall Road North	172	183
	4 - Wallington Road	177	179
08:00-08:15	1 - A507 Clothall Road South	314	328
	2 - South Road	266	274
	3 - A507 Clothall Road North	205	219
	4 - Wallington Road	211	214
08:15-08:30	1 - A507 Clothall Road South	384	402
	2 - South Road	326	336
	3 - A507 Clothall Road North	251	268
	4 - Wallington Road	259	262
08:30-08:45	1 - A507 Clothall Road South	384	402
	2 - South Road	326	336
	3 - A507 Clothall Road North	251	268
	4 - Wallington Road	259	262
08:45-09:00	1 - A507 Clothall Road South	314	328
	2 - South Road	266	274
	3 - A507 Clothall Road North	205	219
	4 - Wallington Road	211	214
09:00-09:15	1 - A507 Clothall Road South	263	275
	2 - South Road	223	230
	3 - A507 Clothall Road North	172	183
	4 - Wallington Road	177	179

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.27	3.48	0.4	1.1	A
2 - South Road	0.32	5.18	0.5	2.0	A
3 - A507 Clothall Road North	0.16	2.65	0.2	0.5	A
4 - Wallington Road	0.23	4.10	0.3	1.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	263	227	1488	0.177	262	0.2	2.934	A
2 - South Road	223	137	1058	0.211	222	0.3	4.302	A
3 - A507 Clothall Road North	172	193	1674	0.103	171	0.1	2.396	A
4 - Wallington Road	177	277	1220	0.145	176	0.2	3.448	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	314	271	1459	0.215	314	0.3	3.143	A
2 - South Road	266	163	1042	0.255	266	0.3	4.633	A
3 - A507 Clothall Road North	205	231	1646	0.125	205	0.1	2.497	A
4 - Wallington Road	211	331	1185	0.178	211	0.2	3.697	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	384	332	1418	0.271	384	0.4	3.480	A
2 - South Road	326	200	1021	0.319	325	0.5	5.171	A
3 - A507 Clothall Road North	251	283	1609	0.156	251	0.2	2.650	A
4 - Wallington Road	259	406	1137	0.228	258	0.3	4.097	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	384	333	1418	0.271	384	0.4	3.480	A
2 - South Road	326	200	1021	0.319	326	0.5	5.178	A
3 - A507 Clothall Road North	251	283	1609	0.156	251	0.2	2.651	A
4 - Wallington Road	259	406	1137	0.228	259	0.3	4.099	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	314	272	1458	0.215	314	0.3	3.149	A
2 - South Road	266	164	1042	0.255	267	0.3	4.645	A
3 - A507 Clothall Road North	205	231	1646	0.125	205	0.1	2.498	A
4 - Wallington Road	211	332	1184	0.178	212	0.2	3.701	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	263	228	1488	0.177	263	0.2	2.942	A
2 - South Road	223	137	1057	0.211	223	0.3	4.318	A
3 - A507 Clothall Road North	172	194	1673	0.103	172	0.1	2.399	A
4 - Wallington Road	177	278	1219	0.145	177	0.2	3.458	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - South Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3 - A507 Clothall Road North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - Wallington Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - South Road	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3 - A507 Clothall Road North	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Wallington Road	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.37	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	0.46	0.03	0.25	0.46	0.48			N/A	N/A
3 - A507 Clothall Road North	0.18	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.29	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.37	0.03	0.32	1.06	1.06			N/A	N/A
2 - South Road	0.47	0.03	0.31	1.36	2.02			N/A	N/A
3 - A507 Clothall Road North	0.18	0.03	0.25	0.45	0.48			N/A	N/A
4 - Wallington Road	0.29	0.03	0.31	0.98	1.26			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2 - South Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A
3 - A507 Clothall Road North	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Wallington Road	0.22	0.00	0.00	0.22	0.22			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.22	0.00	0.00	0.22	0.22			N/A	N/A
2 - South Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3 - A507 Clothall Road North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - Wallington Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2022, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	4.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	405	100.000
2 - South Road		✓	397	100.000
3 - A507 Clothall Road North		✓	251	100.000
4 - Wallington Road		✓	174	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	198	197	10
	2 - South Road	176	0	37	184
	3 - A507 Clothall Road North	142	72	0	37
	4 - Wallington Road	6	128	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	1	2	0
	2 - South Road	0	0	0	1
	3 - A507 Clothall Road North	1	1	0	0
	4 - Wallington Road	0	0	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A507 Clothall Road South	305	309
	2 - South Road	299	300
	3 - A507 Clothall Road North	189	191
	4 - Wallington Road	131	132
17:00-17:15	1 - A507 Clothall Road South	364	369
	2 - South Road	357	359
	3 - A507 Clothall Road North	226	228
	4 - Wallington Road	156	158
17:15-17:30	1 - A507 Clothall Road South	446	452
	2 - South Road	437	439
	3 - A507 Clothall Road North	276	279
	4 - Wallington Road	192	193
17:30-17:45	1 - A507 Clothall Road South	446	452
	2 - South Road	437	439
	3 - A507 Clothall Road North	276	279
	4 - Wallington Road	192	193
17:45-18:00	1 - A507 Clothall Road South	364	369
	2 - South Road	357	359
	3 - A507 Clothall Road North	226	228
	4 - Wallington Road	156	158
18:00-18:15	1 - A507 Clothall Road South	305	309
	2 - South Road	299	300
	3 - A507 Clothall Road North	189	191
	4 - Wallington Road	131	132

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.30	3.38	0.4	1.6	A
2 - South Road	0.43	6.28	0.8	2.7	A
3 - A507 Clothall Road North	0.17	2.68	0.2	0.5	A
4 - Wallington Road	0.17	3.79	0.2	0.5	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	305	180	1567	0.195	304	0.2	2.849	A
2 - South Road	299	185	1060	0.282	297	0.4	4.711	A
3 - A507 Clothall Road North	189	277	1715	0.110	188	0.1	2.358	A
4 - Wallington Road	131	293	1225	0.107	131	0.1	3.287	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	364	216	1543	0.236	364	0.3	3.053	A
2 - South Road	357	222	1039	0.344	356	0.5	5.271	A
3 - A507 Clothall Road North	226	332	1674	0.135	226	0.2	2.484	A
4 - Wallington Road	156	350	1190	0.132	156	0.2	3.483	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	446	264	1510	0.295	445	0.4	3.380	A
2 - South Road	437	272	1010	0.433	436	0.8	6.258	A
3 - A507 Clothall Road North	276	407	1619	0.171	276	0.2	2.680	A
4 - Wallington Road	192	429	1142	0.168	191	0.2	3.788	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	446	264	1510	0.295	446	0.4	3.383	A
2 - South Road	437	272	1010	0.433	437	0.8	6.280	A
3 - A507 Clothall Road North	276	407	1618	0.171	276	0.2	2.681	A
4 - Wallington Road	192	429	1141	0.168	192	0.2	3.789	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	364	216	1542	0.236	365	0.3	3.056	A
2 - South Road	357	222	1039	0.344	358	0.5	5.293	A
3 - A507 Clothall Road North	226	333	1673	0.135	226	0.2	2.487	A
4 - Wallington Road	156	351	1189	0.132	157	0.2	3.486	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	305	181	1566	0.195	305	0.2	2.854	A
2 - South Road	299	186	1059	0.282	299	0.4	4.739	A
3 - A507 Clothall Road North	189	279	1713	0.110	189	0.1	2.363	A
4 - Wallington Road	131	294	1224	0.107	131	0.1	3.293	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2 - South Road	0.39	0.00	0.00	0.39	0.39			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.12	0.00	0.00	0.12	0.12			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - South Road	0.52	0.52	1.00	1.40	1.45			N/A	N/A
3 - A507 Clothall Road North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Wallington Road	0.15	0.00	0.00	0.15	0.15			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.42	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	0.75	0.03	0.26	0.75	0.75			N/A	N/A
3 - A507 Clothall Road North	0.21	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.20	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.42	0.03	0.32	1.34	1.61			N/A	N/A
2 - South Road	0.76	0.03	0.28	0.76	2.66			N/A	N/A
3 - A507 Clothall Road North	0.21	0.03	0.25	0.45	0.48			N/A	N/A
4 - Wallington Road	0.20	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - South Road	0.53	0.53	1.00	1.40	1.45			N/A	N/A
3 - A507 Clothall Road North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Wallington Road	0.15	0.00	0.00	0.15	0.15			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2 - South Road	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.12	0.00	0.00	0.12	0.12			N/A	N/A

2028, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	3.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	365	100.000
2 - South Road		✓	310	100.000
3 - A507 Clothall Road North		✓	239	100.000
4 - Wallington Road		✓	246	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	222	136	7
	2 - South Road	178	0	48	84
	3 - A507 Clothall Road North	129	80	0	30
	4 - Wallington Road	9	190	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	4	6	0
	2 - South Road	5	0	0	1
	3 - A507 Clothall Road North	11	0	0	7
	4 - Wallington Road	0	1	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A507 Clothall Road South	275	288
	2 - South Road	233	241
	3 - A507 Clothall Road North	180	192
	4 - Wallington Road	185	187
08:00-08:15	1 - A507 Clothall Road South	328	343
	2 - South Road	279	287
	3 - A507 Clothall Road North	215	230
	4 - Wallington Road	221	224
08:15-08:30	1 - A507 Clothall Road South	402	421
	2 - South Road	341	352
	3 - A507 Clothall Road North	263	281
	4 - Wallington Road	271	274
08:30-08:45	1 - A507 Clothall Road South	402	421
	2 - South Road	341	352
	3 - A507 Clothall Road North	263	281
	4 - Wallington Road	271	274
08:45-09:00	1 - A507 Clothall Road South	328	343
	2 - South Road	279	287
	3 - A507 Clothall Road North	215	230
	4 - Wallington Road	221	224
09:00-09:15	1 - A507 Clothall Road South	275	288
	2 - South Road	233	241
	3 - A507 Clothall Road North	180	192
	4 - Wallington Road	185	187

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.29	3.58	0.4	1.4	A
2 - South Road	0.34	5.33	0.5	2.3	A
3 - A507 Clothall Road North	0.16	2.69	0.2	0.5	A
4 - Wallington Road	0.24	4.22	0.3	1.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	275	238	1481	0.186	274	0.2	2.982	A
2 - South Road	233	143	1054	0.221	232	0.3	4.375	A
3 - A507 Clothall Road North	180	202	1667	0.108	179	0.1	2.419	A
4 - Wallington Road	185	290	1211	0.153	184	0.2	3.505	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	328	285	1450	0.226	328	0.3	3.208	A
2 - South Road	279	171	1038	0.268	278	0.4	4.736	A
3 - A507 Clothall Road North	215	242	1639	0.131	215	0.2	2.527	A
4 - Wallington Road	221	348	1174	0.188	221	0.2	3.775	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	402	349	1408	0.286	401	0.4	3.575	A
2 - South Road	341	209	1016	0.336	341	0.5	5.326	A
3 - A507 Clothall Road North	263	296	1600	0.165	263	0.2	2.692	A
4 - Wallington Road	271	426	1124	0.241	271	0.3	4.214	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	402	349	1407	0.286	402	0.4	3.579	A
2 - South Road	341	209	1016	0.336	341	0.5	5.335	A
3 - A507 Clothall Road North	263	296	1599	0.165	263	0.2	2.693	A
4 - Wallington Road	271	426	1124	0.241	271	0.3	4.219	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	328	285	1449	0.226	329	0.3	3.215	A
2 - South Road	279	171	1038	0.269	279	0.4	4.748	A
3 - A507 Clothall Road North	215	242	1638	0.131	215	0.2	2.529	A
4 - Wallington Road	221	348	1174	0.188	221	0.2	3.780	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	275	239	1480	0.186	275	0.2	2.987	A
2 - South Road	233	143	1054	0.221	234	0.3	4.391	A
3 - A507 Clothall Road North	180	203	1667	0.108	180	0.1	2.421	A
4 - Wallington Road	185	292	1210	0.153	185	0.2	3.515	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2 - South Road	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
2 - South Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - A507 Clothall Road North	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Wallington Road	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.40	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	0.50	0.03	0.25	0.50	0.50			N/A	N/A
3 - A507 Clothall Road North	0.20	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.32	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.40	0.03	0.32	1.30	1.43			N/A	N/A
2 - South Road	0.50	0.03	0.30	1.34	2.30			N/A	N/A
3 - A507 Clothall Road North	0.20	0.03	0.25	0.45	0.48			N/A	N/A
4 - Wallington Road	0.32	0.03	0.32	1.08	1.34			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
2 - South Road	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - A507 Clothall Road North	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Wallington Road	0.23	0.00	0.00	0.23	0.23			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2 - South Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2028, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	4.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	423	100.000
2 - South Road		✓	416	100.000
3 - A507 Clothall Road North		✓	263	100.000
4 - Wallington Road		✓	182	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	207	206	10
	2 - South Road	184	0	39	193
	3 - A507 Clothall Road North	149	75	0	39
	4 - Wallington Road	6	134	42	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	1	1	0
	2 - South Road	0	0	0	1
	3 - A507 Clothall Road North	1	1	0	0
	4 - Wallington Road	0	0	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A507 Clothall Road South	318	322
	2 - South Road	313	315
	3 - A507 Clothall Road North	198	200
	4 - Wallington Road	137	138
17:00-17:15	1 - A507 Clothall Road South	380	384
	2 - South Road	374	376
	3 - A507 Clothall Road North	236	238
	4 - Wallington Road	164	164
17:15-17:30	1 - A507 Clothall Road South	466	470
	2 - South Road	458	460
	3 - A507 Clothall Road North	290	292
	4 - Wallington Road	200	201
17:30-17:45	1 - A507 Clothall Road South	466	470
	2 - South Road	458	460
	3 - A507 Clothall Road North	290	292
	4 - Wallington Road	200	201
17:45-18:00	1 - A507 Clothall Road South	380	384
	2 - South Road	374	376
	3 - A507 Clothall Road North	236	238
	4 - Wallington Road	164	164
18:00-18:15	1 - A507 Clothall Road South	318	322
	2 - South Road	313	315
	3 - A507 Clothall Road North	198	200
	4 - Wallington Road	137	138

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.31	3.45	0.4	1.8	A
2 - South Road	0.46	6.58	0.8	2.5	A
3 - A507 Clothall Road North	0.18	2.74	0.2	0.5	A
4 - Wallington Road	0.18	3.86	0.2	0.5	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	318	188	1569	0.203	317	0.3	2.873	A
2 - South Road	313	194	1056	0.297	312	0.4	4.823	A
3 - A507 Clothall Road North	198	290	1705	0.116	197	0.1	2.387	A
4 - Wallington Road	137	306	1219	0.112	137	0.1	3.322	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	380	225	1544	0.246	380	0.3	3.093	A
2 - South Road	374	232	1035	0.361	373	0.6	5.440	A
3 - A507 Clothall Road North	236	347	1663	0.142	236	0.2	2.523	A
4 - Wallington Road	164	366	1182	0.138	163	0.2	3.532	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	466	276	1509	0.309	465	0.4	3.446	A
2 - South Road	458	284	1005	0.456	457	0.8	6.554	A
3 - A507 Clothall Road North	290	425	1605	0.180	289	0.2	2.735	A
4 - Wallington Road	200	449	1132	0.177	200	0.2	3.862	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	466	276	1509	0.309	466	0.4	3.449	A
2 - South Road	458	284	1005	0.456	458	0.8	6.582	A
3 - A507 Clothall Road North	290	426	1605	0.180	290	0.2	2.736	A
4 - Wallington Road	200	449	1132	0.177	200	0.2	3.865	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	380	226	1543	0.246	381	0.3	3.099	A
2 - South Road	374	232	1034	0.362	375	0.6	5.468	A
3 - A507 Clothall Road North	236	349	1662	0.142	237	0.2	2.527	A
4 - Wallington Road	164	367	1182	0.138	164	0.2	3.539	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	318	189	1568	0.203	319	0.3	2.882	A
2 - South Road	313	194	1056	0.297	314	0.4	4.857	A
3 - A507 Clothall Road North	198	292	1704	0.116	198	0.1	2.392	A
4 - Wallington Road	137	308	1218	0.112	137	0.1	3.329	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - South Road	0.42	0.00	0.00	0.42	0.42			N/A	N/A
3 - A507 Clothall Road North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Wallington Road	0.13	0.00	0.00	0.13	0.13			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2 - South Road	0.56	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 Clothall Road North	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Wallington Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.44	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	0.83	0.03	0.26	0.83	0.83			N/A	N/A
3 - A507 Clothall Road North	0.22	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.21	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.45	0.03	0.32	1.38	1.82			N/A	N/A
2 - South Road	0.83	0.03	0.28	0.83	2.51			N/A	N/A
3 - A507 Clothall Road North	0.22	0.03	0.25	0.45	0.48			N/A	N/A
4 - Wallington Road	0.21	0.03	0.25	0.46	0.48			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2 - South Road	0.57	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 Clothall Road North	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Wallington Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - South Road	0.42	0.03	0.31	0.97	1.24			N/A	N/A
3 - A507 Clothall Road North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Wallington Road	0.13	0.00	0.00	0.13	0.13			N/A	N/A

2033, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	3.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2033	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	374	100.000
2 - South Road		✓	317	100.000
3 - A507 Clothall Road North		✓	244	100.000
4 - Wallington Road		✓	212	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	227	139	8
	2 - South Road	182	0	49	86
	3 - A507 Clothall Road North	132	81	0	31
	4 - Wallington Road	10	194	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	4	6	0
	2 - South Road	5	0	0	1
	3 - A507 Clothall Road North	11	0	0	7
	4 - Wallington Road	0	1	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A507 Clothall Road South	282	295
	2 - South Road	239	246
	3 - A507 Clothall Road North	184	196
	4 - Wallington Road	160	161
08:00-08:15	1 - A507 Clothall Road South	336	352
	2 - South Road	285	294
	3 - A507 Clothall Road North	219	234
	4 - Wallington Road	191	192
08:15-08:30	1 - A507 Clothall Road South	412	431
	2 - South Road	349	360
	3 - A507 Clothall Road North	269	287
	4 - Wallington Road	233	236
08:30-08:45	1 - A507 Clothall Road South	412	431
	2 - South Road	349	360
	3 - A507 Clothall Road North	269	287
	4 - Wallington Road	233	236
08:45-09:00	1 - A507 Clothall Road South	336	352
	2 - South Road	285	294
	3 - A507 Clothall Road North	219	234
	4 - Wallington Road	191	192
09:00-09:15	1 - A507 Clothall Road South	282	295
	2 - South Road	239	246
	3 - A507 Clothall Road North	184	196
	4 - Wallington Road	160	161

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.29	3.53	0.4	1.5	A
2 - South Road	0.34	5.23	0.5	2.3	A
3 - A507 Clothall Road North	0.17	2.72	0.2	0.5	A
4 - Wallington Road	0.21	4.06	0.3	1.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	282	212	1498	0.188	281	0.2	2.956	A
2 - South Road	239	116	1069	0.223	238	0.3	4.326	A
3 - A507 Clothall Road North	184	207	1663	0.110	183	0.1	2.432	A
4 - Wallington Road	160	296	1209	0.132	159	0.2	3.426	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	336	254	1470	0.229	336	0.3	3.173	A
2 - South Road	285	139	1056	0.270	285	0.4	4.667	A
3 - A507 Clothall Road North	219	248	1634	0.134	219	0.2	2.544	A
4 - Wallington Road	191	355	1172	0.163	190	0.2	3.668	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	412	311	1433	0.287	411	0.4	3.522	A
2 - South Road	349	170	1038	0.336	348	0.5	5.220	A
3 - A507 Clothall Road North	269	303	1594	0.169	268	0.2	2.716	A
4 - Wallington Road	233	434	1120	0.208	233	0.3	4.056	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	412	312	1432	0.287	412	0.4	3.526	A
2 - South Road	349	171	1037	0.336	349	0.5	5.229	A
3 - A507 Clothall Road North	269	304	1593	0.169	269	0.2	2.716	A
4 - Wallington Road	233	435	1120	0.208	233	0.3	4.059	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	336	255	1470	0.229	337	0.3	3.179	A
2 - South Road	285	140	1055	0.270	286	0.4	4.680	A
3 - A507 Clothall Road North	219	249	1633	0.134	220	0.2	2.548	A
4 - Wallington Road	191	356	1171	0.163	191	0.2	3.672	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	282	213	1497	0.188	282	0.2	2.961	A
2 - South Road	239	117	1068	0.223	239	0.3	4.341	A
3 - A507 Clothall Road North	184	208	1662	0.111	184	0.1	2.434	A
4 - Wallington Road	160	298	1208	0.132	160	0.2	3.433	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2 - South Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
2 - South Road	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - A507 Clothall Road North	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Wallington Road	0.19	0.00	0.00	0.19	0.19			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.40	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	0.50	0.03	0.25	0.50	0.50			N/A	N/A
3 - A507 Clothall Road North	0.20	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.26	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.40	0.03	0.32	1.31	1.47			N/A	N/A
2 - South Road	0.50	0.03	0.30	1.34	2.31			N/A	N/A
3 - A507 Clothall Road North	0.20	0.03	0.25	0.45	0.48			N/A	N/A
4 - Wallington Road	0.26	0.03	0.29	0.71	1.11			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
2 - South Road	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - A507 Clothall Road North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Wallington Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2 - South Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.15	0.00	0.00	0.15	0.15			N/A	N/A

2033, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	4.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2033	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	434	100.000
2 - South Road		✓	425	100.000
3 - A507 Clothall Road North		✓	269	100.000
4 - Wallington Road		✓	186	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	212	211	11
	2 - South Road	188	0	40	197
	3 - A507 Clothall Road North	152	77	0	40
	4 - Wallington Road	6	137	43	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	1	2	0
	2 - South Road	0	0	0	1
	3 - A507 Clothall Road North	1	1	0	0
	4 - Wallington Road	0	0	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A507 Clothall Road South	327	332
	2 - South Road	320	321
	3 - A507 Clothall Road North	203	204
	4 - Wallington Road	140	141
17:00-17:15	1 - A507 Clothall Road South	390	396
	2 - South Road	382	384
	3 - A507 Clothall Road North	242	244
	4 - Wallington Road	167	168
17:15-17:30	1 - A507 Clothall Road South	478	485
	2 - South Road	468	470
	3 - A507 Clothall Road North	296	299
	4 - Wallington Road	205	206
17:30-17:45	1 - A507 Clothall Road South	478	485
	2 - South Road	468	470
	3 - A507 Clothall Road North	296	299
	4 - Wallington Road	205	206
17:45-18:00	1 - A507 Clothall Road South	390	396
	2 - South Road	382	384
	3 - A507 Clothall Road North	242	244
	4 - Wallington Road	167	168
18:00-18:15	1 - A507 Clothall Road South	327	332
	2 - South Road	320	321
	3 - A507 Clothall Road North	203	204
	4 - Wallington Road	140	141

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.32	3.53	0.5	2.0	A
2 - South Road	0.47	6.78	0.9	2.4	A
3 - A507 Clothall Road North	0.19	2.77	0.2	0.5	A
4 - Wallington Road	0.18	3.92	0.2	0.5	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	327	193	1558	0.210	326	0.3	2.917	A
2 - South Road	320	199	1052	0.304	318	0.4	4.897	A
3 - A507 Clothall Road North	203	297	1700	0.119	202	0.1	2.402	A
4 - Wallington Road	140	313	1212	0.116	140	0.1	3.353	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	390	231	1532	0.255	390	0.3	3.150	A
2 - South Road	382	238	1030	0.371	381	0.6	5.549	A
3 - A507 Clothall Road North	242	355	1657	0.146	242	0.2	2.543	A
4 - Wallington Road	167	374	1175	0.142	167	0.2	3.572	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	478	283	1497	0.319	477	0.5	3.528	A
2 - South Road	468	291	999	0.468	467	0.9	6.747	A
3 - A507 Clothall Road North	296	435	1598	0.185	296	0.2	2.764	A
4 - Wallington Road	205	458	1123	0.182	205	0.2	3.916	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	478	283	1497	0.319	478	0.5	3.531	A
2 - South Road	468	292	999	0.468	468	0.9	6.779	A
3 - A507 Clothall Road North	296	436	1597	0.185	296	0.2	2.766	A
4 - Wallington Road	205	459	1123	0.182	205	0.2	3.920	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	390	231	1532	0.255	391	0.3	3.154	A
2 - South Road	382	239	1029	0.371	383	0.6	5.581	A
3 - A507 Clothall Road North	242	357	1656	0.146	242	0.2	2.546	A
4 - Wallington Road	167	376	1174	0.142	167	0.2	3.576	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	327	194	1558	0.210	327	0.3	2.927	A
2 - South Road	320	200	1052	0.304	321	0.4	4.927	A
3 - A507 Clothall Road North	203	299	1699	0.119	203	0.1	2.405	A
4 - Wallington Road	140	314	1211	0.116	140	0.1	3.362	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - South Road	0.43	0.00	0.00	0.43	0.43			N/A	N/A
3 - A507 Clothall Road North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Wallington Road	0.13	0.00	0.00	0.13	0.13			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2 - South Road	0.58	0.11	0.85	1.37	1.44			N/A	N/A
3 - A507 Clothall Road North	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Wallington Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.47	0.03	0.25	0.47	0.48			N/A	N/A
2 - South Road	0.87	0.03	0.26	0.87	0.87			N/A	N/A
3 - A507 Clothall Road North	0.23	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.22	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.47	0.03	0.31	1.39	1.96			N/A	N/A
2 - South Road	0.88	0.03	0.28	0.88	2.42			N/A	N/A
3 - A507 Clothall Road North	0.23	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.22	0.03	0.26	0.46	0.49			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2 - South Road	0.60	0.12	0.87	1.37	1.44			N/A	N/A
3 - A507 Clothall Road North	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Wallington Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - South Road	0.44	0.03	0.34	1.13	1.31			N/A	N/A
3 - A507 Clothall Road North	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Wallington Road	0.13	0.00	0.00	0.13	0.13			N/A	N/A

2033 w Dev, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	4.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033 w Dev	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	332	100.000
2 - South Road		✓	367	100.000
3 - A507 Clothall Road North		✓	202	100.000
4 - Wallington Road		✓	252	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	244	80	8
	2 - South Road	187	0	94	86
	3 - A507 Clothall Road North	59	112	0	31
	4 - Wallington Road	10	194	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	4	5	0
	2 - South Road	5	0	1	1
	3 - A507 Clothall Road North	9	0	0	7
	4 - Wallington Road	0	1	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A507 Clothall Road South	250	260
	2 - South Road	276	285
	3 - A507 Clothall Road North	152	158
	4 - Wallington Road	190	192
08:00-08:15	1 - A507 Clothall Road South	298	311
	2 - South Road	330	340
	3 - A507 Clothall Road North	182	188
	4 - Wallington Road	227	229
08:15-08:30	1 - A507 Clothall Road South	366	381
	2 - South Road	404	416
	3 - A507 Clothall Road North	222	231
	4 - Wallington Road	277	281
08:30-08:45	1 - A507 Clothall Road South	366	381
	2 - South Road	404	416
	3 - A507 Clothall Road North	222	231
	4 - Wallington Road	277	281
08:45-09:00	1 - A507 Clothall Road South	298	311
	2 - South Road	330	340
	3 - A507 Clothall Road North	182	188
	4 - Wallington Road	227	229
09:00-09:15	1 - A507 Clothall Road South	250	260
	2 - South Road	276	285
	3 - A507 Clothall Road North	152	158
	4 - Wallington Road	190	192

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.26	3.52	0.4	1.5	A
2 - South Road	0.38	5.55	0.6	2.7	A
3 - A507 Clothall Road North	0.14	2.54	0.2	0.5	A
4 - Wallington Road	0.24	4.13	0.3	1.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	250	266	1470	0.170	249	0.2	2.948	A
2 - South Road	276	102	1079	0.256	275	0.3	4.469	A
3 - A507 Clothall Road North	152	211	1711	0.089	152	0.1	2.309	A
4 - Wallington Road	190	268	1228	0.154	189	0.2	3.463	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	298	318	1435	0.208	298	0.3	3.166	A
2 - South Road	330	122	1068	0.309	330	0.4	4.875	A
3 - A507 Clothall Road North	182	252	1680	0.108	181	0.1	2.402	A
4 - Wallington Road	227	322	1195	0.190	226	0.2	3.717	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	366	389	1388	0.263	365	0.4	3.520	A
2 - South Road	404	150	1052	0.384	403	0.6	5.543	A
3 - A507 Clothall Road North	222	309	1638	0.136	222	0.2	2.542	A
4 - Wallington Road	277	394	1149	0.241	277	0.3	4.128	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	366	390	1388	0.263	366	0.4	3.521	A
2 - South Road	404	150	1052	0.384	404	0.6	5.555	A
3 - A507 Clothall Road North	222	309	1638	0.136	222	0.2	2.543	A
4 - Wallington Road	277	394	1149	0.241	277	0.3	4.130	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	298	319	1435	0.208	299	0.3	3.169	A
2 - South Road	330	122	1068	0.309	331	0.5	4.889	A
3 - A507 Clothall Road North	182	253	1679	0.108	182	0.1	2.403	A
4 - Wallington Road	227	322	1194	0.190	227	0.2	3.721	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	250	267	1469	0.170	250	0.2	2.955	A
2 - South Road	276	102	1079	0.256	277	0.3	4.491	A
3 - A507 Clothall Road North	152	212	1710	0.089	152	0.1	2.310	A
4 - Wallington Road	190	270	1227	0.155	190	0.2	3.470	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - South Road	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3 - A507 Clothall Road North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - Wallington Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - South Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.36	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	0.62	0.03	0.25	0.62	0.62			N/A	N/A
3 - A507 Clothall Road North	0.16	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.32	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.36	0.03	0.32	1.19	1.46			N/A	N/A
2 - South Road	0.62	0.03	0.29	1.07	2.67			N/A	N/A
3 - A507 Clothall Road North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Wallington Road	0.32	0.03	0.32	1.08	1.34			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - South Road	0.45	0.00	0.00	0.45	0.45			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - South Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A
3 - A507 Clothall Road North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - Wallington Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2033 w Dev, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	4.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2033 w Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	336	100.000
2 - South Road		✓	466	100.000
3 - A507 Clothall Road North		✓	248	100.000
4 - Wallington Road		✓	186	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	219	106	11
	2 - South Road	201	0	68	197
	3 - A507 Clothall Road North	98	110	0	40
	4 - Wallington Road	6	137	43	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	1	2	0
	2 - South Road	0	0	1	1
	3 - A507 Clothall Road North	0	1	0	0
	4 - Wallington Road	0	0	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A507 Clothall Road South	253	256
	2 - South Road	351	353
	3 - A507 Clothall Road North	187	188
	4 - Wallington Road	140	141
17:00-17:15	1 - A507 Clothall Road South	302	306
	2 - South Road	419	421
	3 - A507 Clothall Road North	223	224
	4 - Wallington Road	167	168
17:15-17:30	1 - A507 Clothall Road South	370	375
	2 - South Road	513	516
	3 - A507 Clothall Road North	273	274
	4 - Wallington Road	205	206
17:30-17:45	1 - A507 Clothall Road South	370	375
	2 - South Road	513	516
	3 - A507 Clothall Road North	273	274
	4 - Wallington Road	205	206
17:45-18:00	1 - A507 Clothall Road South	302	306
	2 - South Road	419	421
	3 - A507 Clothall Road North	223	224
	4 - Wallington Road	167	168
18:00-18:15	1 - A507 Clothall Road South	253	256
	2 - South Road	351	353
	3 - A507 Clothall Road North	187	188
	4 - Wallington Road	140	141

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.25	3.26	0.3	1.4	A
2 - South Road	0.48	6.53	0.9	2.0	A
3 - A507 Clothall Road North	0.17	2.73	0.2	0.5	A
4 - Wallington Road	0.18	3.89	0.2	0.5	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	253	218	1544	0.164	252	0.2	2.785	A
2 - South Road	351	120	1096	0.320	349	0.5	4.806	A
3 - A507 Clothall Road North	187	306	1700	0.110	186	0.1	2.378	A
4 - Wallington Road	140	307	1217	0.115	140	0.1	3.340	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	302	261	1515	0.199	302	0.2	2.967	A
2 - South Road	419	144	1083	0.387	418	0.6	5.415	A
3 - A507 Clothall Road North	223	367	1655	0.135	223	0.2	2.513	A
4 - Wallington Road	167	367	1180	0.142	167	0.2	3.554	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	370	319	1475	0.251	370	0.3	3.257	A
2 - South Road	513	176	1064	0.482	512	0.9	6.504	A
3 - A507 Clothall Road North	273	449	1594	0.171	273	0.2	2.724	A
4 - Wallington Road	205	450	1130	0.181	205	0.2	3.890	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	370	319	1475	0.251	370	0.3	3.257	A
2 - South Road	513	176	1064	0.482	513	0.9	6.533	A
3 - A507 Clothall Road North	273	450	1593	0.171	273	0.2	2.726	A
4 - Wallington Road	205	450	1129	0.181	205	0.2	3.894	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	302	261	1515	0.199	302	0.3	2.972	A
2 - South Road	419	144	1082	0.387	420	0.6	5.443	A
3 - A507 Clothall Road North	223	369	1654	0.135	223	0.2	2.516	A
4 - Wallington Road	167	368	1179	0.142	167	0.2	3.558	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	253	219	1543	0.164	253	0.2	2.792	A
2 - South Road	351	121	1096	0.320	351	0.5	4.841	A
3 - A507 Clothall Road North	187	308	1699	0.110	187	0.1	2.383	A
4 - Wallington Road	140	308	1216	0.115	140	0.1	3.349	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - South Road	0.47	0.00	0.00	0.47	0.47			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.13	0.00	0.00	0.13	0.13			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - South Road	0.63	0.12	0.88	1.38	1.44			N/A	N/A
3 - A507 Clothall Road North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Wallington Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.33	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	0.92	0.03	0.26	0.92	0.92			N/A	N/A
3 - A507 Clothall Road North	0.21	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.22	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.33	0.03	0.32	1.12	1.37			N/A	N/A
2 - South Road	0.92	0.03	0.27	0.92	2.03			N/A	N/A
3 - A507 Clothall Road North	0.21	0.03	0.25	0.45	0.48			N/A	N/A
4 - Wallington Road	0.22	0.03	0.26	0.46	0.49			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - South Road	0.64	0.16	0.91	1.38	1.44			N/A	N/A
3 - A507 Clothall Road North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Wallington Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - South Road	0.47	0.04	0.41	1.24	1.37			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.13	0.00	0.00	0.13	0.13			N/A	N/A

2040, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	3.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2040	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	360	100.000
2 - South Road		✓	306	100.000
3 - A507 Clothall Road North		✓	235	100.000
4 - Wallington Road		✓	242	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	219	134	7
	2 - South Road	176	0	47	83
	3 - A507 Clothall Road North	127	78	0	30
	4 - Wallington Road	9	187	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	4	6	0
	2 - South Road	5	0	0	1
	3 - A507 Clothall Road North	11	0	0	7
	4 - Wallington Road	0	1	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A507 Clothall Road South	271	284
	2 - South Road	230	238
	3 - A507 Clothall Road North	177	189
	4 - Wallington Road	182	184
08:00-08:15	1 - A507 Clothall Road South	324	339
	2 - South Road	275	284
	3 - A507 Clothall Road North	211	226
	4 - Wallington Road	218	220
08:15-08:30	1 - A507 Clothall Road South	396	415
	2 - South Road	337	348
	3 - A507 Clothall Road North	259	276
	4 - Wallington Road	266	270
08:30-08:45	1 - A507 Clothall Road South	396	415
	2 - South Road	337	348
	3 - A507 Clothall Road North	259	276
	4 - Wallington Road	266	270
08:45-09:00	1 - A507 Clothall Road South	324	339
	2 - South Road	275	284
	3 - A507 Clothall Road North	211	226
	4 - Wallington Road	218	220
09:00-09:15	1 - A507 Clothall Road South	271	284
	2 - South Road	230	238
	3 - A507 Clothall Road North	177	189
	4 - Wallington Road	182	184

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.28	3.54	0.4	1.3	A
2 - South Road	0.33	5.29	0.5	2.2	A
3 - A507 Clothall Road North	0.16	2.68	0.2	0.5	A
4 - Wallington Road	0.24	4.18	0.3	1.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	271	233	1484	0.183	270	0.2	2.965	A
2 - South Road	230	140	1055	0.218	229	0.3	4.352	A
3 - A507 Clothall Road North	177	199	1669	0.106	176	0.1	2.412	A
4 - Wallington Road	182	286	1214	0.150	181	0.2	3.485	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	324	279	1453	0.223	323	0.3	3.186	A
2 - South Road	275	168	1040	0.265	275	0.4	4.705	A
3 - A507 Clothall Road North	211	239	1640	0.129	211	0.1	2.518	A
4 - Wallington Road	218	342	1178	0.185	217	0.2	3.748	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	396	342	1412	0.281	396	0.4	3.541	A
2 - South Road	337	206	1018	0.331	336	0.5	5.277	A
3 - A507 Clothall Road North	259	292	1602	0.162	259	0.2	2.680	A
4 - Wallington Road	266	419	1129	0.236	266	0.3	4.174	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	396	342	1412	0.281	396	0.4	3.544	A
2 - South Road	337	206	1018	0.331	337	0.5	5.286	A
3 - A507 Clothall Road North	259	293	1601	0.162	259	0.2	2.680	A
4 - Wallington Road	266	419	1128	0.236	266	0.3	4.176	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	324	280	1453	0.223	324	0.3	3.191	A
2 - South Road	275	168	1039	0.265	276	0.4	4.718	A
3 - A507 Clothall Road North	211	240	1640	0.129	211	0.1	2.522	A
4 - Wallington Road	218	343	1177	0.185	218	0.2	3.755	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	271	234	1483	0.183	271	0.2	2.970	A
2 - South Road	230	141	1055	0.218	231	0.3	4.370	A
3 - A507 Clothall Road North	177	201	1668	0.106	177	0.1	2.416	A
4 - Wallington Road	182	287	1213	0.150	182	0.2	3.492	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.22	0.00	0.00	0.22	0.22			N/A	N/A
2 - South Road	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
2 - South Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - A507 Clothall Road North	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Wallington Road	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.39	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	0.49	0.03	0.25	0.49	0.49			N/A	N/A
3 - A507 Clothall Road North	0.19	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.31	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.39	0.03	0.32	1.28	1.32			N/A	N/A
2 - South Road	0.49	0.03	0.30	1.35	2.22			N/A	N/A
3 - A507 Clothall Road North	0.19	0.03	0.25	0.45	0.48			N/A	N/A
4 - Wallington Road	0.31	0.03	0.31	1.05	1.31			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
2 - South Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - A507 Clothall Road North	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Wallington Road	0.23	0.00	0.00	0.23	0.23			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.22	0.00	0.00	0.22	0.22			N/A	N/A
2 - South Road	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A507 Clothall Road North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Wallington Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2040, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	4.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2040	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	417	100.000
2 - South Road		✓	408	100.000
3 - A507 Clothall Road North		✓	258	100.000
4 - Wallington Road		✓	179	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	204	203	10
	2 - South Road	181	0	38	189
	3 - A507 Clothall Road North	146	74	0	38
	4 - Wallington Road	6	132	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	1	2	0
	2 - South Road	0	0	0	1
	3 - A507 Clothall Road North	1	1	0	0
	4 - Wallington Road	0	0	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A507 Clothall Road South	314	319
	2 - South Road	307	309
	3 - A507 Clothall Road North	194	196
	4 - Wallington Road	135	136
17:00-17:15	1 - A507 Clothall Road South	375	380
	2 - South Road	367	368
	3 - A507 Clothall Road North	232	234
	4 - Wallington Road	161	162
17:15-17:30	1 - A507 Clothall Road South	459	466
	2 - South Road	449	451
	3 - A507 Clothall Road North	284	286
	4 - Wallington Road	197	198
17:30-17:45	1 - A507 Clothall Road South	459	466
	2 - South Road	449	451
	3 - A507 Clothall Road North	284	286
	4 - Wallington Road	197	198
17:45-18:00	1 - A507 Clothall Road South	375	380
	2 - South Road	367	368
	3 - A507 Clothall Road North	232	234
	4 - Wallington Road	161	162
18:00-18:15	1 - A507 Clothall Road South	314	319
	2 - South Road	307	309
	3 - A507 Clothall Road North	194	196
	4 - Wallington Road	135	136

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.31	3.44	0.4	1.8	A
2 - South Road	0.45	6.47	0.8	2.6	A
3 - A507 Clothall Road North	0.18	2.71	0.2	0.5	A
4 - Wallington Road	0.17	3.84	0.2	0.5	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	314	185	1563	0.201	313	0.3	2.876	A
2 - South Road	307	191	1057	0.291	306	0.4	4.782	A
3 - A507 Clothall Road North	194	285	1709	0.114	194	0.1	2.375	A
4 - Wallington Road	135	301	1220	0.110	134	0.1	3.314	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	375	222	1538	0.244	375	0.3	3.093	A
2 - South Road	367	228	1035	0.354	366	0.5	5.375	A
3 - A507 Clothall Road North	232	341	1667	0.139	232	0.2	2.507	A
4 - Wallington Road	161	360	1184	0.136	161	0.2	3.519	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	459	272	1505	0.305	459	0.4	3.439	A
2 - South Road	449	279	1006	0.447	448	0.8	6.442	A
3 - A507 Clothall Road North	284	417	1611	0.176	284	0.2	2.712	A
4 - Wallington Road	197	441	1134	0.174	197	0.2	3.839	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	459	272	1504	0.305	459	0.4	3.443	A
2 - South Road	449	280	1006	0.447	449	0.8	6.466	A
3 - A507 Clothall Road North	284	418	1610	0.176	284	0.2	2.713	A
4 - Wallington Road	197	441	1134	0.174	197	0.2	3.842	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	375	222	1538	0.244	375	0.3	3.096	A
2 - South Road	367	229	1035	0.354	368	0.6	5.404	A
3 - A507 Clothall Road North	232	343	1666	0.139	232	0.2	2.511	A
4 - Wallington Road	161	361	1183	0.136	161	0.2	3.525	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	314	186	1563	0.201	314	0.3	2.885	A
2 - South Road	307	191	1056	0.291	308	0.4	4.813	A
3 - A507 Clothall Road North	194	287	1708	0.114	194	0.1	2.380	A
4 - Wallington Road	135	302	1219	0.111	135	0.1	3.323	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - South Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A
3 - A507 Clothall Road North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Wallington Road	0.12	0.00	0.00	0.12	0.12			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
2 - South Road	0.54	0.54	1.00	1.40	1.45			N/A	N/A
3 - A507 Clothall Road North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Wallington Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.44	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	0.80	0.03	0.26	0.80	0.80			N/A	N/A
3 - A507 Clothall Road North	0.21	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.21	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.44	0.03	0.32	1.37	1.77			N/A	N/A
2 - South Road	0.80	0.03	0.28	0.80	2.58			N/A	N/A
3 - A507 Clothall Road North	0.21	0.03	0.25	0.45	0.48			N/A	N/A
4 - Wallington Road	0.21	0.03	0.25	0.46	0.48			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
2 - South Road	0.55	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 Clothall Road North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Wallington Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - South Road	0.41	0.03	0.29	0.73	1.12			N/A	N/A
3 - A507 Clothall Road North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Wallington Road	0.12	0.00	0.00	0.12	0.12			N/A	N/A

2040 w Dev no School, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	5.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2040 w Dev no School	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	345	100.000
2 - South Road		✓	543	100.000
3 - A507 Clothall Road North		✓	358	100.000
4 - Wallington Road		✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	235	98	12
	2 - South Road	181	0	161	201
	3 - A507 Clothall Road North	85	171	0	102
	4 - Wallington Road	13	215	112	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	4	4	0
	2 - South Road	5	0	2	2
	3 - A507 Clothall Road North	6	0	0	2
	4 - Wallington Road	0	1	1	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A507 Clothall Road South	260	270
	2 - South Road	409	421
	3 - A507 Clothall Road North	270	275
	4 - Wallington Road	256	258
08:00-08:15	1 - A507 Clothall Road South	310	322
	2 - South Road	488	503
	3 - A507 Clothall Road North	322	328
	4 - Wallington Road	306	309
08:15-08:30	1 - A507 Clothall Road South	380	395
	2 - South Road	598	616
	3 - A507 Clothall Road North	394	402
	4 - Wallington Road	374	378
08:30-08:45	1 - A507 Clothall Road South	380	395
	2 - South Road	598	616
	3 - A507 Clothall Road North	394	402
	4 - Wallington Road	374	378
08:45-09:00	1 - A507 Clothall Road South	310	322
	2 - South Road	488	503
	3 - A507 Clothall Road North	322	328
	4 - Wallington Road	306	309
09:00-09:15	1 - A507 Clothall Road South	260	270
	2 - South Road	409	421
	3 - A507 Clothall Road North	270	275
	4 - Wallington Road	256	258

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.30	3.97	0.4	1.6	A
2 - South Road	0.60	8.93	1.5	1.8	A
3 - A507 Clothall Road North	0.25	3.05	0.3	1.4	A
4 - Wallington Road	0.34	4.97	0.5	2.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	260	374	1403	0.185	259	0.2	3.143	A
2 - South Road	409	166	1044	0.392	406	0.6	5.620	A
3 - A507 Clothall Road North	270	295	1677	0.161	269	0.2	2.555	A
4 - Wallington Road	256	328	1195	0.214	255	0.3	3.827	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	310	447	1354	0.229	310	0.3	3.449	A
2 - South Road	488	199	1026	0.476	487	0.9	6.667	A
3 - A507 Clothall Road North	322	353	1633	0.197	322	0.2	2.746	A
4 - Wallington Road	306	392	1154	0.265	305	0.4	4.238	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	380	548	1287	0.295	379	0.4	3.964	A
2 - South Road	598	244	1001	0.597	596	1.4	8.837	A
3 - A507 Clothall Road North	394	432	1573	0.251	394	0.3	3.052	A
4 - Wallington Road	374	480	1099	0.340	374	0.5	4.956	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	380	548	1287	0.295	380	0.4	3.970	A
2 - South Road	598	244	1001	0.598	598	1.5	8.934	A
3 - A507 Clothall Road North	394	434	1572	0.251	394	0.3	3.055	A
4 - Wallington Road	374	481	1099	0.341	374	0.5	4.968	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	310	448	1353	0.229	311	0.3	3.454	A
2 - South Road	488	200	1025	0.476	490	0.9	6.756	A
3 - A507 Clothall Road North	322	356	1631	0.197	322	0.2	2.751	A
4 - Wallington Road	306	394	1153	0.265	306	0.4	4.252	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	260	375	1401	0.185	260	0.2	3.156	A
2 - South Road	409	167	1044	0.392	410	0.7	5.688	A
3 - A507 Clothall Road North	270	297	1675	0.161	270	0.2	2.562	A
4 - Wallington Road	256	330	1194	0.214	256	0.3	3.842	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2 - South Road	0.64	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 Clothall Road North	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - Wallington Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
2 - South Road	0.90	0.10	0.90	1.24	1.67			N/A	N/A
3 - A507 Clothall Road North	0.24	0.00	0.00	0.24	0.24			N/A	N/A
4 - Wallington Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.42	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	1.45	0.03	0.27	1.45	1.45			N/A	N/A
3 - A507 Clothall Road North	0.33	0.03	0.25	0.45	0.48			N/A	N/A
4 - Wallington Road	0.51	0.03	0.25	0.51	0.51			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.42	0.03	0.32	1.34	1.59			N/A	N/A
2 - South Road	1.47	0.03	0.27	1.47	1.78			N/A	N/A
3 - A507 Clothall Road North	0.33	0.03	0.32	1.11	1.36			N/A	N/A
4 - Wallington Road	0.51	0.03	0.30	1.38	2.35			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
2 - South Road	0.92	0.10	0.92	1.34	1.73			N/A	N/A
3 - A507 Clothall Road North	0.25	0.00	0.00	0.25	0.25			N/A	N/A
4 - Wallington Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2 - South Road	0.65	0.05	0.56	1.26	1.26			N/A	N/A
3 - A507 Clothall Road North	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - Wallington Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A

2040 w Dev no School, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	5.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2040 w Dev no School	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	341	100.000
2 - South Road		✓	530	100.000
3 - A507 Clothall Road North		✓	326	100.000
4 - Wallington Road		✓	244	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	211	117	13
	2 - South Road	193	0	115	222
	3 - A507 Clothall Road North	118	126	0	82
	4 - Wallington Road	9	150	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	1	1	0
	2 - South Road	0	0	0	0
	3 - A507 Clothall Road North	0	1	0	0
	4 - Wallington Road	0	0	1	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A507 Clothall Road South	257	259
	2 - South Road	399	399
	3 - A507 Clothall Road North	245	246
	4 - Wallington Road	184	184
17:00-17:15	1 - A507 Clothall Road South	307	310
	2 - South Road	476	476
	3 - A507 Clothall Road North	293	294
	4 - Wallington Road	219	220
17:15-17:30	1 - A507 Clothall Road South	375	379
	2 - South Road	584	584
	3 - A507 Clothall Road North	359	360
	4 - Wallington Road	269	270
17:30-17:45	1 - A507 Clothall Road South	375	379
	2 - South Road	584	584
	3 - A507 Clothall Road North	359	360
	4 - Wallington Road	269	270
17:45-18:00	1 - A507 Clothall Road South	307	310
	2 - South Road	476	476
	3 - A507 Clothall Road North	293	294
	4 - Wallington Road	219	220
18:00-18:15	1 - A507 Clothall Road South	257	259
	2 - South Road	399	399
	3 - A507 Clothall Road North	245	246
	4 - Wallington Road	184	184

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.26	3.42	0.4	1.5	A
2 - South Road	0.56	7.94	1.3	1.6	A
3 - A507 Clothall Road North	0.23	2.95	0.3	1.2	A
4 - Wallington Road	0.24	4.26	0.3	1.3	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	257	271	1513	0.170	256	0.2	2.862	A
2 - South Road	399	161	1080	0.370	397	0.6	5.252	A
3 - A507 Clothall Road North	245	320	1692	0.145	245	0.2	2.486	A
4 - Wallington Road	184	328	1208	0.152	183	0.2	3.511	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	307	324	1477	0.208	306	0.3	3.076	A
2 - South Road	476	193	1062	0.449	476	0.8	6.134	A
3 - A507 Clothall Road North	293	384	1645	0.178	293	0.2	2.662	A
4 - Wallington Road	219	392	1168	0.188	219	0.2	3.792	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	375	397	1427	0.263	375	0.4	3.422	A
2 - South Road	584	236	1037	0.563	582	1.3	7.876	A
3 - A507 Clothall Road North	359	470	1581	0.227	359	0.3	2.944	A
4 - Wallington Road	269	480	1115	0.241	268	0.3	4.251	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	375	397	1427	0.263	375	0.4	3.423	A
2 - South Road	584	237	1037	0.563	583	1.3	7.939	A
3 - A507 Clothall Road North	359	471	1580	0.227	359	0.3	2.946	A
4 - Wallington Road	269	481	1114	0.241	269	0.3	4.257	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	307	325	1476	0.208	307	0.3	3.081	A
2 - South Road	476	194	1061	0.449	478	0.8	6.192	A
3 - A507 Clothall Road North	293	386	1643	0.178	293	0.2	2.667	A
4 - Wallington Road	219	394	1168	0.188	220	0.2	3.798	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	257	272	1512	0.170	257	0.2	2.867	A
2 - South Road	399	162	1079	0.370	400	0.6	5.307	A
3 - A507 Clothall Road North	245	323	1690	0.145	246	0.2	2.492	A
4 - Wallington Road	184	329	1207	0.152	184	0.2	3.521	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - South Road	0.58	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 Clothall Road North	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Wallington Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - South Road	0.80	0.11	0.88	1.08	1.08			N/A	N/A
3 - A507 Clothall Road North	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4 - Wallington Road	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.36	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	1.26	0.03	0.26	1.26	1.26			N/A	N/A
3 - A507 Clothall Road North	0.29	0.03	0.25	0.45	0.48			N/A	N/A
4 - Wallington Road	0.32	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.36	0.03	0.33	1.19	1.45			N/A	N/A
2 - South Road	1.27	0.03	0.27	1.27	1.64			N/A	N/A
3 - A507 Clothall Road North	0.29	0.03	0.30	0.91	1.22			N/A	N/A
4 - Wallington Road	0.32	0.03	0.32	1.08	1.34			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - South Road	0.82	0.13	0.91	1.07	1.07			N/A	N/A
3 - A507 Clothall Road North	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4 - Wallington Road	0.23	0.00	0.00	0.23	0.23			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - South Road	0.59	0.05	0.58	1.34	1.44			N/A	N/A
3 - A507 Clothall Road North	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Wallington Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2040 w Dev&School, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	8.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2040 w Dev&School	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	344	100.000
2 - South Road		✓	637	100.000
3 - A507 Clothall Road North		✓	629	100.000
4 - Wallington Road		✓	521	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	229	98	17
	2 - South Road	177	0	161	299
	3 - A507 Clothall Road North	85	171	0	373
	4 - Wallington Road	11	253	257	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	4	4	0
	2 - South Road	5	0	2	1
	3 - A507 Clothall Road North	6	0	0	1
	4 - Wallington Road	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A507 Clothall Road South	259	269
	2 - South Road	480	491
	3 - A507 Clothall Road North	474	480
	4 - Wallington Road	392	392
08:00-08:15	1 - A507 Clothall Road South	309	321
	2 - South Road	573	586
	3 - A507 Clothall Road North	565	573
	4 - Wallington Road	468	468
08:15-08:30	1 - A507 Clothall Road South	379	393
	2 - South Road	701	718
	3 - A507 Clothall Road North	693	702
	4 - Wallington Road	574	574
08:30-08:45	1 - A507 Clothall Road South	379	393
	2 - South Road	701	718
	3 - A507 Clothall Road North	693	702
	4 - Wallington Road	574	574
08:45-09:00	1 - A507 Clothall Road South	309	321
	2 - South Road	573	586
	3 - A507 Clothall Road North	565	573
	4 - Wallington Road	468	468
09:00-09:15	1 - A507 Clothall Road South	259	269
	2 - South Road	480	491
	3 - A507 Clothall Road North	474	480
	4 - Wallington Road	392	392

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.33	4.63	0.5	2.1	A
2 - South Road	0.77	16.62	3.1	15.1	C
3 - A507 Clothall Road North	0.46	4.44	0.9	2.3	A
4 - Wallington Road	0.52	6.68	1.1	2.0	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	259	510	1315	0.197	258	0.2	3.403	A
2 - South Road	480	279	989	0.485	476	0.9	6.963	A
3 - A507 Clothall Road North	474	368	1633	0.290	472	0.4	3.096	A
4 - Wallington Road	392	324	1208	0.325	390	0.5	4.391	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	309	611	1248	0.248	309	0.3	3.833	A
2 - South Road	573	334	959	0.597	571	1.4	9.228	A
3 - A507 Clothall Road North	565	442	1578	0.358	565	0.6	3.550	A
4 - Wallington Road	468	388	1168	0.401	468	0.7	5.135	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	379	748	1158	0.327	378	0.5	4.612	A
2 - South Road	701	409	917	0.765	695	3.0	15.783	C
3 - A507 Clothall Road North	693	538	1506	0.460	691	0.8	4.412	A
4 - Wallington Road	574	475	1114	0.515	572	1.0	6.629	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	379	750	1157	0.327	379	0.5	4.626	A
2 - South Road	701	410	916	0.765	701	3.1	16.618	C
3 - A507 Clothall Road North	693	542	1503	0.461	693	0.9	4.442	A
4 - Wallington Road	574	477	1112	0.516	574	1.1	6.682	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	309	614	1246	0.248	310	0.3	3.848	A
2 - South Road	573	335	958	0.598	579	1.5	9.663	A
3 - A507 Clothall Road North	565	448	1574	0.359	567	0.6	3.578	A
4 - Wallington Road	468	392	1166	0.402	470	0.7	5.182	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	259	514	1313	0.197	259	0.2	3.418	A
2 - South Road	480	281	988	0.485	482	1.0	7.139	A
3 - A507 Clothall Road North	474	373	1630	0.291	474	0.4	3.118	A
4 - Wallington Road	392	327	1207	0.325	393	0.5	4.429	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2 - South Road	0.93	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 Clothall Road North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
4 - Wallington Road	0.48	0.00	0.00	0.48	0.48			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2 - South Road	1.45	0.07	0.91	3.21	4.57			N/A	N/A
3 - A507 Clothall Road North	0.55	0.07	0.74	1.35	1.42			N/A	N/A
4 - Wallington Road	0.66	0.11	0.85	1.37	1.44			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.48	0.03	0.25	0.48	0.48			N/A	N/A
2 - South Road	3.03	0.03	0.31	4.36	15.10			N/A	N/A
3 - A507 Clothall Road North	0.84	0.03	0.25	0.84	0.84			N/A	N/A
4 - Wallington Road	1.05	0.03	0.26	1.05	1.05			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.48	0.03	0.31	1.42	2.07			N/A	N/A
2 - South Road	3.14	0.03	0.29	3.14	10.00			N/A	N/A
3 - A507 Clothall Road North	0.85	0.03	0.27	0.85	2.29			N/A	N/A
4 - Wallington Road	1.06	0.03	0.27	1.06	1.97			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2 - South Road	1.52	0.05	0.56	3.81	5.82			N/A	N/A
3 - A507 Clothall Road North	0.56	0.55	1.00	1.40	1.45			N/A	N/A
4 - Wallington Road	0.68	0.16	0.91	1.38	1.44			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - South Road	0.96	0.04	0.37	2.37	4.21			N/A	N/A
3 - A507 Clothall Road North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
4 - Wallington Road	0.48	0.04	0.43	1.26	1.38			N/A	N/A

2040 w Dev&School, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wallington Rd / Clothall Rd	Standard Roundabout		1, 2, 3, 4	5.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2040 w Dev&School	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 Clothall Road South		✓	338	100.000
2 - South Road		✓	505	100.000
3 - A507 Clothall Road North		✓	285	100.000
4 - Wallington Road		✓	363	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	211	117	10
	2 - South Road	192	0	115	198
	3 - A507 Clothall Road North	118	126	0	41
	4 - Wallington Road	14	184	165	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 Clothall Road South	2 - South Road	3 - A507 Clothall Road North	4 - Wallington Road
From	1 - A507 Clothall Road South	0	1	1	0
	2 - South Road	0	0	0	0
	3 - A507 Clothall Road North	0	1	0	0
	4 - Wallington Road	0	0	1	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A507 Clothall Road South	254	257
	2 - South Road	380	380
	3 - A507 Clothall Road North	215	216
	4 - Wallington Road	273	275
17:00-17:15	1 - A507 Clothall Road South	304	307
	2 - South Road	454	454
	3 - A507 Clothall Road North	256	257
	4 - Wallington Road	326	328
17:15-17:30	1 - A507 Clothall Road South	372	376
	2 - South Road	556	556
	3 - A507 Clothall Road North	314	315
	4 - Wallington Road	400	401
17:30-17:45	1 - A507 Clothall Road South	372	376
	2 - South Road	556	556
	3 - A507 Clothall Road North	314	315
	4 - Wallington Road	400	401
17:45-18:00	1 - A507 Clothall Road South	304	307
	2 - South Road	454	454
	3 - A507 Clothall Road North	256	257
	4 - Wallington Road	326	328
18:00-18:15	1 - A507 Clothall Road South	254	257
	2 - South Road	380	380
	3 - A507 Clothall Road North	215	216
	4 - Wallington Road	273	275

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - A507 Clothall Road South	0.28	3.71	0.4	1.2	A
2 - South Road	0.56	8.32	1.3	1.9	A
3 - A507 Clothall Road North	0.20	2.79	0.2	0.5	A
4 - Wallington Road	0.36	5.04	0.6	2.6	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	254	356	1455	0.175	254	0.2	2.996	A
2 - South Road	380	219	1047	0.363	378	0.6	5.363	A
3 - A507 Clothall Road North	215	299	1706	0.126	214	0.1	2.412	A
4 - Wallington Road	273	327	1207	0.226	272	0.3	3.845	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	304	427	1407	0.216	304	0.3	3.263	A
2 - South Road	454	262	1022	0.444	453	0.8	6.315	A
3 - A507 Clothall Road North	256	359	1662	0.154	256	0.2	2.559	A
4 - Wallington Road	326	391	1168	0.279	326	0.4	4.274	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	372	522	1341	0.277	372	0.4	3.710	A
2 - South Road	556	321	989	0.562	554	1.3	8.248	A
3 - A507 Clothall Road North	314	439	1603	0.196	314	0.2	2.791	A
4 - Wallington Road	400	479	1114	0.359	399	0.6	5.029	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	372	523	1341	0.278	372	0.4	3.715	A
2 - South Road	556	321	988	0.563	556	1.3	8.321	A
3 - A507 Clothall Road North	314	440	1602	0.196	314	0.2	2.793	A
4 - Wallington Road	400	480	1114	0.359	400	0.6	5.041	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	304	428	1406	0.216	304	0.3	3.271	A
2 - South Road	454	263	1022	0.444	456	0.8	6.381	A
3 - A507 Clothall Road North	256	361	1661	0.154	256	0.2	2.563	A
4 - Wallington Road	326	393	1167	0.280	327	0.4	4.291	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 Clothall Road South	254	358	1453	0.175	255	0.2	3.005	A
2 - South Road	380	220	1046	0.363	381	0.6	5.420	A
3 - A507 Clothall Road North	215	302	1705	0.126	215	0.1	2.416	A
4 - Wallington Road	273	329	1206	0.227	274	0.3	3.862	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - South Road	0.57	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 Clothall Road North	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Wallington Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - South Road	0.79	0.11	0.88	1.42	1.49			N/A	N/A
3 - A507 Clothall Road North	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Wallington Road	0.39	0.00	0.00	0.39	0.39			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.38	0.03	0.25	0.45	0.48			N/A	N/A
2 - South Road	1.26	0.03	0.26	1.26	1.26			N/A	N/A
3 - A507 Clothall Road North	0.24	0.03	0.25	0.46	0.48			N/A	N/A
4 - Wallington Road	0.55	0.03	0.25	0.55	0.55			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.38	0.03	0.33	1.22	1.22			N/A	N/A
2 - South Road	1.27	0.03	0.27	1.27	1.86			N/A	N/A
3 - A507 Clothall Road North	0.24	0.03	0.26	0.47	0.50			N/A	N/A
4 - Wallington Road	0.56	0.03	0.30	1.34	2.61			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2 - South Road	0.81	0.12	0.89	1.03	1.03			N/A	N/A
3 - A507 Clothall Road North	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Wallington Road	0.39	0.00	0.00	0.39	0.39			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 Clothall Road South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - South Road	0.58	0.05	0.53	1.33	1.43			N/A	N/A
3 - A507 Clothall Road North	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Wallington Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A

London Road / South Road / High Street Roundabout

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: Import of J11_London Rd.High St Rdbt.j9
Path: C:\Users\923595\Royal HaskoningDHV\P-PC7029-Baldock-OPA - Team\WIP\02 Calculations\Junction Modelling\Models
Report generation date: 12/09/2025 11:09:57

»2022, AM
»2022, PM
»2028, AM
»2028, PM
»2033, AM
»2033, PM
»2033 + Dev, AM
»2033 + Dev, PM
»2040, AM
»2040, PM
»2040 + Dev, AM
»2040 + Dev, PM
»2040 + Dev + School, AM
»2040 + Dev + School, PM

Summary of junction performance

	AM					PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	Junction Delay (s)	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	Junction Delay (s)
2022										
1 - South Road	1.0	1.8	6.24	0.51		0.8	2.6	5.67	0.44	
2 - South Lodge Mews	0.0	0.5	13.54	0.03		0.0	~1	0.00	0.00	
3 - London Road	0.6	2.6	4.30	0.36	4.39	0.7	2.7	4.53	0.41	4.16
4 - Supermarket Access	0.2	0.5	2.76	0.17		0.4	1.7	3.15	0.30	
5 - High Street	0.4	1.1	2.93	0.28		0.5	2.5	3.34	0.35	
2028										
1 - South Road	1.2	1.6	6.71	0.54		0.9	2.4	6.08	0.47	
2 - South Lodge Mews	0.0	0.5	14.38	0.03		0.0	~1	0.00	0.00	
3 - London Road	0.6	2.8	4.50	0.38	4.63	0.8	2.6	4.81	0.44	4.41
4 - Supermarket Access	0.2	0.5	2.83	0.18		0.5	2.0	3.30	0.32	
5 - High Street	0.4	1.5	3.01	0.29		0.6	2.7	3.52	0.37	
2033										
1 - South Road	1.2	1.5	6.97	0.56		0.9	2.3	6.28	0.49	
2 - South Lodge Mews	0.0	0.5	14.84	0.03		0.0	~1	0.00	0.00	
3 - London Road	0.6	2.8	4.60	0.39	4.76	0.8	2.5	4.94	0.45	4.52
4 - Supermarket Access	0.2	0.5	2.86	0.19		0.5	2.2	3.37	0.33	
5 - High Street	0.4	1.6	3.05	0.30		0.6	2.8	3.59	0.39	
2033 + Dev										
1 - South Road	1.4	1.6	7.54	0.59		1.1	1.9	6.82	0.53	
2 - South Lodge Mews	0.0	0.5	15.63	0.03		0.0	~1	0.00	0.00	
3 - London Road	0.7	2.8	4.67	0.40	5.02	0.9	2.0	5.27	0.48	4.84
4 - Supermarket Access	0.2	0.5	2.89	0.19		0.5	2.3	3.47	0.34	
5 - High Street	0.4	1.7	3.08	0.30		0.6	2.8	3.72	0.39	
2040										
1 - South Road	1.1	1.6	6.53	0.53		0.9	2.5	5.96	0.46	
2 - South Lodge Mews	0.0	0.5	14.06	0.03		0.0	~1	0.00	0.00	
3 - London Road	0.6	2.7	4.43	0.38	4.54	0.7	2.7	4.73	0.43	4.33
4 - Supermarket Access	0.2	0.5	2.81	0.18		0.5	1.9	3.26	0.32	
5 - High Street	0.4	1.4	2.98	0.29		0.6	2.7	3.47	0.37	
2040 + Dev										
1 - South Road	1.9	3.1	8.97	0.66		1.2	1.8	6.96	0.54	
2 - South Lodge Mews	0.0	0.5	17.31	0.04		0.0	~1	0.00	0.00	
3 - London Road	1.0	1.9	5.47	0.49	5.94	0.8	2.4	4.93	0.45	4.80
4 - Supermarket Access	0.2	0.5	3.08	0.20		0.5	2.1	3.40	0.33	
5 - High Street	0.4	1.8	3.29	0.31		0.6	2.8	3.68	0.38	
2040 + Dev + School										
1 - South Road	2.4	7.1	10.39	0.71		1.3	1.6	7.45	0.57	
2 - South Lodge Mews	0.0	0.5	18.65	0.04		0.0	~1	0.00	0.00	
3 - London Road	1.3	1.5	6.52	0.57	6.89	1.0	1.7	5.48	0.51	5.15
4 - Supermarket Access	0.3	0.9	3.31	0.21		0.5	2.2	3.50	0.33	
5 - High Street	0.5	2.2	3.53	0.33		0.6	2.8	3.71	0.38	

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.

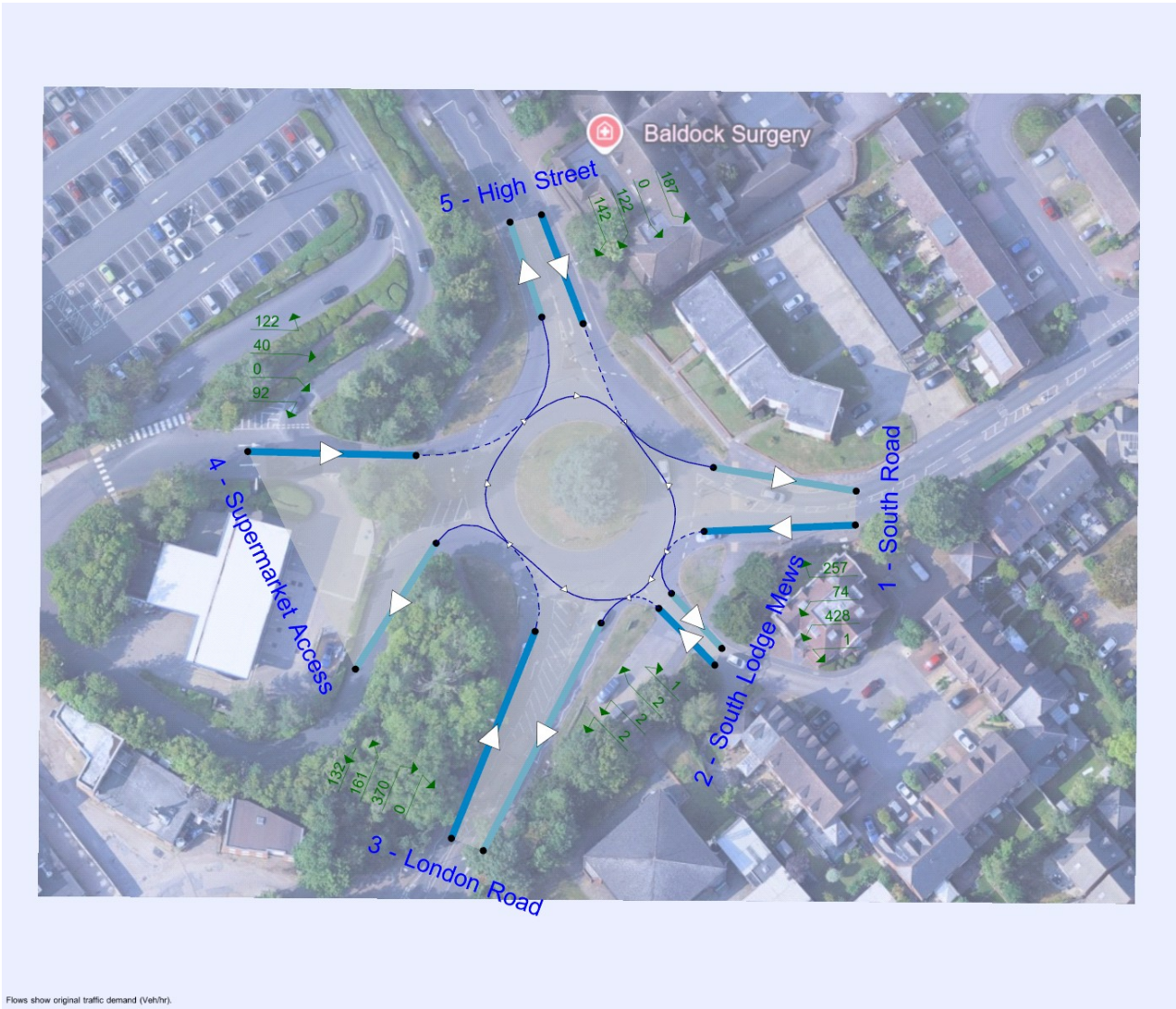
File summary

File Description

Title	High Street/South Road/London Road
Location	Baldock, SG7 6DT
Site number	J11
Date	23/07/2025
Version	1
Status	Draft
Identifier	
Client	Urban & Civic
Jobnumber	PC7029
Enumerator	CORPORATEROOT\926654
Description	Junction 11 - Existing layout

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	07:45	09:15	15
D2	2022	PM	ONE HOUR	16:45	18:15	15
D3	2028	AM	ONE HOUR	07:45	09:15	15
D4	2028	PM	ONE HOUR	16:45	18:15	15
D5	2033	AM	ONE HOUR	07:45	09:15	15
D6	2033	PM	ONE HOUR	16:45	18:15	15
D7	2033 + Dev	AM	ONE HOUR	07:45	09:15	15
D8	2033 + Dev	PM	ONE HOUR	16:45	18:15	15
D9	2040	AM	ONE HOUR	07:45	09:15	15
D10	2040	PM	ONE HOUR	16:45	18:15	15
D11	2040 + Dev	AM	ONE HOUR	07:45	09:15	15
D12	2040 + Dev	PM	ONE HOUR	16:45	18:15	15
D13	2040 + Dev + School	AM	ONE HOUR	07:45	09:15	15
D14	2040 + Dev + School	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	South Road	
2	South Lodge Mews	
3	London Road	
4	Supermarket Access	
5	High Street	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - South Road	3.12	6.02	19.5	8.8	42.9	31.8	
2 - South Lodge Mews	2.34	4.42	3.2	3.5	42.9	61.0	
3 - London Road	3.75	6.66	24.4	17.4	42.9	49.2	
4 - Supermarket Access	5.91	7.46	4.8	24.1	42.9	29.9	
5 - High Street	4.82	6.80	17.3	51.9	42.9	29.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - South Road	0.562	1435
2 - South Lodge Mews	0.315	600
3 - London Road	0.601	1643
4 - Supermarket Access	0.704	2039
5 - High Street	0.695	1960

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	548	100.000
2 - South Lodge Mews		✓	7	100.000
3 - London Road		✓	430	100.000
4 - Supermarket Access		✓	249	100.000
5 - High Street		✓	424	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	1	254	72	220
	2 - South Lodge Mews	1	0	2	2	2
	3 - London Road	141	0	5	128	156
	4 - Supermarket Access	39	0	89	3	118
	5 - High Street	143	0	134	138	9

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	1	2
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	6	0	0	0	1
	4 - Supermarket Access	3	0	1	33	2
	5 - High Street	3	0	3	1	11

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.51	6.24	1.0	1.8	A
2 - South Lodge Mews	0.03	13.54	0.0	0.5	B
3 - London Road	0.36	4.30	0.6	2.6	A
4 - Supermarket Access	0.17	2.76	0.2	0.5	A
5 - High Street	0.28	2.93	0.4	1.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	413	284	1255	0.329	411	0.5	4.255	A
2 - South Lodge Mews	5	694	378	0.014	5	0.0	9.665	A
3 - London Road	324	336	1405	0.230	323	0.3	3.323	A
4 - Supermarket Access	187	401	1712	0.110	187	0.1	2.361	A
5 - High Street	319	209	1764	0.181	318	0.2	2.489	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	493	340	1223	0.403	492	0.7	4.917	A
2 - South Lodge Mews	6	831	334	0.019	6	0.0	10.993	B
3 - London Road	387	402	1365	0.283	386	0.4	3.674	A
4 - Supermarket Access	224	480	1656	0.135	224	0.2	2.513	A
5 - High Street	381	251	1735	0.220	381	0.3	2.658	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	603	416	1180	0.511	602	1.0	6.212	A
2 - South Lodge Mews	8	1017	274	0.028	8	0.0	13.508	B
3 - London Road	473	492	1311	0.361	473	0.6	4.289	A
4 - Supermarket Access	274	588	1579	0.174	274	0.2	2.757	A
5 - High Street	467	307	1695	0.275	466	0.4	2.930	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	603	416	1180	0.511	603	1.0	6.244	A
2 - South Lodge Mews	8	1018	274	0.028	8	0.0	13.540	B
3 - London Road	473	493	1311	0.361	473	0.6	4.298	A
4 - Supermarket Access	274	589	1579	0.174	274	0.2	2.759	A
5 - High Street	467	307	1695	0.275	467	0.4	2.930	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	493	340	1223	0.403	494	0.7	4.950	A
2 - South Lodge Mews	6	833	333	0.019	6	0.0	11.027	B
3 - London Road	387	404	1364	0.283	387	0.4	3.688	A
4 - Supermarket Access	224	482	1654	0.135	224	0.2	2.518	A
5 - High Street	381	251	1734	0.220	382	0.3	2.663	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	413	285	1254	0.329	413	0.5	4.284	A
2 - South Lodge Mews	5	697	376	0.014	5	0.0	9.699	A
3 - London Road	324	338	1404	0.231	324	0.3	3.337	A
4 - Supermarket Access	187	403	1710	0.110	188	0.1	2.365	A
5 - High Street	319	210	1763	0.181	319	0.2	2.495	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - South Lodge Mews	0.01	0.00	0.00	0.01	0.01			N/A	N/A
3 - London Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - Supermarket Access	0.12	0.00	0.00	0.12	0.12			N/A	N/A
5 - High Street	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.67	0.11	0.85	1.37	1.44			N/A	N/A
2 - South Lodge Mews	0.02	0.02	0.25	0.45	0.48			N/A	N/A
3 - London Road	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - Supermarket Access	0.16	0.00	0.00	0.16	0.16			N/A	N/A
5 - High Street	0.28	0.00	0.00	0.28	0.28			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.03	0.03	0.26	1.03	1.03			N/A	N/A
2 - South Lodge Mews	0.03	0.00	0.00	0.03	0.03			N/A	N/A
3 - London Road	0.56	0.03	0.25	0.56	0.56			N/A	N/A
4 - Supermarket Access	0.21	0.03	0.25	0.46	0.48			N/A	N/A
5 - High Street	0.38	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.04	0.03	0.27	1.04	1.78			N/A	N/A
2 - South Lodge Mews	0.03	0.00	0.00	0.03	0.03			N/A	N/A
3 - London Road	0.56	0.03	0.30	1.33	2.64			N/A	N/A
4 - Supermarket Access	0.21	0.03	0.25	0.45	0.48			N/A	N/A
5 - High Street	0.38	0.03	0.33	1.09	1.09			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.68	0.19	0.92	1.39	1.44			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.40	0.00	0.00	0.40	0.40			N/A	N/A
4 - Supermarket Access	0.16	0.00	0.00	0.16	0.16			N/A	N/A
5 - High Street	0.28	0.00	0.00	0.28	0.28			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.49	0.04	0.45	1.27	1.39			N/A	N/A
2 - South Lodge Mews	0.01	0.00	0.00	0.01	0.01			N/A	N/A
3 - London Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - Supermarket Access	0.12	0.00	0.00	0.12	0.12			N/A	N/A
5 - High Street	0.22	0.00	0.00	0.22	0.22			N/A	N/A

2022, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	459	100.000
2 - South Lodge Mews		✓	5	100.000
3 - London Road		✓	504	100.000
4 - Supermarket Access		✓	454	100.000
5 - High Street		✓	522	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	0	211	87	160
	2 - South Lodge Mews	1	0	2	0	2
	3 - London Road	177	1	1	154	171
	4 - Supermarket Access	96	0	113	0	245
	5 - High Street	177	2	163	180	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	0	1
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	0	0	0	1	1
	4 - Supermarket Access	0	0	0	0	0
	5 - High Street	1	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.44	5.67	0.8	2.6	A
2 - South Lodge Mews	0.00	0.00	0.0	~1	A
3 - London Road	0.41	4.53	0.7	2.7	A
4 - Supermarket Access	0.30	3.15	0.4	1.7	A
5 - High Street	0.35	3.34	0.5	2.5	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	346	345	1231	0.281	344	0.4	4.054	A
2 - South Lodge Mews	0	687	382	0.000	0	0.0	0.000	A
3 - London Road	379	321	1440	0.264	378	0.4	3.386	A
4 - Supermarket Access	342	383	1768	0.193	341	0.2	2.521	A
5 - High Street	393	292	1745	0.225	392	0.3	2.657	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	413	413	1193	0.346	412	0.5	4.609	A
2 - South Lodge Mews	0	823	339	0.000	0	0.0	0.000	A
3 - London Road	453	384	1402	0.323	453	0.5	3.791	A
4 - Supermarket Access	408	459	1714	0.238	408	0.3	2.755	A
5 - High Street	469	349	1705	0.275	469	0.4	2.911	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	505	506	1141	0.443	504	0.8	5.647	A
2 - South Lodge Mews	0	1007	281	0.000	0	0.0	0.000	A
3 - London Road	555	470	1350	0.411	554	0.7	4.520	A
4 - Supermarket Access	500	562	1642	0.305	499	0.4	3.149	A
5 - High Street	575	428	1651	0.348	574	0.5	3.340	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	505	506	1140	0.443	505	0.8	5.668	A
2 - South Lodge Mews	0	1009	280	0.000	0	0.0	0.000	A
3 - London Road	555	471	1349	0.411	555	0.7	4.531	A
4 - Supermarket Access	500	563	1641	0.305	500	0.4	3.154	A
5 - High Street	575	428	1651	0.348	575	0.5	3.344	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	413	414	1192	0.346	414	0.5	4.632	A
2 - South Lodge Mews	0	825	338	0.000	0	0.0	0.000	A
3 - London Road	453	386	1401	0.323	454	0.5	3.807	A
4 - Supermarket Access	408	460	1713	0.238	409	0.3	2.759	A
5 - High Street	469	350	1705	0.275	470	0.4	2.918	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	346	347	1230	0.281	346	0.4	4.076	A
2 - South Lodge Mews	0	690	381	0.000	0	0.0	0.000	A
3 - London Road	379	323	1439	0.264	380	0.4	3.400	A
4 - Supermarket Access	342	385	1767	0.193	342	0.2	2.527	A
5 - High Street	393	293	1744	0.225	393	0.3	2.667	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.39	0.00	0.00	0.39	0.39			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4 - Supermarket Access	0.24	0.00	0.00	0.24	0.24			N/A	N/A
5 - High Street	0.29	0.00	0.00	0.29	0.29			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.53	0.53	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.47	0.00	0.00	0.47	0.47			N/A	N/A
4 - Supermarket Access	0.31	0.00	0.00	0.31	0.31			N/A	N/A
5 - High Street	0.38	0.00	0.00	0.38	0.38			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.79	0.03	0.26	0.79	0.79			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.69	0.03	0.25	0.69	0.69			N/A	N/A
4 - Supermarket Access	0.44	0.03	0.25	0.45	0.48			N/A	N/A
5 - High Street	0.53	0.03	0.25	0.53	0.53			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.79	0.03	0.28	0.79	2.64			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.70	0.03	0.28	0.88	2.74			N/A	N/A
4 - Supermarket Access	0.44	0.03	0.32	1.37	1.70			N/A	N/A
5 - High Street	0.53	0.03	0.30	1.39	2.47			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.53	0.53	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.48	0.00	0.00	0.48	0.48			N/A	N/A
4 - Supermarket Access	0.31	0.00	0.00	0.31	0.31			N/A	N/A
5 - High Street	0.38	0.00	0.00	0.38	0.38			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.39	0.00	0.00	0.39	0.39			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4 - Supermarket Access	0.24	0.00	0.00	0.24	0.24			N/A	N/A
5 - High Street	0.29	0.00	0.00	0.29	0.29			N/A	N/A

2028, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	574	100.000
2 - South Lodge Mews		✓	7	100.000
3 - London Road		✓	451	100.000
4 - Supermarket Access		✓	261	100.000
5 - High Street		✓	445	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	1	266	75	231
	2 - South Lodge Mews	1	0	2	2	2
	3 - London Road	148	0	5	134	164
	4 - Supermarket Access	41	0	93	3	124
	5 - High Street	150	0	141	145	9

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	1	2
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	6	0	0	0	1
	4 - Supermarket Access	3	0	1	33	2
	5 - High Street	3	0	3	1	11

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.54	6.71	1.2	1.6	A
2 - South Lodge Mews	0.03	14.38	0.0	0.5	B
3 - London Road	0.38	4.50	0.6	2.8	A
4 - Supermarket Access	0.18	2.83	0.2	0.5	A
5 - High Street	0.29	3.01	0.4	1.5	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	432	297	1247	0.347	430	0.5	4.394	A
2 - South Lodge Mews	5	727	367	0.014	5	0.0	9.947	A
3 - London Road	340	352	1396	0.243	338	0.3	3.400	A
4 - Supermarket Access	196	421	1698	0.116	196	0.1	2.396	A
5 - High Street	335	219	1757	0.191	334	0.2	2.528	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	516	356	1214	0.425	515	0.7	5.144	A
2 - South Lodge Mews	6	870	321	0.020	6	0.0	11.434	B
3 - London Road	405	421	1354	0.299	405	0.4	3.791	A
4 - Supermarket Access	235	504	1639	0.143	234	0.2	2.562	A
5 - High Street	400	262	1727	0.232	400	0.3	2.712	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	632	436	1169	0.541	630	1.2	6.662	A
2 - South Lodge Mews	8	1065	259	0.030	8	0.0	14.338	B
3 - London Road	497	515	1298	0.383	496	0.6	4.486	A
4 - Supermarket Access	287	616	1559	0.184	287	0.2	2.829	A
5 - High Street	490	321	1685	0.291	490	0.4	3.011	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	632	436	1169	0.541	632	1.2	6.707	A
2 - South Lodge Mews	8	1067	258	0.030	8	0.0	14.378	B
3 - London Road	497	516	1297	0.383	497	0.6	4.497	A
4 - Supermarket Access	287	618	1559	0.184	287	0.2	2.831	A
5 - High Street	490	321	1685	0.291	490	0.4	3.011	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	516	356	1214	0.425	518	0.7	5.186	A
2 - South Lodge Mews	6	873	320	0.020	6	0.0	11.473	B
3 - London Road	405	423	1353	0.300	406	0.4	3.804	A
4 - Supermarket Access	235	506	1638	0.143	235	0.2	2.567	A
5 - High Street	400	263	1726	0.232	400	0.3	2.715	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	432	298	1247	0.347	433	0.5	4.429	A
2 - South Lodge Mews	5	731	366	0.014	5	0.0	9.985	A
3 - London Road	340	354	1394	0.244	340	0.3	3.414	A
4 - Supermarket Access	196	423	1697	0.116	197	0.1	2.401	A
5 - High Street	335	220	1757	0.191	335	0.2	2.532	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.53	0.53	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.01	0.00	0.00	0.01	0.01			N/A	N/A
3 - London Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4 - Supermarket Access	0.13	0.00	0.00	0.13	0.13			N/A	N/A
5 - High Street	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.73	0.10	0.85	1.39	1.46			N/A	N/A
2 - South Lodge Mews	0.02	0.02	0.25	0.45	0.48			N/A	N/A
3 - London Road	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4 - Supermarket Access	0.17	0.00	0.00	0.17	0.17			N/A	N/A
5 - High Street	0.30	0.00	0.00	0.30	0.30			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.16	0.03	0.26	1.16	1.16			N/A	N/A
2 - South Lodge Mews	0.03	0.00	0.00	0.03	0.03			N/A	N/A
3 - London Road	0.61	0.03	0.25	0.61	0.61			N/A	N/A
4 - Supermarket Access	0.23	0.03	0.25	0.46	0.48			N/A	N/A
5 - High Street	0.41	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.17	0.03	0.27	1.17	1.58			N/A	N/A
2 - South Lodge Mews	0.03	0.00	0.00	0.03	0.03			N/A	N/A
3 - London Road	0.62	0.03	0.29	1.20	2.77			N/A	N/A
4 - Supermarket Access	0.23	0.03	0.25	0.45	0.48			N/A	N/A
5 - High Street	0.41	0.03	0.32	1.32	1.48			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.75	0.17	0.92	1.39	1.45			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.43	0.00	0.00	0.43	0.43			N/A	N/A
4 - Supermarket Access	0.17	0.00	0.00	0.17	0.17			N/A	N/A
5 - High Street	0.30	0.00	0.00	0.30	0.30			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.53	0.05	0.52	1.31	1.40			N/A	N/A
2 - South Lodge Mews	0.01	0.00	0.00	0.01	0.01			N/A	N/A
3 - London Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4 - Supermarket Access	0.13	0.00	0.00	0.13	0.13			N/A	N/A
5 - High Street	0.24	0.00	0.00	0.24	0.24			N/A	N/A

2028, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	481	100.000
2 - South Lodge Mews		✓	5	100.000
3 - London Road		✓	528	100.000
4 - Supermarket Access		✓	476	100.000
5 - High Street		✓	557	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	0	221	91	168
	2 - South Lodge Mews	1	0	2	0	2
	3 - London Road	186	1	1	161	179
	4 - Supermarket Access	101	0	118	0	257
	5 - High Street	186	2	171	189	9

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	0	1
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	0	0	0	1	1
	4 - Supermarket Access	0	0	0	0	0
	5 - High Street	1	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.47	6.08	0.9	2.4	A
2 - South Lodge Mews	0.00	0.00	0.0	~1	A
3 - London Road	0.44	4.81	0.8	2.6	A
4 - Supermarket Access	0.32	3.30	0.5	2.0	A
5 - High Street	0.37	3.52	0.6	2.7	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	362	369	1218	0.297	360	0.4	4.194	A
2 - South Lodge Mews	0	727	370	0.000	0	0.0	0.000	A
3 - London Road	398	343	1426	0.279	396	0.4	3.490	A
4 - Supermarket Access	358	409	1750	0.205	357	0.3	2.584	A
5 - High Street	419	306	1735	0.242	418	0.3	2.730	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	432	441	1177	0.367	432	0.6	4.826	A
2 - South Lodge Mews	0	870	324	0.000	0	0.0	0.000	A
3 - London Road	475	411	1385	0.343	474	0.5	3.947	A
4 - Supermarket Access	428	489	1693	0.253	428	0.3	2.845	A
5 - High Street	501	366	1694	0.296	500	0.4	3.016	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	530	540	1122	0.472	528	0.9	6.055	A
2 - South Lodge Mews	0	1065	262	0.000	0	0.0	0.000	A
3 - London Road	581	503	1330	0.437	580	0.8	4.796	A
4 - Supermarket Access	524	599	1615	0.324	524	0.5	3.295	A
5 - High Street	613	449	1637	0.375	613	0.6	3.512	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	530	541	1121	0.472	530	0.9	6.082	A
2 - South Lodge Mews	0	1067	262	0.000	0	0.0	0.000	A
3 - London Road	581	504	1329	0.437	581	0.8	4.811	A
4 - Supermarket Access	524	600	1614	0.325	524	0.5	3.300	A
5 - High Street	613	449	1637	0.375	613	0.6	3.516	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	432	442	1176	0.368	434	0.6	4.853	A
2 - South Lodge Mews	0	873	323	0.000	0	0.0	0.000	A
3 - London Road	475	413	1385	0.343	476	0.5	3.966	A
4 - Supermarket Access	428	491	1692	0.253	428	0.3	2.852	A
5 - High Street	501	367	1693	0.296	501	0.4	3.022	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	362	370	1217	0.298	363	0.4	4.218	A
2 - South Lodge Mews	0	731	368	0.000	0	0.0	0.000	A
3 - London Road	398	345	1425	0.279	398	0.4	3.506	A
4 - Supermarket Access	358	411	1748	0.205	359	0.3	2.590	A
5 - High Street	419	308	1734	0.242	420	0.3	2.740	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.42	0.00	0.00	0.42	0.42			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - Supermarket Access	0.26	0.00	0.00	0.26	0.26			N/A	N/A
5 - High Street	0.32	0.00	0.00	0.32	0.32			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.58	0.09	0.81	1.36	1.43			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.52	0.52	1.00	1.40	1.45			N/A	N/A
4 - Supermarket Access	0.34	0.00	0.00	0.34	0.34			N/A	N/A
5 - High Street	0.42	0.00	0.00	0.42	0.42			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.88	0.03	0.26	0.88	0.88			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.77	0.03	0.25	0.77	0.77			N/A	N/A
4 - Supermarket Access	0.48	0.03	0.25	0.48	0.48			N/A	N/A
5 - High Street	0.60	0.03	0.25	0.60	0.60			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.89	0.03	0.28	0.89	2.42			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.77	0.03	0.28	0.77	2.59			N/A	N/A
4 - Supermarket Access	0.48	0.03	0.31	1.42	1.99			N/A	N/A
5 - High Street	0.60	0.03	0.29	1.26	2.75			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.59	0.55	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.53	0.53	1.00	1.40	1.45			N/A	N/A
4 - Supermarket Access	0.34	0.00	0.00	0.34	0.34			N/A	N/A
5 - High Street	0.42	0.00	0.00	0.42	0.42			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.43	0.03	0.31	1.00	1.25			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - Supermarket Access	0.26	0.00	0.00	0.26	0.26			N/A	N/A
5 - High Street	0.32	0.00	0.00	0.32	0.32			N/A	N/A

2033, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2033	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	587	100.000
2 - South Lodge Mews		✓	7	100.000
3 - London Road		✓	460	100.000
4 - Supermarket Access		✓	266	100.000
5 - High Street		✓	455	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	1	272	77	236
	2 - South Lodge Mews	1	0	2	2	2
	3 - London Road	151	0	5	137	167
	4 - Supermarket Access	42	0	95	3	126
	5 - High Street	153	0	144	148	10

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	1	2
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	6	0	0	0	1
	4 - Supermarket Access	3	0	1	33	2
	5 - High Street	3	0	3	1	11

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.56	6.97	1.2	1.5	A
2 - South Lodge Mews	0.03	14.84	0.0	0.5	B
3 - London Road	0.39	4.60	0.6	2.8	A
4 - Supermarket Access	0.19	2.86	0.2	0.5	A
5 - High Street	0.30	3.05	0.4	1.6	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	442	304	1243	0.355	440	0.5	4.469	A
2 - South Lodge Mews	5	743	362	0.015	5	0.0	10.094	B
3 - London Road	346	360	1391	0.249	345	0.3	3.438	A
4 - Supermarket Access	200	430	1692	0.118	200	0.1	2.412	A
5 - High Street	343	224	1754	0.195	342	0.2	2.548	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	528	364	1209	0.436	527	0.8	5.267	A
2 - South Lodge Mews	6	890	315	0.020	6	0.0	11.668	B
3 - London Road	414	431	1348	0.307	413	0.4	3.848	A
4 - Supermarket Access	239	514	1632	0.147	239	0.2	2.584	A
5 - High Street	409	268	1723	0.237	409	0.3	2.739	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	646	446	1163	0.556	644	1.2	6.914	A
2 - South Lodge Mews	8	1089	251	0.031	8	0.0	14.793	B
3 - London Road	506	527	1290	0.392	506	0.6	4.582	A
4 - Supermarket Access	293	630	1550	0.189	293	0.2	2.862	A
5 - High Street	501	328	1680	0.298	501	0.4	3.051	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	646	446	1163	0.556	646	1.2	6.966	A
2 - South Lodge Mews	8	1091	250	0.031	8	0.0	14.839	B
3 - London Road	506	528	1290	0.393	506	0.6	4.595	A
4 - Supermarket Access	293	631	1549	0.189	293	0.2	2.864	A
5 - High Street	501	328	1680	0.298	501	0.4	3.052	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	528	364	1209	0.436	530	0.8	5.311	A
2 - South Lodge Mews	6	893	314	0.020	6	0.0	11.714	B
3 - London Road	414	433	1347	0.307	414	0.4	3.862	A
4 - Supermarket Access	239	516	1630	0.147	239	0.2	2.589	A
5 - High Street	409	268	1722	0.238	409	0.3	2.742	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	442	305	1243	0.356	443	0.6	4.505	A
2 - South Lodge Mews	5	747	360	0.015	5	0.0	10.137	B
3 - London Road	346	362	1389	0.249	347	0.3	3.453	A
4 - Supermarket Access	200	432	1690	0.118	200	0.1	2.416	A
5 - High Street	343	225	1753	0.195	343	0.2	2.552	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.55	0.55	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.01	0.00	0.00	0.01	0.01			N/A	N/A
3 - London Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
4 - Supermarket Access	0.13	0.00	0.00	0.13	0.13			N/A	N/A
5 - High Street	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.77	0.10	0.85	1.42	1.49			N/A	N/A
2 - South Lodge Mews	0.02	0.02	0.25	0.45	0.48			N/A	N/A
3 - London Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
4 - Supermarket Access	0.17	0.00	0.00	0.17	0.17			N/A	N/A
5 - High Street	0.31	0.00	0.00	0.31	0.31			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.23	0.03	0.26	1.23	1.23			N/A	N/A
2 - South Lodge Mews	0.03	0.00	0.00	0.03	0.03			N/A	N/A
3 - London Road	0.64	0.03	0.25	0.64	0.64			N/A	N/A
4 - Supermarket Access	0.23	0.03	0.25	0.46	0.48			N/A	N/A
5 - High Street	0.42	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.24	0.03	0.27	1.24	1.51			N/A	N/A
2 - South Lodge Mews	0.03	0.00	0.00	0.03	0.03			N/A	N/A
3 - London Road	0.64	0.03	0.29	1.11	2.79			N/A	N/A
4 - Supermarket Access	0.23	0.03	0.26	0.46	0.48			N/A	N/A
5 - High Street	0.42	0.03	0.32	1.35	1.62			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.78	0.16	0.91	1.40	1.46			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.45	0.00	0.00	0.45	0.45			N/A	N/A
4 - Supermarket Access	0.17	0.00	0.00	0.17	0.17			N/A	N/A
5 - High Street	0.31	0.00	0.00	0.31	0.31			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.56	0.05	0.55	1.32	1.41			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
4 - Supermarket Access	0.13	0.00	0.00	0.13	0.13			N/A	N/A
5 - High Street	0.24	0.00	0.00	0.24	0.24			N/A	N/A

2033, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2033	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	491	100.000
2 - South Lodge Mews		✓	5	100.000
3 - London Road		✓	540	100.000
4 - Supermarket Access		✓	487	100.000
5 - High Street		✓	570	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	0	226	93	171
	2 - South Lodge Mews	1	0	2	0	2
	3 - London Road	190	1	1	165	183
	4 - Supermarket Access	103	0	121	0	263
	5 - High Street	190	2	175	193	10

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	0	1
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	0	0	0	1	1
	4 - Supermarket Access	0	0	0	0	0
	5 - High Street	1	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.49	6.28	0.9	2.3	A
2 - South Lodge Mews	0.00	0.00	0.0	~1	A
3 - London Road	0.45	4.94	0.8	2.5	A
4 - Supermarket Access	0.33	3.37	0.5	2.2	A
5 - High Street	0.39	3.59	0.6	2.8	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	370	378	1213	0.305	368	0.4	4.254	A
2 - South Lodge Mews	0	743	364	0.000	0	0.0	0.000	A
3 - London Road	407	351	1422	0.286	405	0.4	3.541	A
4 - Supermarket Access	367	418	1744	0.210	366	0.3	2.611	A
5 - High Street	429	313	1731	0.248	428	0.3	2.760	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	441	452	1171	0.377	441	0.6	4.926	A
2 - South Lodge Mews	0	890	318	0.000	0	0.0	0.000	A
3 - London Road	485	420	1380	0.352	485	0.5	4.019	A
4 - Supermarket Access	438	500	1685	0.260	437	0.3	2.885	A
5 - High Street	512	375	1688	0.304	512	0.4	3.061	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	541	553	1114	0.485	539	0.9	6.247	A
2 - South Lodge Mews	0	1089	255	0.000	0	0.0	0.000	A
3 - London Road	595	514	1323	0.449	593	0.8	4.925	A
4 - Supermarket Access	536	612	1606	0.334	536	0.5	3.361	A
5 - High Street	628	458	1630	0.385	627	0.6	3.586	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	541	554	1114	0.485	541	0.9	6.278	A
2 - South Lodge Mews	0	1091	254	0.000	0	0.0	0.000	A
3 - London Road	595	515	1323	0.449	595	0.8	4.942	A
4 - Supermarket Access	536	613	1605	0.334	536	0.5	3.367	A
5 - High Street	628	459	1630	0.385	628	0.6	3.591	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	441	453	1170	0.377	443	0.6	4.957	A
2 - South Lodge Mews	0	893	317	0.000	0	0.0	0.000	A
3 - London Road	485	422	1379	0.352	487	0.5	4.039	A
4 - Supermarket Access	438	502	1684	0.260	438	0.4	2.891	A
5 - High Street	512	376	1688	0.304	513	0.4	3.066	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	370	379	1212	0.305	370	0.4	4.283	A
2 - South Lodge Mews	0	747	363	0.000	0	0.0	0.000	A
3 - London Road	407	353	1421	0.286	407	0.4	3.553	A
4 - Supermarket Access	367	420	1742	0.210	367	0.3	2.618	A
5 - High Street	429	314	1730	0.248	430	0.3	2.771	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.40	0.00	0.00	0.40	0.40			N/A	N/A
4 - Supermarket Access	0.27	0.00	0.00	0.27	0.27			N/A	N/A
5 - High Street	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.60	0.10	0.83	1.37	1.43			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.54	0.07	0.72	1.34	1.42			N/A	N/A
4 - Supermarket Access	0.35	0.00	0.00	0.35	0.35			N/A	N/A
5 - High Street	0.43	0.00	0.00	0.43	0.43			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.93	0.03	0.26	0.93	0.93			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.81	0.03	0.25	0.81	0.81			N/A	N/A
4 - Supermarket Access	0.50	0.03	0.25	0.50	0.50			N/A	N/A
5 - High Street	0.62	0.03	0.25	0.62	0.62			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.94	0.03	0.27	0.94	2.30			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.81	0.03	0.28	0.81	2.46			N/A	N/A
4 - Supermarket Access	0.50	0.03	0.31	1.43	2.22			N/A	N/A
5 - High Street	0.62	0.03	0.29	1.17	2.77			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.61	0.14	0.89	1.38	1.44			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.55	0.55	1.00	1.40	1.45			N/A	N/A
4 - Supermarket Access	0.35	0.00	0.00	0.35	0.35			N/A	N/A
5 - High Street	0.44	0.00	0.00	0.44	0.44			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.44	0.03	0.35	1.14	1.32			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.40	0.00	0.00	0.40	0.40			N/A	N/A
4 - Supermarket Access	0.27	0.00	0.00	0.27	0.27			N/A	N/A
5 - High Street	0.33	0.00	0.00	0.33	0.33			N/A	N/A

2033 + Dev, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	5.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033 + Dev	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	622	100.000
2 - South Lodge Mews		✓	7	100.000
3 - London Road		✓	472	100.000
4 - Supermarket Access		✓	266	100.000
5 - High Street		✓	457	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	1	304	77	239
	2 - South Lodge Mews	1	2	2	2	0
	3 - London Road	163	0	5	137	167
	4 - Supermarket Access	42	0	95	3	126
	5 - High Street	155	0	144	148	10

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	1	2
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	5	0	0	0	1
	4 - Supermarket Access	3	0	1	33	2
	5 - High Street	3	0	3	1	11

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.59	7.54	1.4	1.6	A
2 - South Lodge Mews	0.03	15.63	0.0	0.5	C
3 - London Road	0.40	4.67	0.7	2.8	A
4 - Supermarket Access	0.19	2.89	0.2	0.5	A
5 - High Street	0.30	3.08	0.4	1.7	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	468	306	1243	0.377	466	0.6	4.620	A
2 - South Lodge Mews	5	769	353	0.015	5	0.0	10.335	B
3 - London Road	355	362	1393	0.255	354	0.3	3.461	A
4 - Supermarket Access	200	441	1685	0.119	200	0.1	2.424	A
5 - High Street	344	234	1747	0.197	343	0.2	2.563	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	559	366	1209	0.463	558	0.9	5.517	A
2 - South Lodge Mews	6	921	305	0.021	6	0.0	12.058	B
3 - London Road	424	434	1350	0.314	424	0.5	3.886	A
4 - Supermarket Access	239	528	1623	0.147	239	0.2	2.600	A
5 - High Street	411	280	1715	0.240	411	0.3	2.760	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	685	448	1162	0.589	683	1.4	7.472	A
2 - South Lodge Mews	8	1127	239	0.032	8	0.0	15.568	C
3 - London Road	520	530	1292	0.402	519	0.7	4.653	A
4 - Supermarket Access	293	646	1540	0.190	293	0.2	2.886	A
5 - High Street	503	343	1671	0.301	503	0.4	3.080	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	685	448	1162	0.589	685	1.4	7.540	A
2 - South Lodge Mews	8	1130	238	0.032	8	0.0	15.630	C
3 - London Road	520	532	1291	0.403	520	0.7	4.667	A
4 - Supermarket Access	293	647	1539	0.190	293	0.2	2.889	A
5 - High Street	503	344	1670	0.301	503	0.4	3.084	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	559	366	1208	0.463	561	0.9	5.582	A
2 - South Lodge Mews	6	925	304	0.021	6	0.0	12.114	B
3 - London Road	424	436	1349	0.315	425	0.5	3.901	A
4 - Supermarket Access	239	530	1622	0.147	239	0.2	2.606	A
5 - High Street	411	281	1714	0.240	411	0.3	2.765	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	468	307	1242	0.377	469	0.6	4.666	A
2 - South Lodge Mews	5	774	352	0.015	5	0.0	10.382	B
3 - London Road	355	364	1391	0.255	356	0.3	3.476	A
4 - Supermarket Access	200	443	1683	0.119	200	0.1	2.430	A
5 - High Street	344	235	1746	0.197	344	0.2	2.567	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.60	0.55	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.01	0.00	0.00	0.01	0.01			N/A	N/A
3 - London Road	0.34	0.00	0.00	0.34	0.34			N/A	N/A
4 - Supermarket Access	0.13	0.00	0.00	0.13	0.13			N/A	N/A
5 - High Street	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.85	0.09	0.86	1.11	1.61			N/A	N/A
2 - South Lodge Mews	0.02	0.02	0.25	0.45	0.48			N/A	N/A
3 - London Road	0.46	0.00	0.00	0.46	0.46			N/A	N/A
4 - Supermarket Access	0.17	0.00	0.00	0.17	0.17			N/A	N/A
5 - High Street	0.31	0.00	0.00	0.31	0.31			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.41	0.03	0.26	1.41	1.41			N/A	N/A
2 - South Lodge Mews	0.03	0.00	0.00	0.03	0.03			N/A	N/A
3 - London Road	0.67	0.03	0.25	0.67	0.67			N/A	N/A
4 - Supermarket Access	0.23	0.03	0.25	0.46	0.48			N/A	N/A
5 - High Street	0.43	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.42	0.03	0.27	1.42	1.42			N/A	N/A
2 - South Lodge Mews	0.03	0.00	0.00	0.03	0.03			N/A	N/A
3 - London Road	0.67	0.03	0.28	1.02	2.79			N/A	N/A
4 - Supermarket Access	0.23	0.03	0.26	0.46	0.49			N/A	N/A
5 - High Street	0.43	0.03	0.32	1.36	1.67			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.87	0.13	0.92	1.43	1.43			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.46	0.00	0.00	0.46	0.46			N/A	N/A
4 - Supermarket Access	0.17	0.00	0.00	0.17	0.17			N/A	N/A
5 - High Street	0.32	0.00	0.00	0.32	0.32			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.61	0.05	0.57	1.36	1.46			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.34	0.00	0.00	0.34	0.34			N/A	N/A
4 - Supermarket Access	0.14	0.00	0.00	0.14	0.14			N/A	N/A
5 - High Street	0.25	0.00	0.00	0.25	0.25			N/A	N/A

2033 + Dev, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2033 + Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	532	100.000
2 - South Lodge Mews		✓	5	100.000
3 - London Road		✓	580	100.000
4 - Supermarket Access		✓	487	100.000
5 - High Street		✓	573	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	0	265	93	173
	2 - South Lodge Mews	1	0	2	0	2
	3 - London Road	230	1	1	165	183
	4 - Supermarket Access	103	0	121	0	263
	5 - High Street	193	2	175	193	10

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	0	1
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	0	0	0	1	1
	4 - Supermarket Access	0	0	0	0	0
	5 - High Street	1	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.53	6.82	1.1	1.9	A
2 - South Lodge Mews	0.00	0.00	0.0	~1	A
3 - London Road	0.48	5.27	0.9	2.0	A
4 - Supermarket Access	0.34	3.47	0.5	2.3	A
5 - High Street	0.39	3.72	0.6	2.8	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	401	378	1212	0.330	399	0.5	4.413	A
2 - South Lodge Mews	0	774	355	0.000	0	0.0	0.000	A
3 - London Road	437	352	1421	0.307	435	0.4	3.643	A
4 - Supermarket Access	367	449	1722	0.213	366	0.3	2.652	A
5 - High Street	431	343	1710	0.252	430	0.3	2.810	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	478	452	1171	0.408	477	0.7	5.187	A
2 - South Lodge Mews	0	927	306	0.000	0	0.0	0.000	A
3 - London Road	521	422	1380	0.378	521	0.6	4.189	A
4 - Supermarket Access	438	538	1659	0.264	437	0.4	2.948	A
5 - High Street	515	410	1663	0.310	515	0.4	3.134	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	586	553	1114	0.526	584	1.1	6.771	A
2 - South Lodge Mews	0	1134	241	0.000	0	0.0	0.000	A
3 - London Road	639	516	1323	0.483	637	0.9	5.243	A
4 - Supermarket Access	536	658	1574	0.341	536	0.5	3.466	A
5 - High Street	631	502	1600	0.394	630	0.6	3.708	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	586	554	1114	0.526	586	1.1	6.816	A
2 - South Lodge Mews	0	1136	240	0.000	0	0.0	0.000	A
3 - London Road	639	517	1322	0.483	639	0.9	5.266	A
4 - Supermarket Access	536	659	1573	0.341	536	0.5	3.473	A
5 - High Street	631	503	1599	0.394	631	0.6	3.716	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	478	453	1170	0.409	480	0.7	5.228	A
2 - South Lodge Mews	0	930	305	0.000	0	0.0	0.000	A
3 - London Road	521	424	1379	0.378	523	0.6	4.211	A
4 - Supermarket Access	438	540	1657	0.264	438	0.4	2.957	A
5 - High Street	515	412	1663	0.310	516	0.5	3.143	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	401	379	1211	0.331	401	0.5	4.447	A
2 - South Lodge Mews	0	778	353	0.000	0	0.0	0.000	A
3 - London Road	437	354	1420	0.307	437	0.4	3.666	A
4 - Supermarket Access	367	452	1720	0.213	367	0.3	2.661	A
5 - High Street	431	344	1709	0.252	432	0.3	2.819	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
4 - Supermarket Access	0.27	0.00	0.00	0.27	0.27			N/A	N/A
5 - High Street	0.34	0.00	0.00	0.34	0.34			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.68	0.10	0.85	1.37	1.44			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.60	0.09	0.82	1.36	1.43			N/A	N/A
4 - Supermarket Access	0.36	0.00	0.00	0.36	0.36			N/A	N/A
5 - High Street	0.45	0.00	0.00	0.45	0.45			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.09	0.03	0.26	1.09	1.09			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.92	0.03	0.26	0.92	0.92			N/A	N/A
4 - Supermarket Access	0.51	0.03	0.25	0.51	0.51			N/A	N/A
5 - High Street	0.65	0.03	0.25	0.65	0.65			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.10	0.03	0.27	1.10	1.90			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.93	0.03	0.27	0.93	1.98			N/A	N/A
4 - Supermarket Access	0.52	0.03	0.31	1.43	2.35			N/A	N/A
5 - High Street	0.65	0.03	0.29	1.08	2.77			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.70	0.16	0.90	1.38	1.44			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.61	0.55	1.00	1.40	1.45			N/A	N/A
4 - Supermarket Access	0.36	0.00	0.00	0.36	0.36			N/A	N/A
5 - High Street	0.45	0.00	0.00	0.45	0.45			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.50	0.05	0.45	1.28	1.39			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.45	0.03	0.34	1.11	1.31			N/A	N/A
4 - Supermarket Access	0.27	0.00	0.00	0.27	0.27			N/A	N/A
5 - High Street	0.34	0.00	0.00	0.34	0.34			N/A	N/A

2040, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2040	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	565	100.000
2 - South Lodge Mews		✓	7	100.000
3 - London Road		✓	444	100.000
4 - Supermarket Access		✓	257	100.000
5 - High Street		✓	437	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	1	262	74	227
	2 - South Lodge Mews	1	0	2	2	2
	3 - London Road	146	0	5	132	161
	4 - Supermarket Access	40	0	92	3	122
	5 - High Street	148	0	138	142	9

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	1	2
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	6	0	0	0	1
	4 - Supermarket Access	3	0	1	33	2
	5 - High Street	3	0	3	1	11

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.53	6.53	1.1	1.6	A
2 - South Lodge Mews	0.03	14.06	0.0	0.5	B
3 - London Road	0.38	4.43	0.6	2.7	A
4 - Supermarket Access	0.18	2.81	0.2	0.5	A
5 - High Street	0.29	2.98	0.4	1.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	425	292	1250	0.340	423	0.5	4.344	A
2 - South Lodge Mews	5	715	371	0.014	5	0.0	9.842	A
3 - London Road	334	346	1399	0.239	333	0.3	3.374	A
4 - Supermarket Access	193	414	1703	0.114	193	0.1	2.384	A
5 - High Street	329	216	1759	0.187	328	0.2	2.514	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	508	349	1218	0.417	507	0.7	5.062	A
2 - South Lodge Mews	6	856	326	0.019	6	0.0	11.269	B
3 - London Road	399	414	1358	0.294	399	0.4	3.749	A
4 - Supermarket Access	231	496	1645	0.140	231	0.2	2.545	A
5 - High Street	393	259	1729	0.227	393	0.3	2.693	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	622	428	1173	0.530	620	1.1	6.492	A
2 - South Lodge Mews	8	1047	264	0.029	8	0.0	14.024	B
3 - London Road	489	507	1303	0.375	488	0.6	4.415	A
4 - Supermarket Access	283	607	1566	0.181	283	0.2	2.804	A
5 - High Street	481	317	1688	0.285	481	0.4	2.981	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	622	428	1173	0.530	622	1.1	6.533	A
2 - South Lodge Mews	8	1049	264	0.029	8	0.0	14.061	B
3 - London Road	489	508	1302	0.375	489	0.6	4.425	A
4 - Supermarket Access	283	608	1566	0.181	283	0.2	2.806	A
5 - High Street	481	317	1688	0.285	481	0.4	2.982	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	508	350	1217	0.417	510	0.7	5.099	A
2 - South Lodge Mews	6	859	325	0.019	6	0.0	11.308	B
3 - London Road	399	415	1357	0.294	400	0.4	3.764	A
4 - Supermarket Access	231	497	1644	0.141	231	0.2	2.548	A
5 - High Street	393	259	1729	0.227	393	0.3	2.698	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	425	293	1250	0.340	426	0.5	4.376	A
2 - South Lodge Mews	5	719	370	0.014	5	0.0	9.881	A
3 - London Road	334	348	1398	0.239	335	0.3	3.386	A
4 - Supermarket Access	193	416	1701	0.114	194	0.1	2.387	A
5 - High Street	329	217	1759	0.187	329	0.2	2.520	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.51	0.51	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.01	0.00	0.00	0.01	0.01			N/A	N/A
3 - London Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A
4 - Supermarket Access	0.13	0.00	0.00	0.13	0.13			N/A	N/A
5 - High Street	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.71	0.11	0.85	1.38	1.45			N/A	N/A
2 - South Lodge Mews	0.02	0.02	0.25	0.45	0.48			N/A	N/A
3 - London Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A
4 - Supermarket Access	0.16	0.00	0.00	0.16	0.16			N/A	N/A
5 - High Street	0.29	0.00	0.00	0.29	0.29			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.11	0.03	0.26	1.11	1.11			N/A	N/A
2 - South Lodge Mews	0.03	0.00	0.00	0.03	0.03			N/A	N/A
3 - London Road	0.60	0.03	0.25	0.60	0.60			N/A	N/A
4 - Supermarket Access	0.22	0.03	0.25	0.46	0.48			N/A	N/A
5 - High Street	0.40	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.12	0.03	0.27	1.12	1.64			N/A	N/A
2 - South Lodge Mews	0.03	0.00	0.00	0.03	0.03			N/A	N/A
3 - London Road	0.60	0.03	0.29	1.25	2.75			N/A	N/A
4 - Supermarket Access	0.22	0.03	0.25	0.45	0.48			N/A	N/A
5 - High Street	0.40	0.03	0.33	1.29	1.35			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.72	0.18	0.92	1.39	1.44			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4 - Supermarket Access	0.16	0.00	0.00	0.16	0.16			N/A	N/A
5 - High Street	0.30	0.00	0.00	0.30	0.30			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.52	0.05	0.49	1.30	1.40			N/A	N/A
2 - South Lodge Mews	0.01	0.00	0.00	0.01	0.01			N/A	N/A
3 - London Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4 - Supermarket Access	0.13	0.00	0.00	0.13	0.13			N/A	N/A
5 - High Street	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2040, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2040	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	474	100.000
2 - South Lodge Mews		✓	5	100.000
3 - London Road		✓	520	100.000
4 - Supermarket Access		✓	469	100.000
5 - High Street		✓	548	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	0	218	90	165
	2 - South Lodge Mews	1	0	2	0	2
	3 - London Road	183	1	1	159	176
	4 - Supermarket Access	99	0	117	0	253
	5 - High Street	183	2	168	186	9

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	0	1
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	0	0	0	1	1
	4 - Supermarket Access	0	0	0	0	0
	5 - High Street	1	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.46	5.96	0.9	2.5	A
2 - South Lodge Mews	0.00	0.00	0.0	~1	A
3 - London Road	0.43	4.73	0.7	2.7	A
4 - Supermarket Access	0.32	3.26	0.5	1.9	A
5 - High Street	0.37	3.47	0.6	2.7	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	357	363	1220	0.292	355	0.4	4.153	A
2 - South Lodge Mews	0	716	373	0.000	0	0.0	0.000	A
3 - London Road	391	338	1429	0.274	390	0.4	3.459	A
4 - Supermarket Access	353	402	1755	0.201	352	0.3	2.565	A
5 - High Street	413	302	1739	0.237	411	0.3	2.710	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	426	435	1181	0.361	426	0.6	4.764	A
2 - South Lodge Mews	0	858	328	0.000	0	0.0	0.000	A
3 - London Road	467	405	1389	0.337	467	0.5	3.902	A
4 - Supermarket Access	422	481	1699	0.248	421	0.3	2.818	A
5 - High Street	493	361	1697	0.290	492	0.4	2.987	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	522	532	1126	0.463	521	0.9	5.934	A
2 - South Lodge Mews	0	1050	267	0.000	0	0.0	0.000	A
3 - London Road	573	496	1335	0.429	572	0.7	4.712	A
4 - Supermarket Access	516	589	1622	0.318	516	0.5	3.252	A
5 - High Street	603	442	1642	0.368	603	0.6	3.463	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	522	533	1126	0.464	522	0.9	5.961	A
2 - South Lodge Mews	0	1051	267	0.000	0	0.0	0.000	A
3 - London Road	573	497	1334	0.429	573	0.7	4.726	A
4 - Supermarket Access	516	590	1621	0.318	516	0.5	3.256	A
5 - High Street	603	443	1641	0.368	603	0.6	3.467	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	426	436	1180	0.361	427	0.6	4.789	A
2 - South Lodge Mews	0	860	327	0.000	0	0.0	0.000	A
3 - London Road	467	406	1388	0.337	468	0.5	3.918	A
4 - Supermarket Access	422	483	1697	0.248	422	0.3	2.825	A
5 - High Street	493	362	1697	0.290	493	0.4	2.994	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	357	365	1220	0.293	357	0.4	4.179	A
2 - South Lodge Mews	0	720	372	0.000	0	0.0	0.000	A
3 - London Road	391	340	1428	0.274	392	0.4	3.474	A
4 - Supermarket Access	353	404	1753	0.201	353	0.3	2.571	A
5 - High Street	413	303	1738	0.237	413	0.3	2.720	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - Supermarket Access	0.25	0.00	0.00	0.25	0.25			N/A	N/A
5 - High Street	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.56	0.08	0.79	1.36	1.43			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.50	0.50	1.00	1.40	1.45			N/A	N/A
4 - Supermarket Access	0.33	0.00	0.00	0.33	0.33			N/A	N/A
5 - High Street	0.41	0.00	0.00	0.41	0.41			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.85	0.03	0.26	0.85	0.85			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.74	0.03	0.25	0.74	0.74			N/A	N/A
4 - Supermarket Access	0.46	0.03	0.25	0.46	0.48			N/A	N/A
5 - High Street	0.58	0.03	0.25	0.58	0.58			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.86	0.03	0.28	0.86	2.49			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.75	0.03	0.28	0.75	2.65			N/A	N/A
4 - Supermarket Access	0.47	0.03	0.32	1.41	1.91			N/A	N/A
5 - High Street	0.58	0.03	0.29	1.31	2.70			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.57	0.55	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.51	0.51	1.00	1.40	1.45			N/A	N/A
4 - Supermarket Access	0.33	0.00	0.00	0.33	0.33			N/A	N/A
5 - High Street	0.41	0.00	0.00	0.41	0.41			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.42	0.03	0.29	0.81	1.16			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - Supermarket Access	0.25	0.00	0.00	0.25	0.25			N/A	N/A
5 - High Street	0.31	0.00	0.00	0.31	0.31			N/A	N/A

2040 + Dev, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	5.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2040 + Dev	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	702	100.000
2 - South Lodge Mews		✓	7	100.000
3 - London Road		✓	586	100.000
4 - Supermarket Access		✓	257	100.000
5 - High Street		✓	444	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	1	390	74	236
	2 - South Lodge Mews	1	0	2	2	2
	3 - London Road	288	0	5	132	161
	4 - Supermarket Access	40	0	92	3	122
	5 - High Street	155	0	138	142	9

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	1	2
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	3	0	0	0	1
	4 - Supermarket Access	3	0	1	33	2
	5 - High Street	3	0	3	1	11

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.66	8.97	1.9	3.1	A
2 - South Lodge Mews	0.04	17.31	0.0	0.5	C
3 - London Road	0.49	5.47	1.0	1.9	A
4 - Supermarket Access	0.20	3.08	0.2	0.5	A
5 - High Street	0.31	3.29	0.4	1.8	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	529	292	1251	0.422	526	0.7	4.943	A
2 - South Lodge Mews	5	817	338	0.016	5	0.0	10.805	B
3 - London Road	441	352	1403	0.314	439	0.5	3.729	A
4 - Supermarket Access	193	527	1625	0.119	193	0.1	2.514	A
5 - High Street	334	323	1687	0.198	333	0.2	2.658	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	631	349	1218	0.518	630	1.1	6.102	A
2 - South Lodge Mews	6	978	287	0.022	6	0.0	12.838	B
3 - London Road	527	422	1361	0.387	526	0.6	4.306	A
4 - Supermarket Access	231	631	1552	0.149	231	0.2	2.725	A
5 - High Street	399	386	1643	0.243	399	0.3	2.894	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	773	428	1174	0.658	770	1.9	8.831	A
2 - South Lodge Mews	8	1196	217	0.036	8	0.0	17.204	C
3 - London Road	645	516	1305	0.495	644	1.0	5.436	A
4 - Supermarket Access	283	772	1452	0.195	283	0.2	3.077	A
5 - High Street	489	473	1582	0.309	488	0.4	3.288	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	773	428	1174	0.658	773	1.9	8.971	A
2 - South Lodge Mews	8	1200	216	0.036	8	0.0	17.307	C
3 - London Road	645	517	1304	0.495	645	1.0	5.465	A
4 - Supermarket Access	283	774	1451	0.195	283	0.2	3.081	A
5 - High Street	489	473	1582	0.309	489	0.4	3.292	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	631	350	1218	0.518	634	1.1	6.200	A
2 - South Lodge Mews	6	984	285	0.022	6	0.0	12.923	B
3 - London Road	527	424	1360	0.387	528	0.6	4.334	A
4 - Supermarket Access	231	634	1549	0.149	231	0.2	2.733	A
5 - High Street	399	387	1642	0.243	400	0.3	2.900	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	529	293	1250	0.423	530	0.7	5.008	A
2 - South Lodge Mews	5	822	337	0.016	5	0.0	10.865	B
3 - London Road	441	355	1402	0.315	442	0.5	3.754	A
4 - Supermarket Access	193	530	1623	0.119	194	0.1	2.520	A
5 - High Street	334	324	1686	0.198	335	0.2	2.664	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.72	0.55	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.46	0.00	0.00	0.46	0.46			N/A	N/A
4 - Supermarket Access	0.13	0.00	0.00	0.13	0.13			N/A	N/A
5 - High Street	0.25	0.00	0.00	0.25	0.25			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.06	0.07	0.88	1.91	2.63			N/A	N/A
2 - South Lodge Mews	0.02	0.02	0.25	0.45	0.48			N/A	N/A
3 - London Road	0.63	0.10	0.83	1.37	1.43			N/A	N/A
4 - Supermarket Access	0.17	0.00	0.00	0.17	0.17			N/A	N/A
5 - High Street	0.32	0.00	0.00	0.32	0.32			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.87	0.03	0.27	1.87	3.14			N/A	N/A
2 - South Lodge Mews	0.04	0.03	0.25	0.45	0.48			N/A	N/A
3 - London Road	0.97	0.03	0.26	0.97	0.97			N/A	N/A
4 - Supermarket Access	0.24	0.03	0.25	0.46	0.48			N/A	N/A
5 - High Street	0.44	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.90	0.03	0.27	1.90	1.90			N/A	N/A
2 - South Lodge Mews	0.04	0.00	0.00	0.04	0.04			N/A	N/A
3 - London Road	0.97	0.03	0.27	0.97	1.87			N/A	N/A
4 - Supermarket Access	0.24	0.03	0.26	0.47	0.49			N/A	N/A
5 - High Street	0.45	0.03	0.32	1.38	1.79			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.09	0.09	0.96	1.86	2.48			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.64	0.23	0.94	1.39	1.44			N/A	N/A
4 - Supermarket Access	0.18	0.00	0.00	0.18	0.18			N/A	N/A
5 - High Street	0.32	0.00	0.00	0.32	0.32			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.74	0.05	0.49	1.39	1.90			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.46	0.04	0.38	1.20	1.35			N/A	N/A
4 - Supermarket Access	0.14	0.00	0.00	0.14	0.14			N/A	N/A
5 - High Street	0.25	0.00	0.00	0.25	0.25			N/A	N/A

2040 + Dev, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2040 + Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	551	100.000
2 - South Lodge Mews		✓	5	100.000
3 - London Road		✓	547	100.000
4 - Supermarket Access		✓	469	100.000
5 - High Street		✓	554	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	0	290	90	170
	2 - South Lodge Mews	1	0	2	0	2
	3 - London Road	249	0	5	132	161
	4 - Supermarket Access	99	0	117	0	253
	5 - High Street	189	2	168	186	9

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	0	1
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	0	0	0	1	1
	4 - Supermarket Access	0	0	0	0	0
	5 - High Street	1	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.54	6.96	1.2	1.8	A
2 - South Lodge Mews	0.00	0.00	0.0	~1	A
3 - London Road	0.45	4.93	0.8	2.4	A
4 - Supermarket Access	0.33	3.40	0.5	2.1	A
5 - High Street	0.38	3.68	0.6	2.8	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	415	366	1219	0.340	413	0.5	4.455	A
2 - South Lodge Mews	0	777	354	0.000	0	0.0	0.000	A
3 - London Road	412	342	1429	0.288	410	0.4	3.528	A
4 - Supermarket Access	353	446	1724	0.205	352	0.3	2.623	A
5 - High Street	417	353	1703	0.245	416	0.3	2.795	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	495	437	1179	0.420	495	0.7	5.254	A
2 - South Lodge Mews	0	930	305	0.000	0	0.0	0.000	A
3 - London Road	492	409	1388	0.354	491	0.5	4.011	A
4 - Supermarket Access	422	534	1661	0.254	421	0.3	2.903	A
5 - High Street	498	423	1655	0.301	498	0.4	3.111	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	607	536	1124	0.540	605	1.2	6.913	A
2 - South Lodge Mews	0	1138	239	0.000	0	0.0	0.000	A
3 - London Road	602	501	1333	0.452	601	0.8	4.913	A
4 - Supermarket Access	516	654	1577	0.327	516	0.5	3.391	A
5 - High Street	610	518	1589	0.384	609	0.6	3.668	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	607	536	1124	0.540	607	1.2	6.964	A
2 - South Lodge Mews	0	1141	238	0.000	0	0.0	0.000	A
3 - London Road	602	502	1332	0.452	602	0.8	4.931	A
4 - Supermarket Access	516	655	1576	0.328	516	0.5	3.397	A
5 - High Street	610	519	1589	0.384	610	0.6	3.677	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	495	438	1178	0.420	497	0.7	5.300	A
2 - South Lodge Mews	0	934	304	0.000	0	0.0	0.000	A
3 - London Road	492	411	1387	0.355	493	0.6	4.031	A
4 - Supermarket Access	422	536	1660	0.254	422	0.3	2.911	A
5 - High Street	498	424	1654	0.301	499	0.4	3.120	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	415	367	1218	0.341	416	0.5	4.492	A
2 - South Lodge Mews	0	781	352	0.000	0	0.0	0.000	A
3 - London Road	412	344	1428	0.288	412	0.4	3.547	A
4 - Supermarket Access	353	449	1722	0.205	353	0.3	2.632	A
5 - High Street	417	355	1702	0.245	418	0.3	2.803	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.51	0.51	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.40	0.00	0.00	0.40	0.40			N/A	N/A
4 - Supermarket Access	0.26	0.00	0.00	0.26	0.26			N/A	N/A
5 - High Street	0.32	0.00	0.00	0.32	0.32			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.72	0.10	0.85	1.39	1.45			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.54	0.07	0.74	1.35	1.42			N/A	N/A
4 - Supermarket Access	0.34	0.00	0.00	0.34	0.34			N/A	N/A
5 - High Street	0.43	0.00	0.00	0.43	0.43			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.15	0.03	0.26	1.15	1.15			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.82	0.03	0.25	0.82	0.82			N/A	N/A
4 - Supermarket Access	0.48	0.03	0.25	0.48	0.48			N/A	N/A
5 - High Street	0.62	0.03	0.25	0.62	0.62			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.16	0.03	0.27	1.16	1.78			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.82	0.03	0.28	0.82	2.41			N/A	N/A
4 - Supermarket Access	0.49	0.03	0.31	1.43	2.05			N/A	N/A
5 - High Street	0.62	0.03	0.29	1.20	2.79			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.73	0.15	0.91	1.39	1.45			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.55	0.55	1.00	1.40	1.45			N/A	N/A
4 - Supermarket Access	0.34	0.00	0.00	0.34	0.34			N/A	N/A
5 - High Street	0.43	0.00	0.00	0.43	0.43			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.52	0.05	0.48	1.29	1.40			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A
4 - Supermarket Access	0.26	0.00	0.00	0.26	0.26			N/A	N/A
5 - High Street	0.33	0.00	0.00	0.33	0.33			N/A	N/A

2040 + Dev + School, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	6.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2040 + Dev + School	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	761	100.000
2 - South Lodge Mews		✓	7	100.000
3 - London Road		✓	668	100.000
4 - Supermarket Access		✓	257	100.000
5 - High Street		✓	460	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	1	428	74	257
	2 - South Lodge Mews	1	0	2	2	2
	3 - London Road	370	0	5	132	161
	4 - Supermarket Access	40	0	92	3	122
	5 - High Street	187	0	122	142	9

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	1	2
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	3	0	0	0	1
	4 - Supermarket Access	3	0	1	33	2
	5 - High Street	2	0	3	1	11

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.71	10.39	2.4	7.1	B
2 - South Lodge Mews	0.04	18.65	0.0	0.5	C
3 - London Road	0.57	6.52	1.3	1.5	A
4 - Supermarket Access	0.21	3.31	0.3	0.9	A
5 - High Street	0.33	3.53	0.5	2.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	573	280	1258	0.456	570	0.8	5.206	A
2 - South Lodge Mews	5	849	328	0.016	5	0.0	11.140	B
3 - London Road	503	368	1392	0.361	501	0.6	4.031	A
4 - Supermarket Access	193	604	1571	0.123	193	0.1	2.611	A
5 - High Street	346	384	1650	0.210	345	0.3	2.755	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	684	335	1227	0.558	682	1.2	6.596	A
2 - South Lodge Mews	6	1017	275	0.023	6	0.0	13.417	B
3 - London Road	601	441	1348	0.445	600	0.8	4.804	A
4 - Supermarket Access	231	723	1486	0.155	231	0.2	2.867	A
5 - High Street	414	460	1597	0.259	413	0.3	3.040	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	838	410	1184	0.708	834	2.3	10.142	B
2 - South Lodge Mews	8	1243	202	0.038	8	0.0	18.499	C
3 - London Road	735	538	1289	0.571	733	1.3	6.455	A
4 - Supermarket Access	283	884	1373	0.206	283	0.3	3.302	A
5 - High Street	506	562	1526	0.332	506	0.5	3.528	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	838	411	1184	0.708	838	2.4	10.388	B
2 - South Lodge Mews	8	1247	201	0.038	8	0.0	18.652	C
3 - London Road	735	541	1288	0.571	735	1.3	6.515	A
4 - Supermarket Access	283	887	1371	0.206	283	0.3	3.308	A
5 - High Street	506	564	1525	0.332	506	0.5	3.534	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	684	336	1226	0.558	688	1.3	6.747	A
2 - South Lodge Mews	6	1023	272	0.023	6	0.0	13.535	B
3 - London Road	601	444	1346	0.446	603	0.8	4.853	A
4 - Supermarket Access	231	728	1483	0.156	231	0.2	2.875	A
5 - High Street	414	462	1596	0.259	414	0.4	3.048	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	573	281	1257	0.456	575	0.8	5.289	A
2 - South Lodge Mews	5	855	326	0.016	5	0.0	11.216	B
3 - London Road	503	371	1390	0.362	504	0.6	4.067	A
4 - Supermarket Access	193	608	1568	0.123	194	0.1	2.620	A
5 - High Street	346	386	1649	0.210	347	0.3	2.764	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.83	0.55	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.56	0.55	1.00	1.40	1.45			N/A	N/A
4 - Supermarket Access	0.14	0.00	0.00	0.14	0.14			N/A	N/A
5 - High Street	0.26	0.00	0.00	0.26	0.26			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.24	0.06	0.84	2.64	3.68			N/A	N/A
2 - South Lodge Mews	0.02	0.02	0.25	0.45	0.48			N/A	N/A
3 - London Road	0.80	0.09	0.84	1.36	1.36			N/A	N/A
4 - Supermarket Access	0.18	0.00	0.00	0.18	0.18			N/A	N/A
5 - High Street	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	2.33	0.03	0.28	2.33	7.10			N/A	N/A
2 - South Lodge Mews	0.04	0.03	0.25	0.45	0.48			N/A	N/A
3 - London Road	1.31	0.03	0.26	1.31	1.31			N/A	N/A
4 - Supermarket Access	0.26	0.03	0.25	0.46	0.48			N/A	N/A
5 - High Street	0.49	0.03	0.25	0.49	0.49			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	2.38	0.03	0.27	2.38	3.01			N/A	N/A
2 - South Lodge Mews	0.04	0.00	0.00	0.04	0.04			N/A	N/A
3 - London Road	1.32	0.03	0.27	1.32	1.32			N/A	N/A
4 - Supermarket Access	0.26	0.03	0.27	0.49	0.92			N/A	N/A
5 - High Street	0.50	0.03	0.31	1.42	2.19			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.28	0.07	0.91	2.67	3.69			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.81	0.17	0.93	1.41	1.47			N/A	N/A
4 - Supermarket Access	0.19	0.00	0.00	0.19	0.19			N/A	N/A
5 - High Street	0.35	0.00	0.00	0.35	0.35			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.85	0.04	0.44	1.86	2.85			N/A	N/A
2 - South Lodge Mews	0.02	0.00	0.00	0.02	0.02			N/A	N/A
3 - London Road	0.57	0.05	0.57	1.32	1.42			N/A	N/A
4 - Supermarket Access	0.14	0.00	0.00	0.14	0.14			N/A	N/A
5 - High Street	0.27	0.00	0.00	0.27	0.27			N/A	N/A

2040 + Dev + School, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	London Road - South Road - High Street Roundabout	Standard Roundabout		1, 2, 3, 4, 5	5.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2040 + Dev + School	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - South Road		✓	585	100.000
2 - South Lodge Mews		✓	5	100.000
3 - London Road		✓	609	100.000
4 - Supermarket Access		✓	469	100.000
5 - High Street		✓	548	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	1	0	317	90	177
	2 - South Lodge Mews	1	0	2	0	2
	3 - London Road	272	1	1	159	176
	4 - Supermarket Access	99	0	117	0	253
	5 - High Street	186	2	165	186	9

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - South Road	2 - South Lodge Mews	3 - London Road	4 - Supermarket Access	5 - High Street
From	1 - South Road	0	0	1	0	1
	2 - South Lodge Mews	0	0	0	0	0
	3 - London Road	0	0	0	1	1
	4 - Supermarket Access	0	0	0	0	0
	5 - High Street	1	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - South Road	0.57	7.45	1.3	1.6	A
2 - South Lodge Mews	0.00	0.00	0.0	~1	A
3 - London Road	0.51	5.48	1.0	1.7	A
4 - Supermarket Access	0.33	3.50	0.5	2.2	A
5 - High Street	0.38	3.71	0.6	2.8	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	440	361	1221	0.361	438	0.6	4.584	A
2 - South Lodge Mews	0	797	347	0.000	0	0.0	0.000	A
3 - London Road	458	347	1425	0.322	457	0.5	3.710	A
4 - Supermarket Access	353	477	1702	0.208	352	0.3	2.667	A
5 - High Street	413	368	1692	0.244	411	0.3	2.807	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	526	432	1182	0.445	525	0.8	5.474	A
2 - South Lodge Mews	0	954	297	0.000	0	0.0	0.000	A
3 - London Road	547	416	1384	0.396	547	0.6	4.296	A
4 - Supermarket Access	422	572	1635	0.258	421	0.3	2.966	A
5 - High Street	493	441	1642	0.300	492	0.4	3.130	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	644	529	1127	0.571	642	1.3	7.385	A
2 - South Lodge Mews	0	1168	230	0.000	0	0.0	0.000	A
3 - London Road	671	509	1328	0.505	669	1.0	5.450	A
4 - Supermarket Access	516	700	1544	0.334	516	0.5	3.498	A
5 - High Street	603	540	1574	0.383	603	0.6	3.701	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	644	530	1127	0.571	644	1.3	7.449	A
2 - South Lodge Mews	0	1170	229	0.000	0	0.0	0.000	A
3 - London Road	671	510	1327	0.505	670	1.0	5.480	A
4 - Supermarket Access	516	701	1543	0.335	516	0.5	3.505	A
5 - High Street	603	541	1573	0.383	603	0.6	3.710	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	526	433	1181	0.445	528	0.8	5.528	A
2 - South Lodge Mews	0	958	296	0.000	0	0.0	0.000	A
3 - London Road	547	417	1383	0.396	549	0.7	4.324	A
4 - Supermarket Access	422	574	1633	0.258	422	0.3	2.976	A
5 - High Street	493	442	1641	0.300	493	0.4	3.139	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - South Road	440	362	1221	0.361	441	0.6	4.627	A
2 - South Lodge Mews	0	802	346	0.000	0	0.0	0.000	A
3 - London Road	458	349	1424	0.322	459	0.5	3.732	A
4 - Supermarket Access	353	480	1699	0.208	353	0.3	2.676	A
5 - High Street	413	370	1691	0.244	413	0.3	2.819	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.56	0.55	1.00	1.40	1.45			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.47	0.00	0.00	0.47	0.47			N/A	N/A
4 - Supermarket Access	0.26	0.00	0.00	0.26	0.26			N/A	N/A
5 - High Street	0.32	0.00	0.00	0.32	0.32			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.79	0.10	0.85	1.23	1.23			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.65	0.10	0.83	1.37	1.43			N/A	N/A
4 - Supermarket Access	0.35	0.00	0.00	0.35	0.35			N/A	N/A
5 - High Street	0.43	0.00	0.00	0.43	0.43			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.31	0.03	0.26	1.31	1.31			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	1.01	0.03	0.26	1.01	1.01			N/A	N/A
4 - Supermarket Access	0.50	0.03	0.25	0.50	0.50			N/A	N/A
5 - High Street	0.62	0.03	0.25	0.62	0.62			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	1.32	0.03	0.27	1.32	1.63			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	1.01	0.03	0.27	1.01	1.71			N/A	N/A
4 - Supermarket Access	0.50	0.03	0.31	1.44	2.22			N/A	N/A
5 - High Street	0.62	0.03	0.29	1.21	2.79			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.81	0.13	0.91	1.43	1.49			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.66	0.25	0.95	1.39	1.44			N/A	N/A
4 - Supermarket Access	0.35	0.00	0.00	0.35	0.35			N/A	N/A
5 - High Street	0.43	0.00	0.00	0.43	0.43			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - South Road	0.57	0.05	0.53	1.33	1.43			N/A	N/A
2 - South Lodge Mews	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - London Road	0.48	0.04	0.41	1.25	1.37			N/A	N/A
4 - Supermarket Access	0.26	0.00	0.00	0.26	0.26			N/A	N/A
5 - High Street	0.32	0.00	0.00	0.32	0.32			N/A	N/A

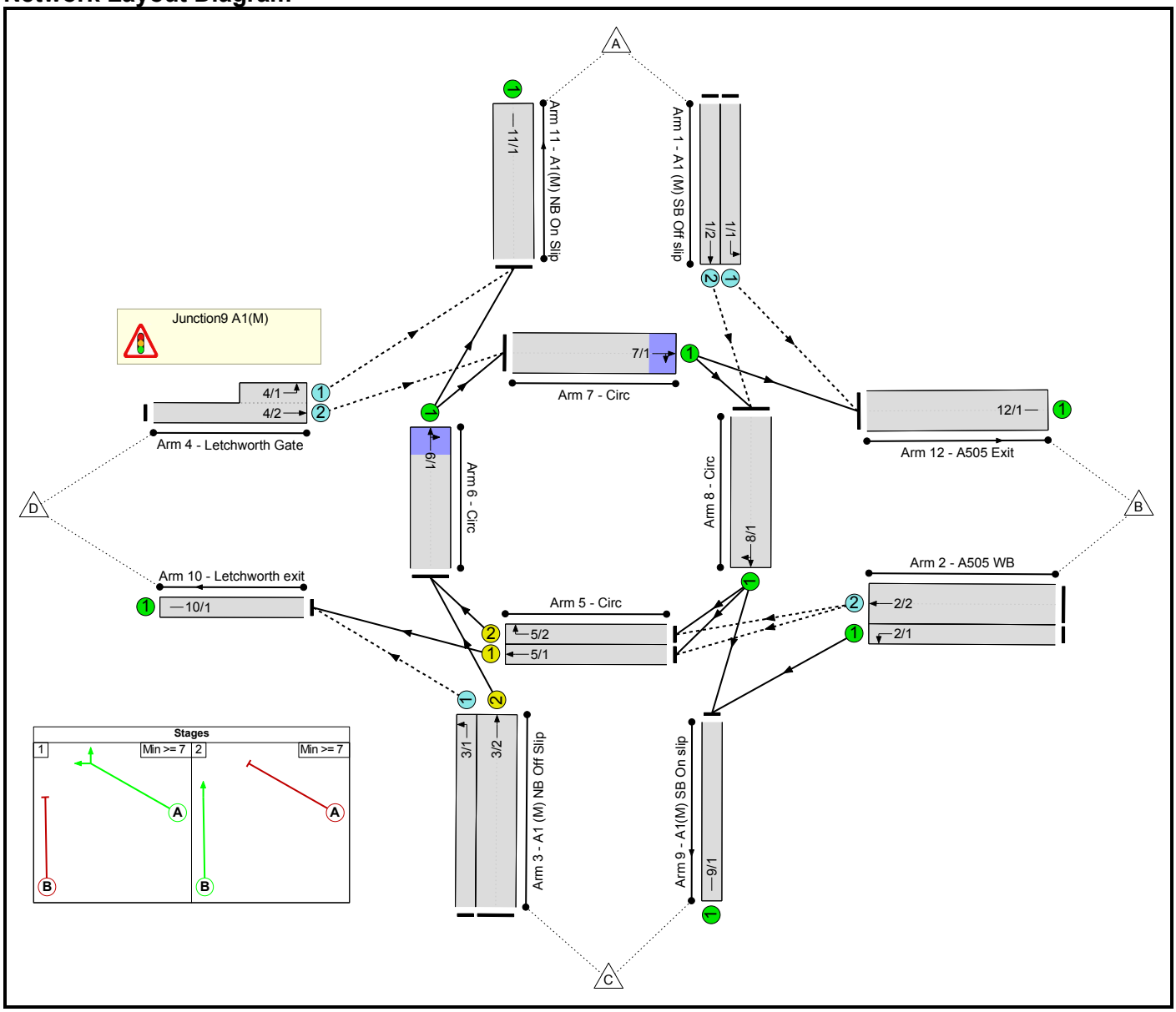
A1(M) Junction 9

Detailed Input Data And Results

User and Project Details

Project:	**Growing Baldock**
Title:	**A1(m) Junction 10**
Location:	Baldock, SG6 2EA
Client:	Urban & Civic
Site Ref(s):	J13
Design Layout Ref:	-
Date Started:	01.08.2025
Date Completed:	-
Checked By:	NL/ZT
Additional detail:	
File name:	J13_A1m.A505 Rdbt_v2 existing.lsg3x
Author:	Jay James
Company:	ITP by Haskoning
Address:	
Linsig Version:	3, 3, 0, 6

Network Layout Diagram



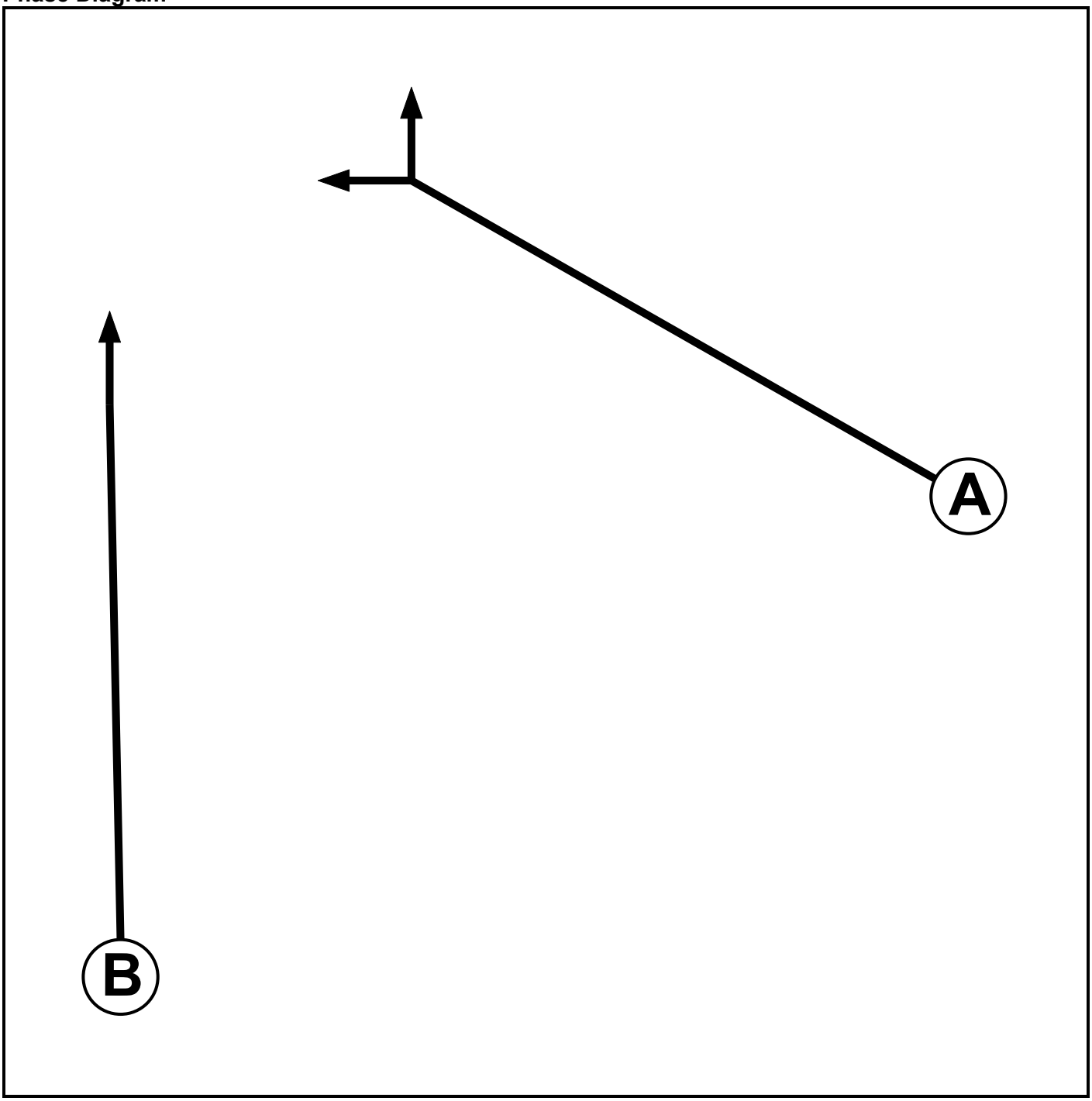
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2022 AM	2022 AM	Base Network Control Plan 1	08:00 - 09:00	72	2.5	23.36
2	2022 PM	2022 PM	Base Network Control Plan 1	17:00 - 18:00	72	-6.2	29.49
3	2028 AM	2028 AM	Base Network Control Plan 1	08:00 - 09:00	72	-3.4	30.21
4	2028 PM	2028 PM	Base Network Control Plan 1	17:00 - 18:00	72	-13.0	42.99
5	2033 AM	2033 AM	Base Network Control Plan 1	08:00 - 09:00	72	-6.3	35.75
6	2033 PM	2033 PM	Base Network Control Plan 1	17:00 - 18:00	72	-16.5	53.69
7	2033 wDev AM	2033 w Dev AM	Base Network Control Plan 1	08:00 - 09:00	72	-7.3	38.54
8	2033 wDev PM	2033 w Dev PM	Base Network Control Plan 1	17:00 - 18:00	72	-16.5	54.86
9	2040 AM	2040 AM	Base Network Control Plan 1	08:00 - 09:00	72	-1.5	27.47
10	2040 PM	2040 PM	Base Network Control Plan 1	17:00 - 18:00	72	-10.4	36.70
11	2040 wDev no School AM	2040 w Dev no School AM	Base Network Control Plan 1	08:00 - 09:00	72	-4.3	32.78
12	2040 wDev no School PM	2040 wDev no School PM	Base Network Control Plan 1	17:00 - 18:00	72	-10.4	39.49
13	2040 wDev w School AM	2040 w Dev with School AM	Base Network Control Plan 1	08:00 - 09:00	72	-4.1	32.37
14	2040 wDev w School PM	2040 wDev with School PM	Base Network Control Plan 1	17:00 - 18:00	72	-10.2	38.99

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1	Gen		Stage Stream 1	2	2	Junction9 A1(M)	

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7

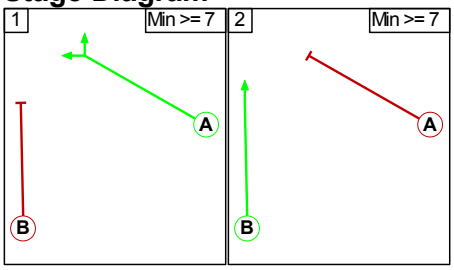
Phase Intergreens Matrix

Terminating Phase	Starting Phase		
		A	B
	A		5
	B	7	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		5
	2	7	

Lane Input Data

Junction: Junction9 A1(M)

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A1 (M) SB Off slip)	O		2	3	60.0	Geom	-	3.46	0.00	Y	Arm 12 Left	Inf
1/2 (A1 (M) SB Off slip)	O		2	3	60.0	Geom	-	3.25	0.00	N	Arm 8 Ahead	Inf
2/1 (A505 WB)	U		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 9 Left	100.00
2/2 (A505 WB)	O		2	3	60.0	User	4178	-	-	-	-	-
3/1 (A1 (M) NB Off Slip)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 10 Left	100.00
3/2 (A1 (M) NB Off Slip)	U	B	2	3	60.0	User	4000	-	-	-	-	-
4/1 (Letchworth Gate)	O		2	3	5.0	Geom	-	3.25	0.00	Y	Arm 11 Left	26.00
4/2 (Letchworth Gate)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 7 Ahead	40.00
5/1 (Circ)	U	A	2	3	20.5	User	1714	-	-	-	-	-
5/2 (Circ)	U	A	2	3	20.5	User	1714	-	-	-	-	-
6/1 (Circ)	U		2	3	14.3	User	3600	-	-	-	-	-
7/1 (Circ)	U		2	3	16.7	User	3600	-	-	-	-	-
8/1 (Circ)	U		2	3	14.3	User	3600	-	-	-	-	-
9/1 (A1(M) SB On slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1 (Letchworth exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (A1(M) NB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1 (A505 Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: Junction9 A1(M)

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (A1 (M) SB Off slip)	12/1 (Left)	715	0	7/1	0.22	All	-	-	-	-	-
1/2 (A1 (M) SB Off slip)	8/1 (Ahead)	1000	0	7/1	0.40	All	-	-	-	-	-
2/2 (A505 WB)	5/1 (Ahead)	1000	0	8/1	0.33	All	-	-	-	-	-
	5/2 (Ahead)	1000	0	8/1	0.33	All					
3/1 (A1 (M) NB Off Slip)	10/1 (Left)	1200	0	5/1	0.33	All	-	-	-	-	-
4/1 (Letchworth Gate)	11/1 (Left)	1439	0	6/1	1.09	All	-	-	-	-	-
4/2 (Letchworth Gate)	7/1 (Ahead)	1350	0	6/1	0.22	All	-	-	-	-	-

Lane Connector Input Data

Junction: Junction9 A1(M)				
Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	12/1	Internal	5	35
1/2	8/1	Internal	5	35
2/1	9/1	Internal	26	35
2/2	5/1	Internal	9	35
2/2	5/2	Internal	9	35
3/1	10/1	Internal	26	35
3/2	6/1	Internal	6	35
4/1	11/1	Internal	5	35
4/2	7/1	Internal	7	35
5/1	10/1	Internal	26	35
5/2	6/1	Internal	6	35
6/1	7/1	Internal	7	35
6/1	11/1	Internal	26	35
7/1	8/1	Internal	6	35
7/1	12/1	Internal	26	35
8/1	5/1	Internal	9	35
8/1	5/2	Internal	9	35
8/1	9/1	Internal	26	35

Scenario 1: '2022 AM' (FG1: '2022 AM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2022 PM' (FG2: '2022 PM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2028 AM' (FG3: '2028 AM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2028 PM' (FG4: '2028 PM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Scenario 5: '2033 AM' (FG5: '2033 AM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Scenario 6: '2033 PM' (FG6: '2033 PM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Scenario 7: '2033 wDev AM' (FG7: '2033 w Dev AM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 7

Scenario 8: '2033 wDev PM' (FG8: '2033 w Dev PM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 8

Scenario 9: '2040 AM' (FG9: '2040 AM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 9

Scenario 10: '2040 PM' (FG10: '2040 PM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 10

Scenario 11: '2040 wDev no School AM' (FG11: '2040 w Dev no School AM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 11

Scenario 12: '2040 wDev no School PM' (FG12: '2040 wDev no School PM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 12

Scenario 13: '2040 wDev w School AM' (FG13: '2040 w Dev with School AM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 13

Scenario 14: '2040 wDev w School PM' (FG14: '2040 wDev with School PM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 14

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 AM'	08:00	09:00	01:00	
2: '2022 PM'	17:00	18:00	01:00	
3: '2028 AM'	08:00	09:00	01:00	
4: '2028 PM'	17:00	18:00	01:00	
5: '2033 AM'	08:00	09:00	01:00	
6: '2033 PM'	17:00	18:00	01:00	
7: '2033 w Dev AM'	08:00	09:00	01:00	
8: '2033 w Dev PM'	17:00	18:00	01:00	
9: '2040 AM'	08:00	09:00	01:00	
10: '2040 PM'	17:00	18:00	01:00	
11: '2040 w Dev no School AM'	08:00	09:00	01:00	
12: '2040 wDev no School PM'	17:00	18:00	01:00	
13: '2040 w Dev with School AM'	08:00	09:00	01:00	
14: '2040 wDev with School PM'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2022 AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	199	2	200	403
	B	105	59	978	431	1573
	C	1	938	1	731	1671
	D	116	314	636	22	1088
	Tot.	224	1510	1617	1384	4735

FG2: '2022 PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	116	0	150	266
	B	153	100	1070	454	1777
	C	2	1252	0	733	1987
	D	143	149	633	4	929
	Tot.	298	1617	1703	1341	4959

FG3: '2028 AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	209	2	210	423
	B	110	62	1025	452	1649
	C	1	983	1	767	1752
	D	122	329	667	23	1141
	Tot.	235	1583	1695	1452	4965

FG4: '2028 PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	122	0	157	279
	B	160	105	1120	475	1860
	C	2	1311	0	767	2080
	D	150	156	663	4	973
	Tot.	312	1694	1783	1403	5192

FG5: '2033 AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	213	2	214	431
	B	113	63	1048	462	1686
	C	1	1005	1	783	1790
	D	124	336	682	24	1166
	Tot.	240	1617	1733	1483	5073

FG6: '2033 PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	124	0	161	285
	B	164	107	1144	486	1901
	C	2	1340	0	784	2126
	D	153	159	677	4	993
	Tot.	319	1730	1821	1435	5305

FG7: '2033 w Dev AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	213	2	214	431
	B	113	63	1092	462	1730
	C	1	1052	1	783	1837
	D	124	336	682	24	1166
	Tot.	240	1664	1777	1483	5164

FG8: '2033 w Dev PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	124	0	161	285
	B	164	107	1182	486	1939
	C	2	1381	0	784	2167
	D	153	159	677	4	993
	Tot.	319	1771	1859	1435	5384

FG9: '2040 AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	205	2	207	416
	B	108	61	1010	445	1624
	C	1	968	1	755	1725
	D	120	324	657	23	1124
	Tot.	231	1558	1670	1430	4889

FG10: '2040 PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	154	273
	B	158	103	1101	467	1829
	C	2	1289	0	755	2046
	D	147	153	651	4	955
	Tot.	307	1664	1752	1380	5103

FG11: '2040 w Dev no School AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	205	2	207	416
	B	108	61	1142	445	1756
	C	1	1102	1	755	1859
	D	120	324	657	23	1124
	Tot.	231	1692	1802	1430	5155

FG12: '2040 wDev no School PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	154	273
	B	158	103	1173	467	1901
	C	2	1398	0	755	2155
	D	147	153	651	4	955
	Tot.	307	1773	1824	1380	5284

FG13: '2040 w Dev with School AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	203	2	205	412
	B	107	61	1124	441	1733
	C	1	1111	1	755	1868
	D	120	320	657	23	1120
	Tot.	230	1695	1784	1424	5133

FG14: '2040 wDev with School PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	154	273
	B	157	103	1192	467	1919
	C	2	1387	0	755	2144
	D	147	153	651	4	955
	Tot.	306	1762	1843	1380	5291

Scenario 1: '2022 AM' (FG1: '2022 AM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	199	2	200	403
	B	105	59	978	431	1573
	C	1	938	1	731	1671
	D	116	314	636	22	1088
	Tot.	224	1510	1617	1384	4735

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 2: '2022 PM' (FG2: '2022 PM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	116	0	150	266
	B	153	100	1070	454	1777
	C	2	1252	0	733	1987
	D	143	149	633	4	929
	Tot.	298	1617	1703	1341	4959

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 3: '2028 AM' (FG3: '2028 AM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	209	2	210	423
	B	110	62	1025	452	1649
	C	1	983	1	767	1752
	D	122	329	667	23	1141
	Tot.	235	1583	1695	1452	4965

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 4: '2028 PM' (FG4: '2028 PM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	122	0	157	279
	B	160	105	1120	475	1860
	C	2	1311	0	767	2080
	D	150	156	663	4	973
	Tot.	312	1694	1783	1403	5192

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 5: '2033 AM' (FG5: '2033 AM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	213	2	214	431
	B	113	63	1048	462	1686
	C	1	1005	1	783	1790
	D	124	336	682	24	1166
	Tot.	240	1617	1733	1483	5073

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 6: '2033 PM' (FG6: '2033 PM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	124	0	161	285
	B	164	107	1144	486	1901
	C	2	1340	0	784	2126
	D	153	159	677	4	993
	Tot.	319	1730	1821	1435	5305

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 7: '2033 wDev AM' (FG7: '2033 w Dev AM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	213	2	214	431
	B	113	63	1092	462	1730
	C	1	1052	1	783	1837
	D	124	336	682	24	1166
	Tot.	240	1664	1777	1483	5164

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 8: '2033 wDev PM' (FG8: '2033 w Dev PM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	124	0	161	285
	B	164	107	1182	486	1939
	C	2	1381	0	784	2167
	D	153	159	677	4	993
	Tot.	319	1771	1859	1435	5384

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 9: '2040 AM' (FG9: '2040 AM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	205	2	207	416
	B	108	61	1010	445	1624
	C	1	968	1	755	1725
	D	120	324	657	23	1124
	Tot.	231	1558	1670	1430	4889

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 10: '2040 PM' (FG10: '2040 PM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	154	273
	B	158	103	1101	467	1829
	C	2	1289	0	755	2046
	D	147	153	651	4	955
	Tot.	307	1664	1752	1380	5103

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 11: '2040 wDev no School AM' (FG11: '2040 w Dev no School AM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	205	2	207	416
	B	108	61	1142	445	1756
	C	1	1102	1	755	1859
	D	120	324	657	23	1124
	Tot.	231	1692	1802	1430	5155

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 12: '2040 wDev no School PM' (FG12: '2040 wDev no School PM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	154	273
	B	158	103	1173	467	1901
	C	2	1398	0	755	2155
	D	147	153	651	4	955
	Tot.	307	1773	1824	1380	5284

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 13: '2040 wDev w School AM' (FG13: '2040 w Dev with School AM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	203	2	205	412
	B	107	61	1124	441	1733
	C	1	1111	1	755	1868
	D	120	320	657	23	1120
	Tot.	230	1695	1784	1424	5133

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 14: '2040 wDev w School PM' (FG14: '2040 wDev with School PM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	154	273
	B	157	103	1192	467	1919
	C	2	1387	0	755	2144
	D	147	153	651	4	955
	Tot.	306	1762	1843	1380	5291

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Traffic Lane Flows

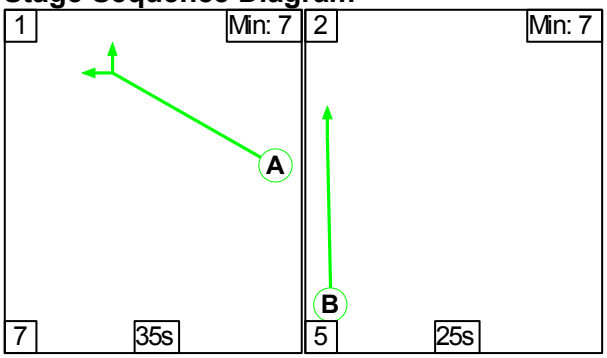
Lane	Scenario 1: 2022 AM	Scenario 2: 2022 PM	Scenario 3: 2028 AM	Scenario 4: 2028 PM	Scenario 5: 2033 AM	Scenario 6: 2033 PM
Junction: Junction9 A1(M)						
1/1	199	116	209	122	213	124
1/2	204	150	214	157	218	161
2/1	978	1070	1025	1120	1048	1144
2/2	595	707	624	740	638	757
3/1	731	733	767	767	783	784
3/2	940	1254	985	1313	1007	1342
4/1 (short)	116	143	122	150	124	153
4/2 (with short)	1088(In) 972(Out)	929(In) 786(Out)	1141(In) 1019(Out)	973(In) 823(Out)	1166(In) 1042(Out)	993(In) 840(Out)
5/1	653	608	685	636	700	651
5/2	166	253	174	265	178	271
6/1	1106	1507	1159	1578	1185	1613
7/1	1970	2138	2065	2239	2111	2287
8/1	863	787	905	824	925	842
9/1	1617	1703	1695	1783	1733	1821
10/1	1384	1341	1452	1403	1483	1435
11/1	224	298	235	312	240	319
12/1	1510	1617	1583	1694	1617	1730

Lane	Scenario 7: 2033 wDev AM	Scenario 8: 2033 wDev PM	Scenario 9: 2040 AM	Scenario 10: 2040 PM	Scenario 11: 2040 wDev no School AM	Scenario 12: 2040 wDev no School PM
Junction: Junction9 A1(M)						
1/1	213	124	205	119	205	119
1/2	218	161	211	154	211	154
2/1	1092	1182	1010	1101	1142	1173
2/2	638	757	614	728	614	728
3/1	783	784	755	755	755	755
3/2	1054	1383	970	1291	1104	1400
4/1 (short)	124	153	120	147	120	147
4/2 (with short)	1166(In) 1042(Out)	993(In) 840(Out)	1124(In) 1004(Out)	955(In) 808(Out)	1124(In) 1004(Out)	955(In) 808(Out)
5/1	700	651	675	625	675	625
5/2	178	271	171	261	171	261
6/1	1232	1654	1141	1552	1275	1661
7/1	2158	2328	2034	2200	2168	2309
8/1	925	842	892	809	892	809
9/1	1777	1859	1670	1752	1802	1824
10/1	1483	1435	1430	1380	1430	1380
11/1	240	319	231	307	231	307
12/1	1664	1771	1558	1664	1692	1773

Lane	Scenario 13: 2040 wDev w School AM	Scenario 14: 2040 wDev w School PM
Junction: Junction9 A1(M)		
1/1	203	119
1/2	209	154
2/1	1124	1192
2/2	609	727
3/1	755	755
3/2	1113	1389
4/1 (short)	120	147
4/2 (with short)	1120(In) 1000(Out)	955(In) 808(Out)
5/1	669	625
5/2	170	260
6/1	1283	1649
7/1	2173	2298
8/1	890	809
9/1	1784	1843
10/1	1424	1380
11/1	230	306
12/1	1695	1762

Scenario 1: '2022 AM' (FG1: '2022 AM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



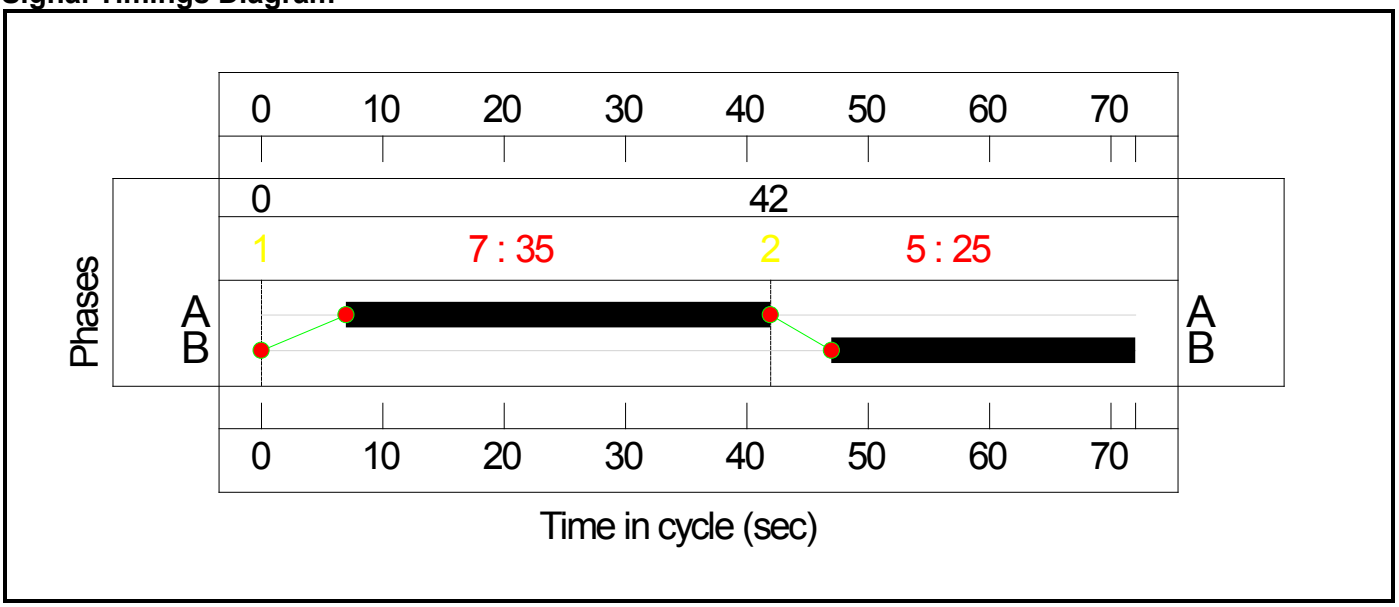
Stage Timings

Stage	1	2
Duration	35	25
Change Point	0	42

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	35	7	42
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	25	47	0

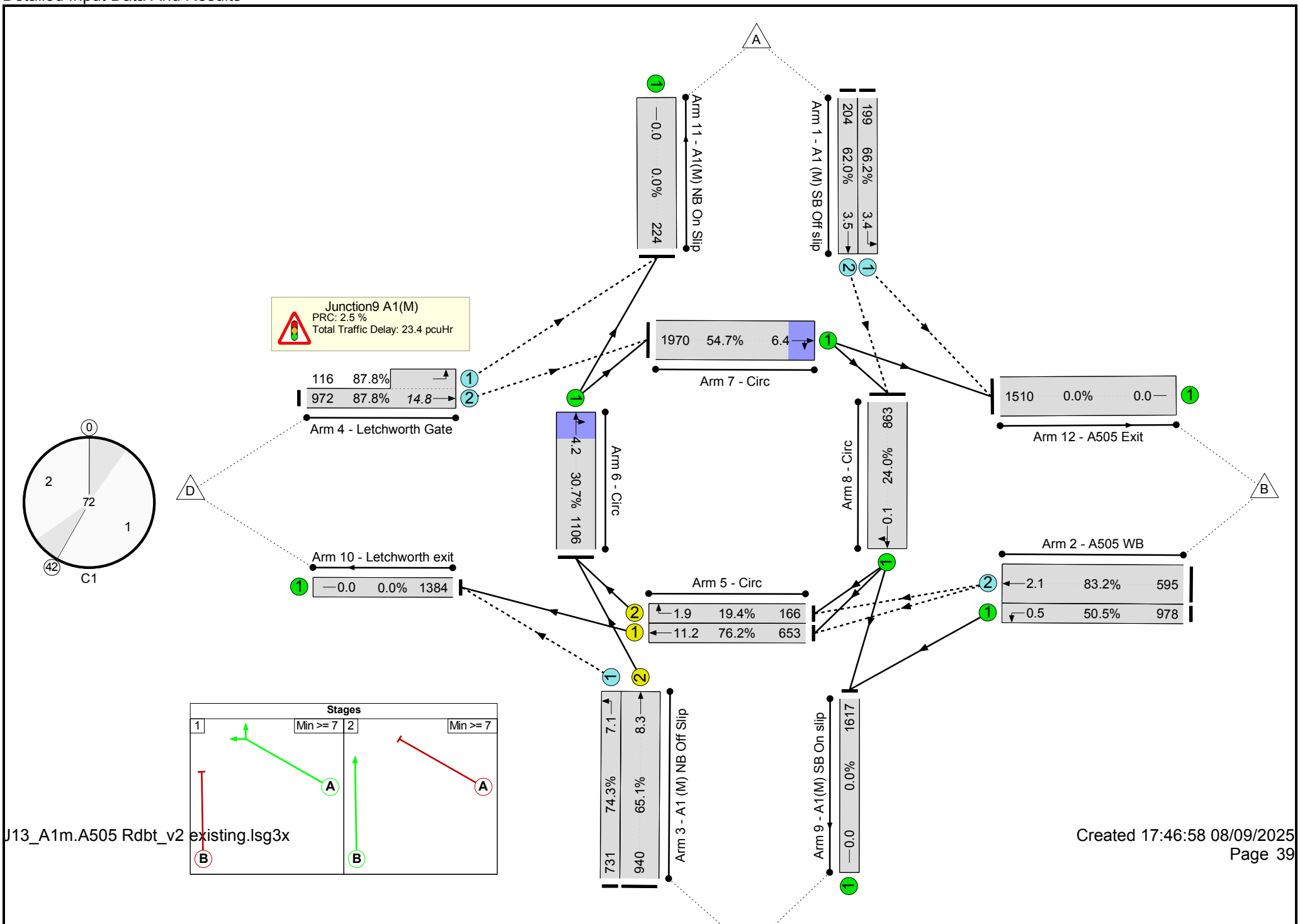
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	Description	Type	Phases	Start Green	End Green
3/2	A1 (M) NB Off Slip Ahead	U	B	47	0
5/1	Circ Ahead	U	A	7	42
5/2	Circ Right	U	A	7	42

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: 2.5 %
Total Traffic Delay: 23.4 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 224
Arm 1 - A1 (M) SB Off slip
204 62.0% 3.5
199 66.2% 3.4
1970 54.7% 6.4
Arm 7 - Circ
116 87.8%
972 87.8% 14.8
Arm 4 - Letchworth Gate
1510 0.0% 0.0
Arm 12 - A505 Exit
4.2 30.7% 1106
Arm 6 - Circ
Arm 8 - Circ
863 24.0% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1384
Arm 5 - Circ
1.9 19.4% 166
11.2 76.2% 653
Arm 2 - A505 WB
2.1 83.2% 595
0.5 50.5% 978
Arm 3 - A1 (M) NB Off Slip
7.1 74.3% 731
8.3 65.1% 940
Arm 9 - A1(M) SB On slip
1617 0.0% 0.0
0
72
1
42
C1
Stages
1
Min >= 7
2
Min >= 7
A
B

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**87.8%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**87.8%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	199	1961	301	66.2%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	204	2080	329	62.0%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	978	1936	1936	50.5%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	595	4178	715	83.2%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	731	1936	984	74.3%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	25	-	-	940	4000	1444	65.1%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	1088	1894:1834	1107+132	87.8 : 87.8%
5/1	Circ Ahead	U	N/A	N/A	A		1	35	-	-	653	1714	857	76.2%
5/2	Circ Right	U	N/A	N/A	A		1	35	-	-	166	1714	857	19.4%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1106	3600	3600	30.7%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1970	3600	3600	54.7%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	863	3600	3600	24.0%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1617	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1384	Inf	Inf	0.0%

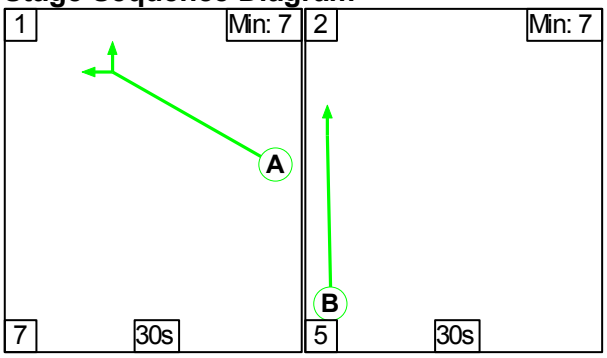
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	224	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1510	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10	**-**	**-**	**3540**	**366**	**0**	**10.2**	**13.1**	**0.0**	**23.4**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3540**	**366**	**0**	**10.2**	**13.1**	**0.0**	**23.4**	**-**	**-**	**-**	**-**	
1/1	199	199	199	0	0	0.4	1.0	-	1.3	24.3	2.5	1.0	3.4	
1/2	204	204	204	0	0	0.5	0.8	-	1.3	22.5	2.7	0.8	3.5	
2/1	978	978	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
2/2	595	595	595	0	0	0.0	2.4	-	2.4	14.5	0.9	1.2	2.1	
3/1	731	731	366	366	0	0.1	1.4	-	1.5	7.6	5.7	1.4	7.1	
3/2	940	940	-	-	-	5.0	0.9	-	5.9	22.8	7.8	0.5	8.3	
4/2+4/1	1088	1088	2176	0	0	0.7	3.5	-	4.1	13.6	11.3	3.5	14.8	
5/1	653	653	-	-	-	2.9	1.6	-	4.5	24.5	9.6	1.6	11.2	
5/2	166	166	-	-	-	0.5	0.1	-	0.6	12.6	1.8	0.1	1.9	
6/1	1106	1106	-	-	-	0.1	0.2	-	0.3	0.9	4.1	0.1	4.2	
7/1	1970	1970	-	-	-	0.2	0.6	-	0.8	1.4	6.1	0.3	6.4	
8/1	863	863	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1617	1617	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1384	1384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	224	224	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1510	1510	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 18.1 PRC Over All Lanes (%): 2.5 Total Delay for Signalled Lanes (pcuHr): 10.98 Total Delay Over All Lanes(pcuHr): 23.36 Cycle Time (s): 72

Scenario 2: '2022 PM' (FG2: '2022 PM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



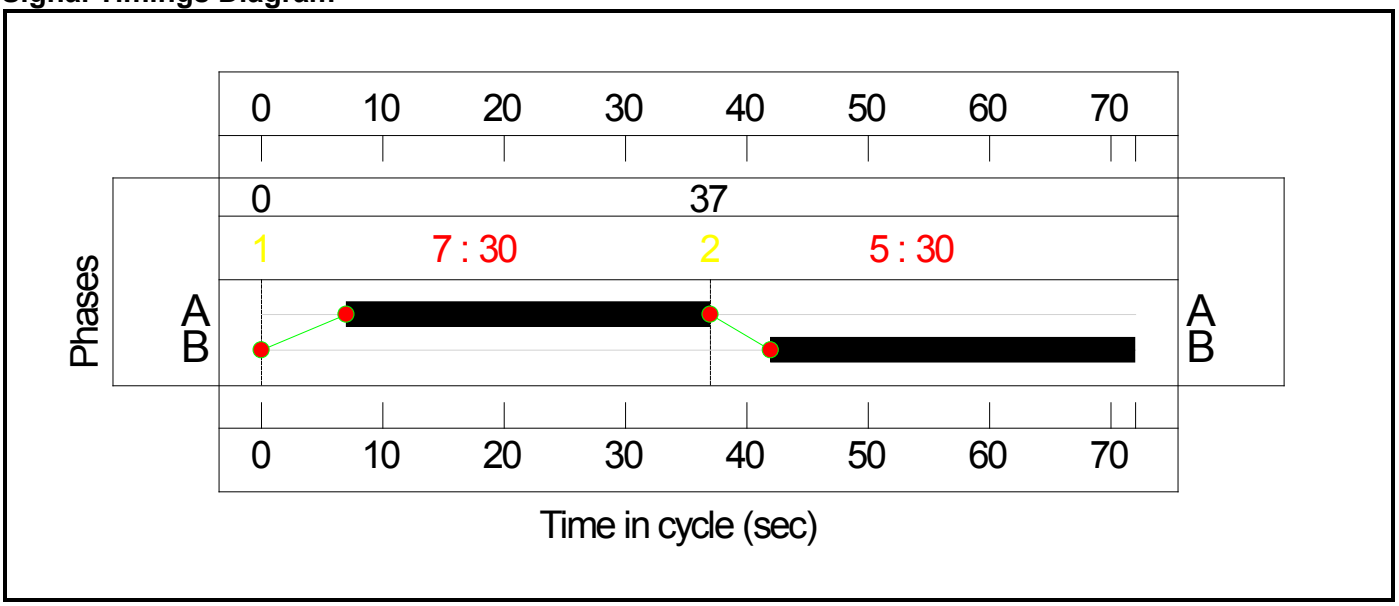
Stage Timings

Stage	1	2
Duration	30	30
Change Point	0	37

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	30	7	37
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	30	42	0

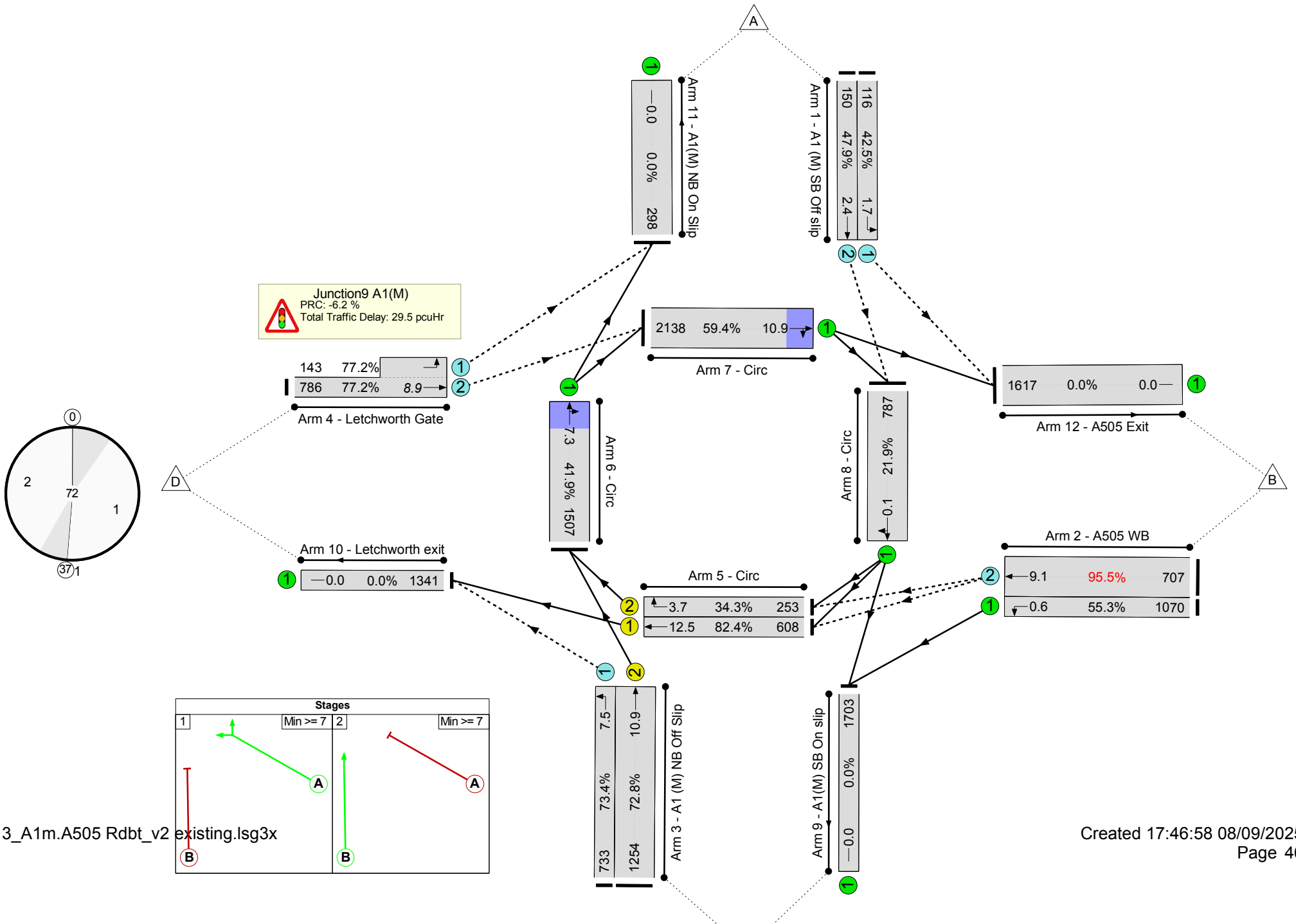
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	42	0
5/1	Circ Ahead	U	A	7	37
5/2	Circ Right	U	A	7	37

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -6.2 %
Total Traffic Delay: 29.5 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 298
Arm 1 - A1 (M) SB Off slip
150 47.9% 2.4
116 42.5% 1.7
2138 59.4% 10.9
Arm 7 - Circ
143 77.2%
786 77.2% 8.9
Arm 4 - Letchworth Gate
1617 0.0% 0.0
Arm 12 - A505 Exit
7.3 41.9% 1507
Arm 6 - Circ
Arm 8 - Circ
787 21.9% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1341
Arm 5 - Circ
3.7 34.3% 253
12.5 82.4% 608
Arm 2 - A505 WB
9.1 95.5% 707
0.6 55.3% 1070
7.5 73.4% 733
10.9 72.8% 1254
Arm 3 - A1 (M) NB Off Slip
Arm 9 - A1(M) SB On slip
1703 0.0% 0.0
0 72 1 2 37 1
Stages
1 Min >= 7 2 Min >= 7
A
B

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**95.5%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**95.5%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	116	1961	273	42.5%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	150	2080	313	47.9%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1070	1936	1936	55.3%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	707	4178	740	95.5%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	733	1936	999	73.4%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	30	-	-	1254	4000	1722	72.8%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	929	1894:1834	1018+185	77.2 : 77.2%
5/1	Circ Ahead	U	N/A	N/A	A		1	30	-	-	608	1714	738	82.4%
5/2	Circ Right	U	N/A	N/A	A		1	30	-	-	253	1714	738	34.3%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1507	3600	3600	41.9%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2138	3600	3600	59.4%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	787	3600	3600	21.9%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1703	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1341	Inf	Inf	0.0%

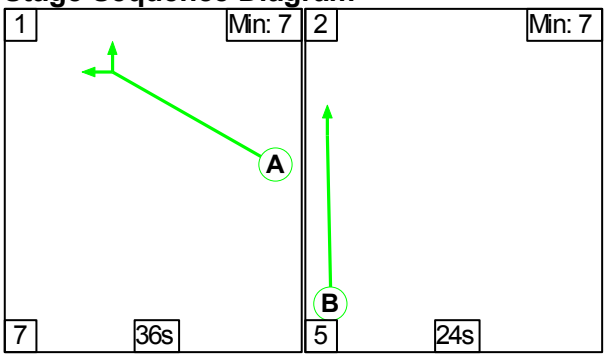
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	298	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1617	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10	**-**	**-**	**3147**	**417**	**0**	**12.5**	**17.0**	**0.0**	**29.5**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3147**	**417**	**0**	**12.5**	**17.0**	**0.0**	**29.5**	**-**	**-**	**-**	**-**	
1/1	116	116	116	0	0	0.3	0.4	-	0.6	19.7	1.3	0.4	1.7	
1/2	150	150	150	0	0	0.4	0.5	-	0.9	21.4	1.9	0.5	2.4	
2/1	1070	1070	-	-	-	0.0	0.6	-	0.6	2.1	0.0	0.6	0.6	
2/2	707	707	707	0	0	0.2	7.4	-	7.6	38.8	5.4	3.7	9.1	
3/1	733	733	316	417	0	0.1	1.4	-	1.5	7.3	6.1	1.4	7.5	
3/2	1254	1254	-	-	-	5.9	1.3	-	7.3	20.8	10.3	0.7	10.9	
4/2+4/1	929	929	1858	0	0	0.6	1.7	-	2.3	8.9	7.2	1.7	8.9	
5/1	608	608	-	-	-	3.4	2.3	-	5.7	33.7	10.2	2.3	12.5	
5/2	253	253	-	-	-	0.9	0.3	-	1.2	17.2	3.5	0.3	3.7	
6/1	1507	1507	-	-	-	0.2	0.4	-	0.5	1.2	7.1	0.2	7.3	
7/1	2138	2138	-	-	-	0.4	0.7	-	1.1	1.9	10.6	0.4	10.9	
8/1	787	787	-	-	-	0.0	0.1	-	0.1	0.6	0.0	0.1	0.1	
9/1	1703	1703	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1341	1341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	298	298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1617	1617	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 9.2 PRC Over All Lanes (%): -6.2 Total Delay for Signalled Lanes (pcuHr): 14.15 Total Delay Over All Lanes(pcuHr): 29.49 Cycle Time (s): 72

Scenario 3: '2028 AM' (FG3: '2028 AM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



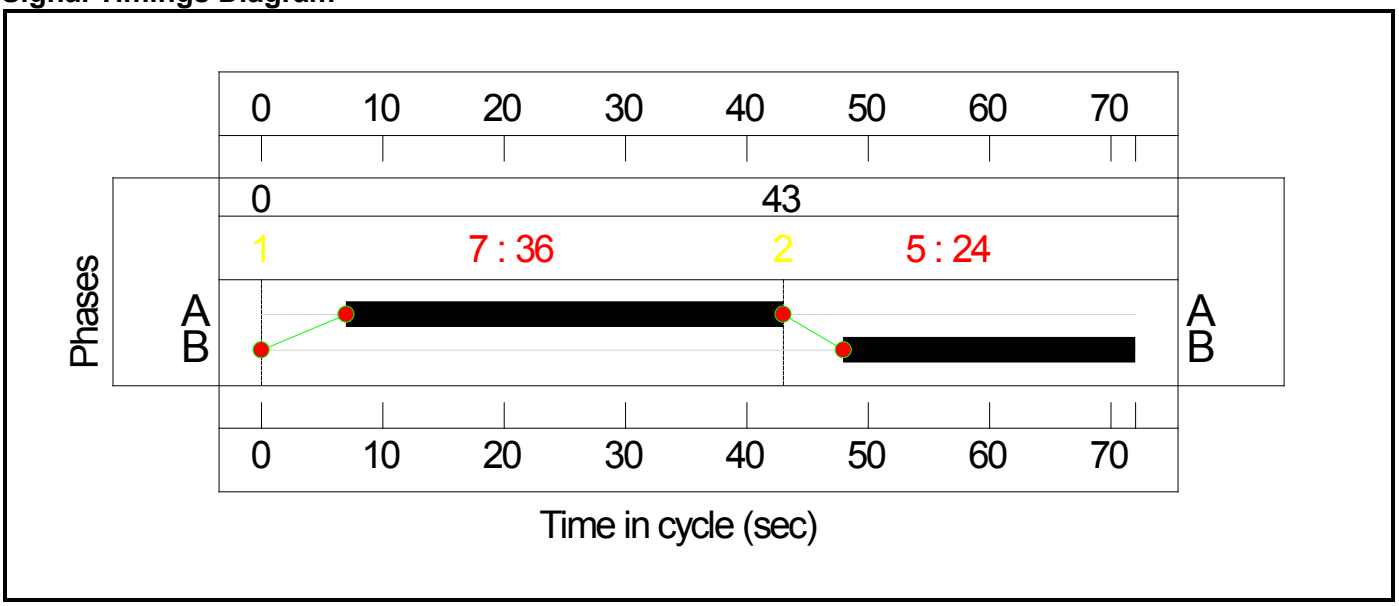
Stage Timings

Stage	1	2
Duration	36	24
Change Point	0	43

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	36	7	43
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	24	48	0

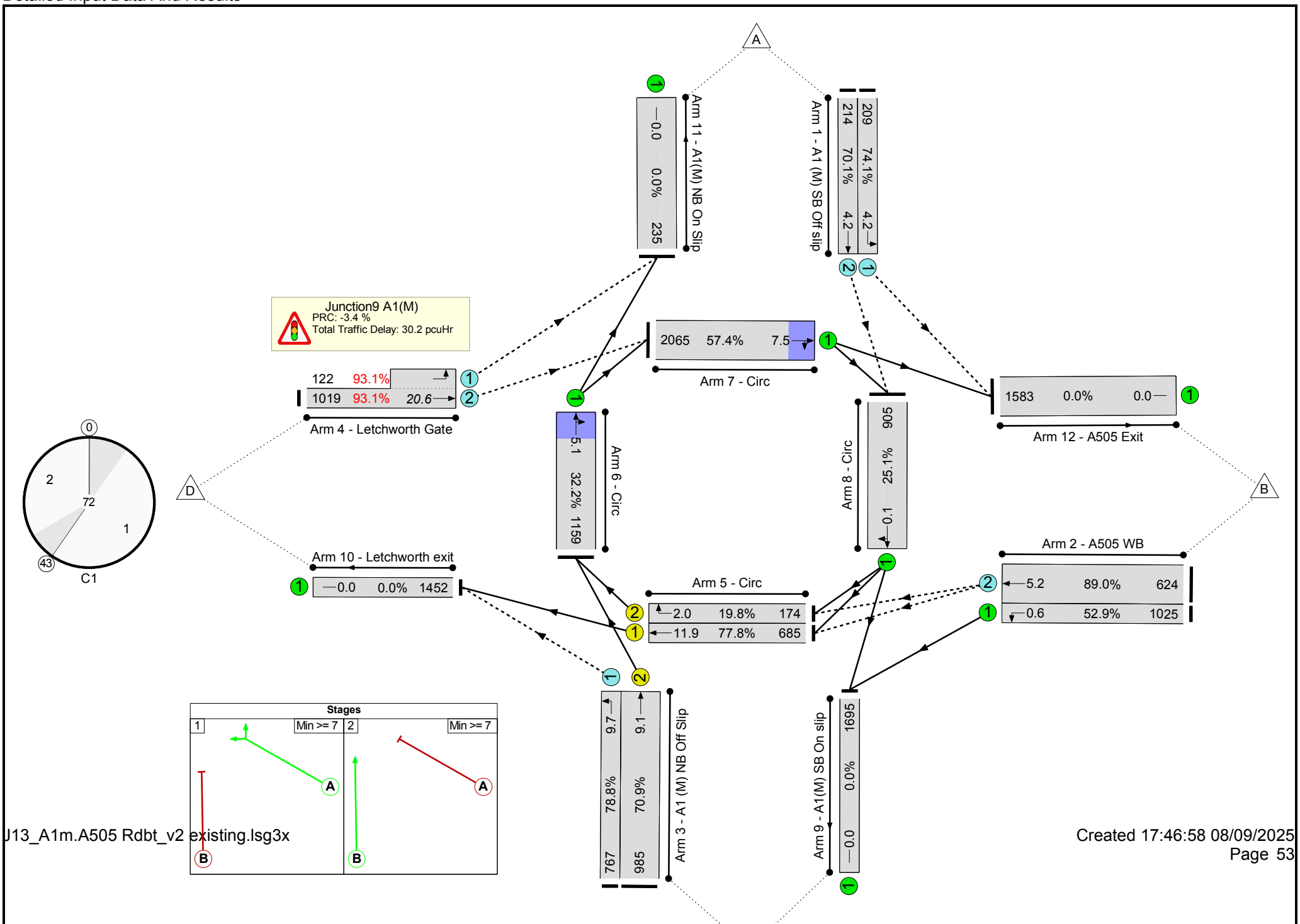
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	48	0
5/1	Circ Ahead	U	A	7	43
5/2	Circ Right	U	A	7	43

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -3.4 %
Total Traffic Delay: 30.2 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 235
Arm 1 - A1 (M) SB Off slip
214 70.1% 4.2
209 74.1% 4.2
2065 57.4% 7.5
Arm 7 - Circ
122 93.1%
1019 93.1% 20.6
Arm 4 - Letchworth Gate
1583 0.0% 0.0
Arm 12 - A505 Exit
5.1 32.2% 1159
Arm 6 - Circ
Arm 8 - Circ
905 25.1% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1452
Arm 5 - Circ
2.0 19.8% 174
11.9 77.8% 685
Arm 2 - A505 WB
5.2 89.0% 624
0.6 52.9% 1025
Arm 3 - A1 (M) NB Off Slip
767 78.8% 9.7
985 70.9% 9.1
Arm 9 - A1(M) SB On slip
1695 0.0% 0.0
0
2
72
1
43
C1
Stages
1
Min >= 7
2
Min >= 7
A
B

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.1%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.1%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	209	1961	282	74.1%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	214	2080	305	70.1%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1025	1936	1936	52.9%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	624	4178	701	89.0%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	767	1936	974	78.8%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	24	-	-	985	4000	1389	70.9%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	1141	1894:1834	1095+131	93.1 : 93.1%
5/1	Circ Ahead	U	N/A	N/A	A		1	36	-	-	685	1714	881	77.8%
5/2	Circ Right	U	N/A	N/A	A		1	36	-	-	174	1714	881	19.8%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1159	3600	3600	32.2%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2065	3600	3600	57.4%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	905	3600	3600	25.1%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1695	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1452	Inf	Inf	0.0%

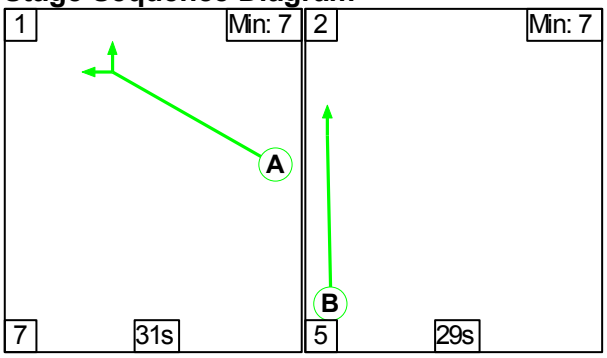
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	235	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1583	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10	**-**	**-**	**3720**	**376**	**0**	**11.6**	**18.6**	**0.0**	**30.2**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3720**	**376**	**0**	**11.6**	**18.6**	**0.0**	**30.2**	**-**	**-**	**-**	**-**	
1/1	209	209	209	0	0	0.5	1.4	-	1.8	31.8	2.8	1.4	4.2	
1/2	214	214	214	0	0	0.5	1.1	-	1.7	28.2	3.0	1.1	4.2	
2/1	1025	1025	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
2/2	624	624	624	0	0	0.1	3.7	-	3.8	21.7	3.4	1.8	5.2	
3/1	767	767	391	376	0	0.2	1.8	-	2.0	9.5	7.9	1.8	9.7	
3/2	985	985	-	-	-	5.6	1.2	-	6.8	24.8	8.5	0.6	9.1	
4/2+4/1	1141	1141	2282	0	0	1.0	5.9	-	6.9	21.7	14.7	5.9	20.6	
5/1	685	685	-	-	-	3.0	1.7	-	4.7	24.8	10.2	1.7	11.9	
5/2	174	174	-	-	-	0.5	0.1	-	0.6	11.9	1.9	0.1	2.0	
6/1	1159	1159	-	-	-	0.1	0.2	-	0.3	1.0	5.0	0.1	5.1	
7/1	2065	2065	-	-	-	0.2	0.7	-	0.9	1.6	7.1	0.3	7.5	
8/1	905	905	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1695	1695	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1452	1452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	235	235	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1583	1583	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 15.7 PRC Over All Lanes (%): -3.4 Total Delay for Signalled Lanes (pcuHr): 12.07 Total Delay Over All Lanes(pcuHr): 30.21 Cycle Time (s): 72

Scenario 4: '2028 PM' (FG4: '2028 PM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



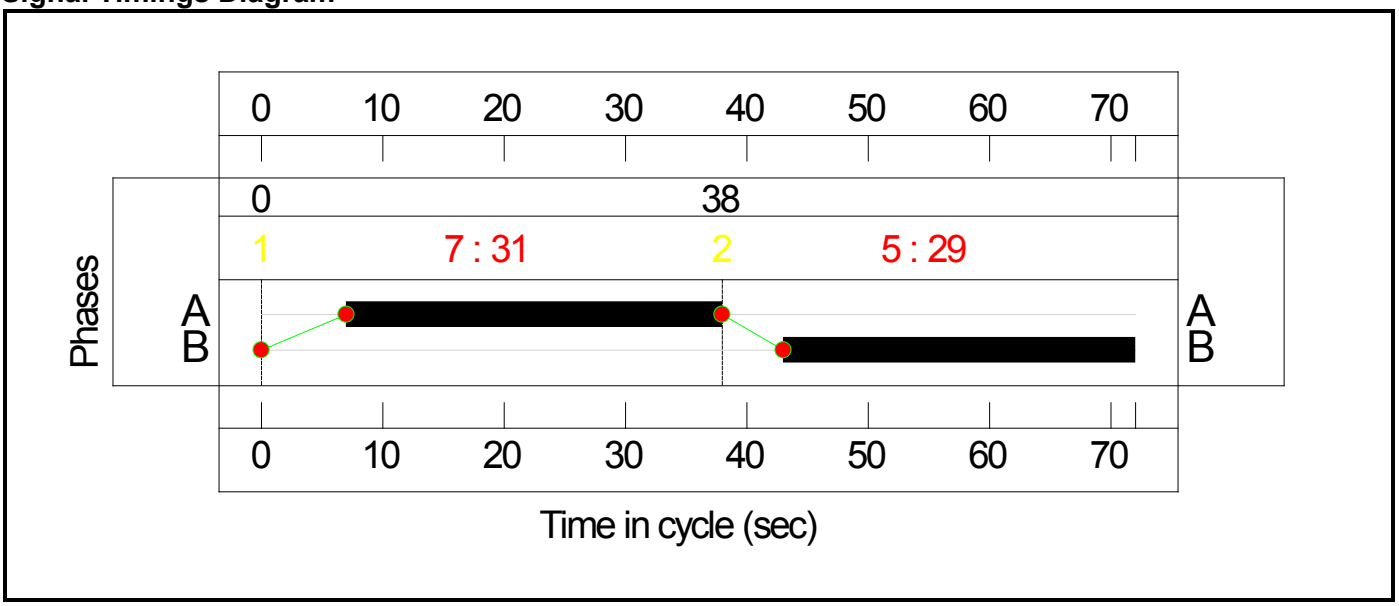
Stage Timings

Stage	1	2
Duration	31	29
Change Point	0	38

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	31	7	38
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	29	43	0

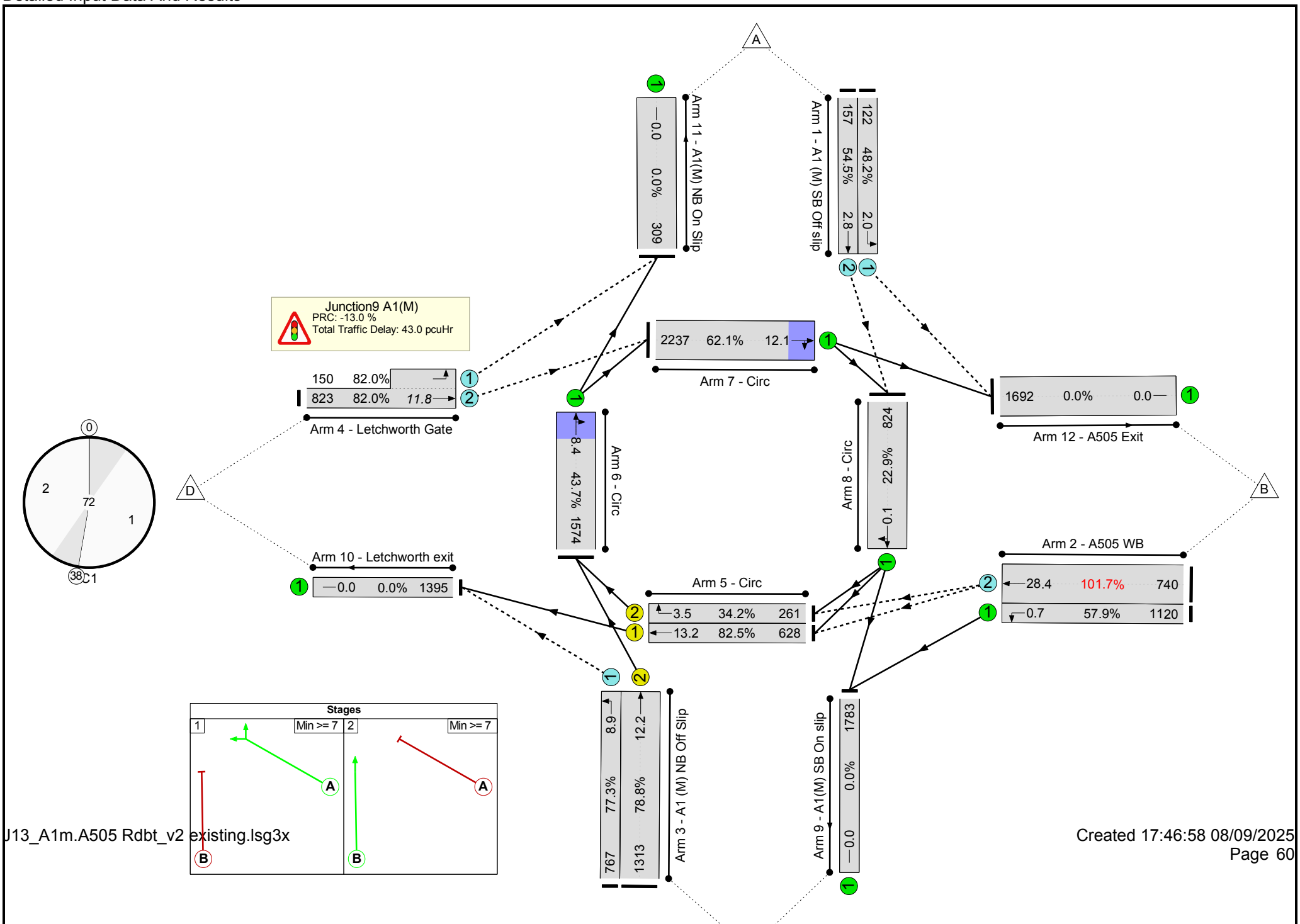
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	43	0
5/1	Circ Ahead	U	A	7	38
5/2	Circ Right	U	A	7	38

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -13.0 %
Total Traffic Delay: 43.0 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 309
Arm 1 - A1 (M) SB Off slip
157 54.5% 2.8
122 48.2% 2.0
2237 62.1% 12.1
Arm 7 - Circ
150 82.0%
823 82.0% 11.8
Arm 4 - Letchworth Gate
1692 0.0% 0.0
Arm 12 - A505 Exit
8.4 43.7% 1574
Arm 6 - Circ
Arm 8 - Circ
824 22.9% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1395
Arm 5 - Circ
3.5 34.2% 261
13.2 82.5% 628
Arm 2 - A505 WB
28.4 101.7% 740
0.7 57.9% 1120
8.9 12.2
77.3% 78.8%
767 1313
Arm 3 - A1 (M) NB Off Slip
Arm 9 - A1(M) SB On slip
1783 0.0% 0.0
Stages
1 Min >= 7 2 Min >= 7
A
B
0
1
2
72
38
C1

Network Results

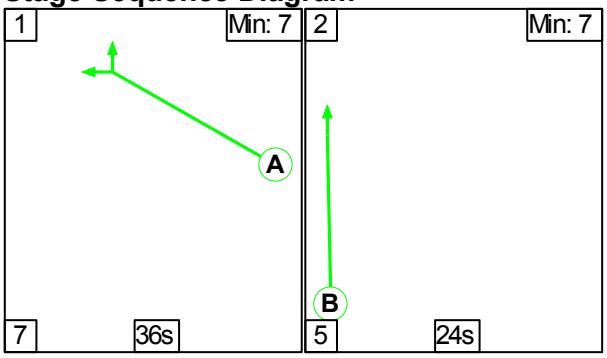
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**101.7%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**101.7%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	122	1961	253	48.2%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	157	2080	288	54.5%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1120	1936	1936	57.9%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	740	4178	728	101.7%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	767	1936	993	77.3%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	29	-	-	1313	4000	1667	78.8%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	973	1894:1834	1004+183	82.0 : 82.0%
5/1	Circ Ahead	U	N/A	N/A	A		1	31	-	-	636	1714	762	82.5%
5/2	Circ Right	U	N/A	N/A	A		1	31	-	-	265	1714	762	34.2%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1578	3600	3600	43.7%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2239	3600	3600	62.1%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	824	3600	3600	22.9%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1783	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1403	Inf	Inf	0.0%
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	312	Inf	Inf	0.0%

12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1694	Inf	Inf	0.0%
Item	**Arriving (pcu)**	**Leaving (pcu)**	**Turners In Gaps (pcu)**	**Turners When Unopposed (pcu)**	**Turners In Intergreen (pcu)**	**Uniform Delay (pcuHr)**	**Rand + Oversat Delay (pcuHr)**	**Storage Area Uniform Delay (pcuHr)**	**Total Delay (pcuHr)**	**Av. Delay Per PCU (s/pcu)**	**Max. Back of Uniform Queue (pcu)**	**Rand + Oversat Queue (pcu)**	**Mean Max Queue (pcu)**	
Network: A1(m) Junction 10	**-**	**-**	**3279**	**441**	**0**	**14.6**	**28.4**	**0.0**	**43.0**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3279**	**441**	**0**	**14.6**	**28.4**	**0.0**	**43.0**	**-**	**-**	**-**	**-**	
1/1	122	122	122	0	0	0.3	0.5	-	0.8	23.4	1.5	0.5	2.0	
1/2	157	157	157	0	0	0.5	0.6	-	1.1	25.7	2.2	0.6	2.8	
2/1	1120	1120	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7	
2/2	740	728	728	0	0	1.1	17.0	-	18.1	88.0	19.9	8.5	28.4	
3/1	767	767	326	441	0	0.2	1.7	-	1.9	8.9	7.2	1.7	8.9	
3/2	1313	1313	-	-	-	6.7	1.8	-	8.5	23.3	11.3	0.9	12.2	
4/2+4/1	973	973	1946	0	0	0.8	2.2	-	3.0	11.2	9.6	2.2	11.8	
5/1	628	628	-	-	-	3.4	2.3	-	5.7	32.7	11.0	2.3	13.2	
5/2	261	261	-	-	-	0.8	0.3	-	1.1	15.3	3.2	0.3	3.5	
6/1	1574	1574	-	-	-	0.2	0.4	-	0.6	1.3	8.2	0.2	8.4	
7/1	2237	2237	-	-	-	0.5	0.8	-	1.3	2.2	11.7	0.4	12.1	
8/1	824	824	-	-	-	0.0	0.1	-	0.1	0.6	0.0	0.1	0.1	
9/1	1783	1783	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1395	1395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	309	309	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1692	1692	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 9.1 Total Delay for Signalled Lanes (pcuHr): 15.30 Cycle Time (s): 72
PRC Over All Lanes (%): -13.0 Total Delay Over All Lanes(pcuHr): 42.99

Scenario 5: '2033 AM' (FG5: '2033 AM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



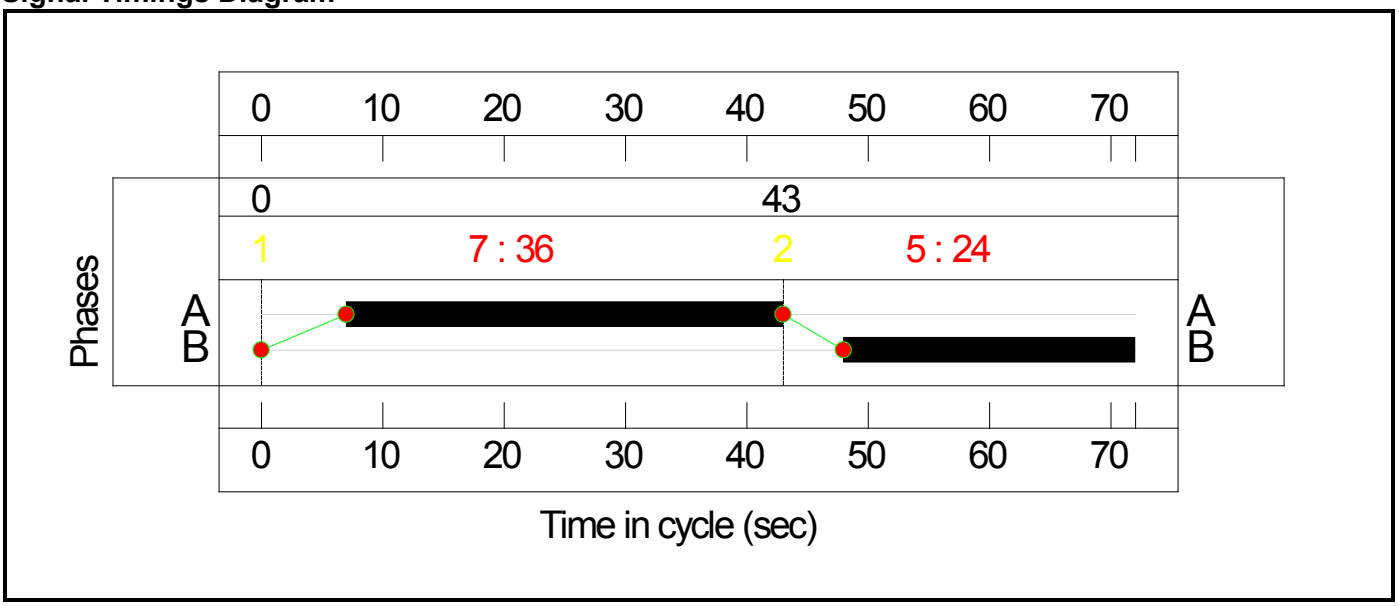
Stage Timings

Stage	1	2
Duration	36	24
Change Point	0	43

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	36	7	43
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	24	48	0

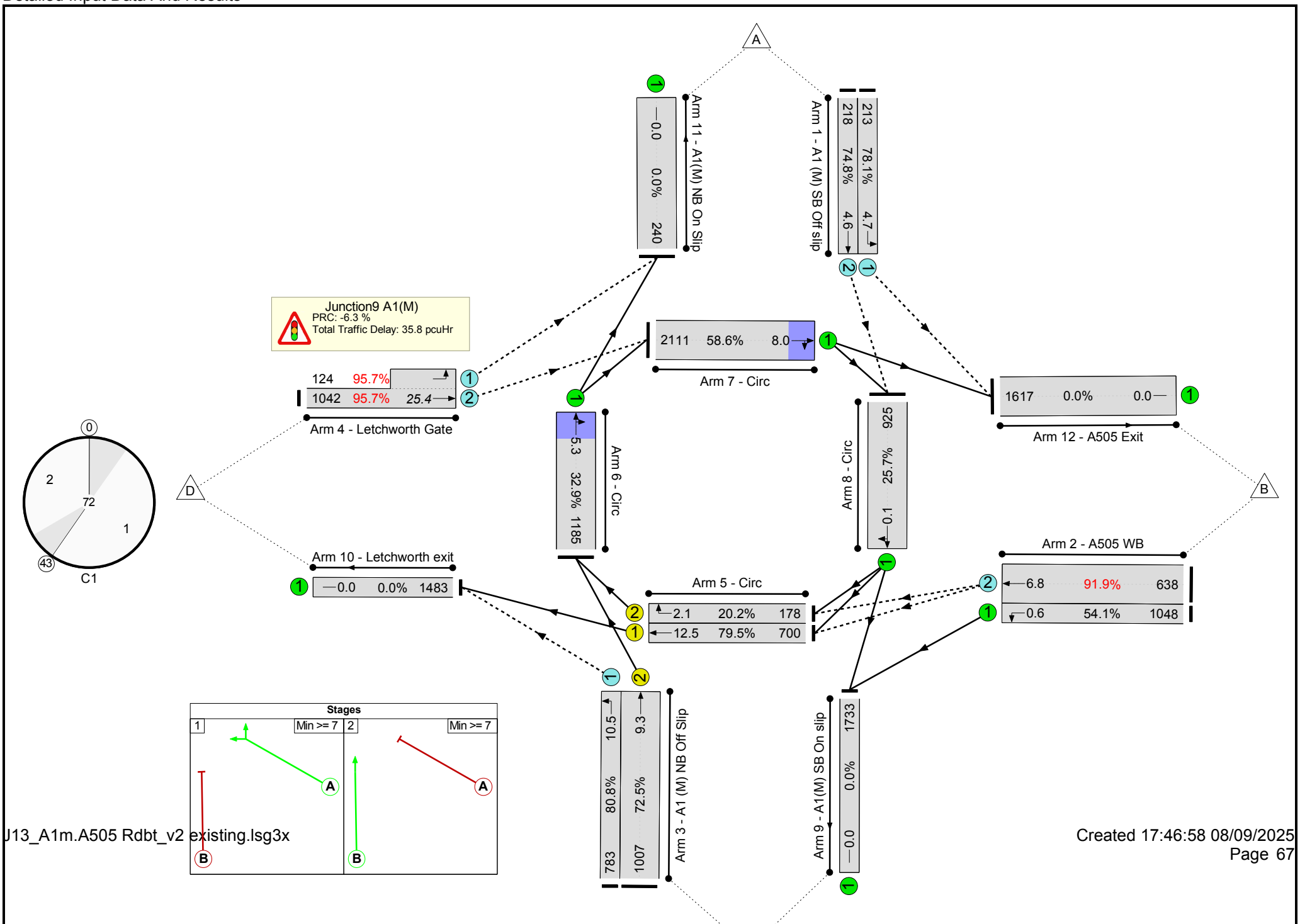
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	48	0
5/1	Circ Ahead	U	A	7	43
5/2	Circ Right	U	A	7	43

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -6.3 %
Total Traffic Delay: 35.8 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 240
Arm 1 - A1 (M) SB Off slip
218 74.8% 4.6
213 78.1% 4.7
2111 58.6% 8.0
Arm 7 - Circ
124 95.7%
1042 95.7% 25.4
Arm 4 - Letchworth Gate
1617 0.0% 0.0
Arm 12 - A505 Exit
5.3 32.9% 1185
Arm 6 - Circ
Arm 8 - Circ
925 25.7% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1483
Arm 5 - Circ
2.1 20.2% 178
12.5 79.5% 700
Arm 2 - A505 WB
6.8 91.9% 638
0.6 54.1% 1048
Arm 3 - A1 (M) NB Off Slip
10.5 80.8% 783
9.3 72.5% 1007
Arm 9 - A1(M) SB On slip
1733 0.0% 0.0
0
2
72
1
43
C1
Stages
1
Min >= 7
2
Min >= 7
A
B

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**95.7%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**95.7%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	213	1961	273	78.1%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	218	2080	292	74.8%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1048	1936	1936	54.1%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	638	4178	694	91.9%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	783	1936	969	80.8%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	24	-	-	1007	4000	1389	72.5%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	1166	1894:1834	1089+130	95.7 : 95.7%
5/1	Circ Ahead	U	N/A	N/A	A		1	36	-	-	700	1714	881	79.5%
5/2	Circ Right	U	N/A	N/A	A		1	36	-	-	178	1714	881	20.2%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1185	3600	3600	32.9%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2111	3600	3600	58.6%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	925	3600	3600	25.7%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1733	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1483	Inf	Inf	0.0%

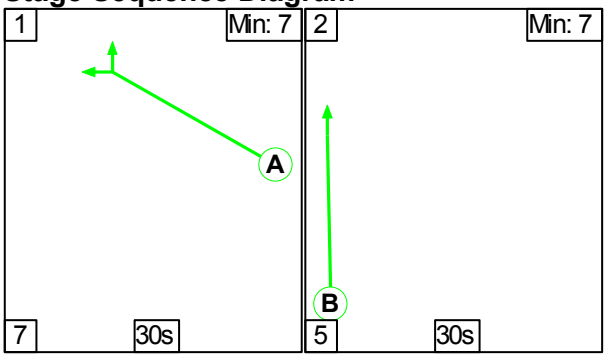
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	240	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1617	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10	**-**	**-**	**3787**	**397**	**0**	**12.3**	**23.4**	**0.0**	**35.8**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3787**	**397**	**0**	**12.3**	**23.4**	**0.0**	**35.8**	**-**	**-**	**-**	**-**	
1/1	213	213	213	0	0	0.5	1.7	-	2.2	37.2	3.0	1.7	4.7	
1/2	218	218	218	0	0	0.6	1.4	-	2.0	33.1	3.1	1.4	4.6	
2/1	1048	1048	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
2/2	638	638	638	0	0	0.2	4.8	-	5.0	28.1	4.3	2.4	6.8	
3/1	783	783	386	397	0	0.3	2.1	-	2.3	10.7	8.5	2.1	10.5	
3/2	1007	1007	-	-	-	5.7	1.3	-	7.0	25.2	8.7	0.7	9.3	
4/2+4/1	1166	1166	2332	0	0	1.2	8.4	-	9.6	29.5	17.1	8.4	25.4	
5/1	700	700	-	-	-	3.1	1.9	-	5.0	25.7	10.6	1.9	12.5	
5/2	178	178	-	-	-	0.4	0.1	-	0.6	11.6	1.9	0.1	2.1	
6/1	1185	1185	-	-	-	0.1	0.2	-	0.3	1.0	5.2	0.1	5.3	
7/1	2111	2111	-	-	-	0.3	0.7	-	1.0	1.6	7.6	0.4	8.0	
8/1	925	925	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1733	1733	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1483	1483	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1617	1617	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 13.2 PRC Over All Lanes (%): -6.3 Total Delay for Signalled Lanes (pcuHr): 12.61 Total Delay Over All Lanes(pcuHr): 35.75 Cycle Time (s): 72

Scenario 6: '2033 PM' (FG6: '2033 PM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



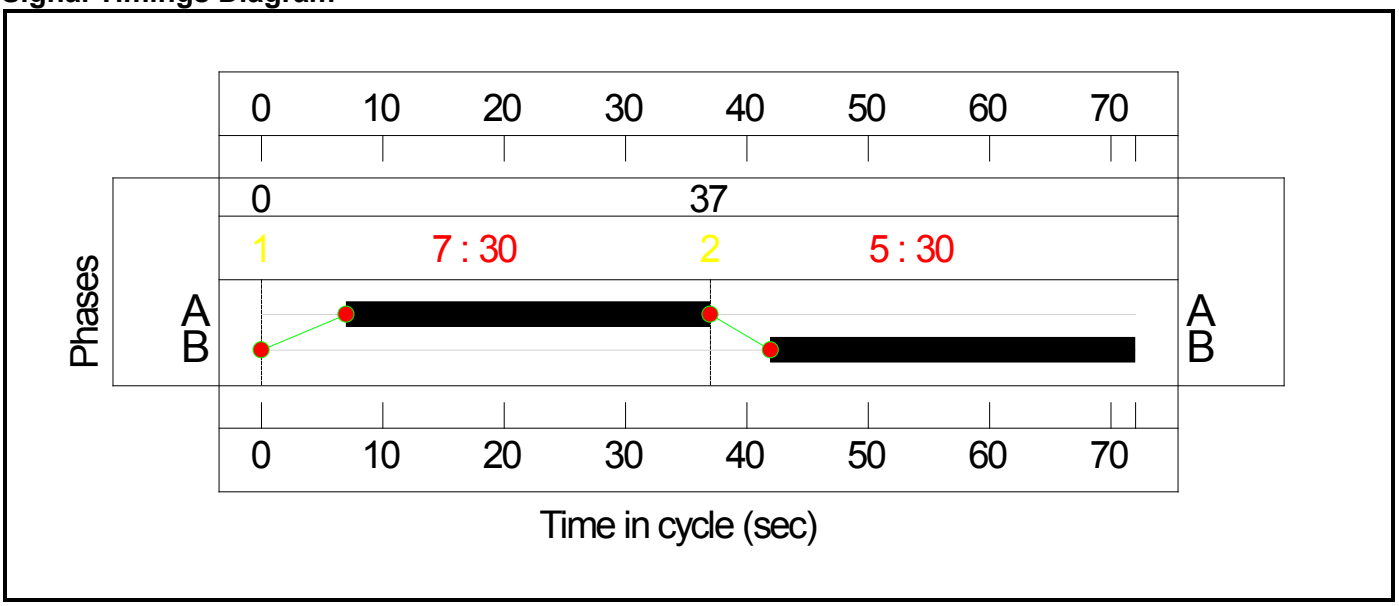
Stage Timings

Stage	1	2
Duration	30	30
Change Point	0	37

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	30	7	37
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	30	42	0

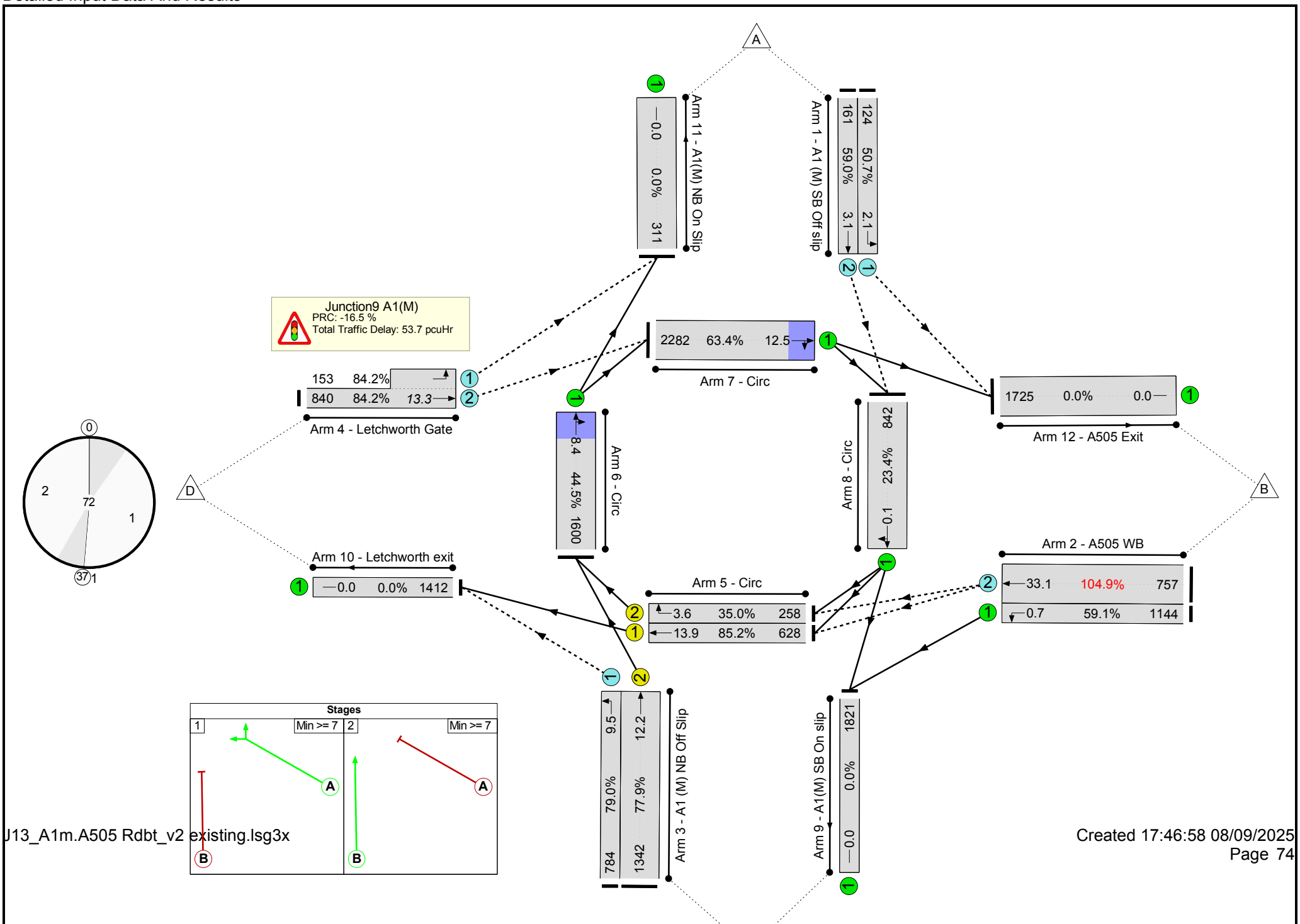
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	42	0
5/1	Circ Ahead	U	A	7	37
5/2	Circ Right	U	A	7	37

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -16.5 %
Total Traffic Delay: 53.7 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 311
Arm 1 - A1 (M) SB Off slip
161 59.0% 3.1
124 50.7% 2.1
2282 63.4% 12.5
Arm 7 - Circ
153 84.2%
840 84.2% 13.3
Arm 4 - Letchworth Gate
1725 0.0% 0.0
Arm 12 - A505 Exit
8.4 44.5% 1600
Arm 6 - Circ
Arm 8 - Circ
842 23.4% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1412
Arm 5 - Circ
3.6 35.0% 258
13.9 85.2% 628
Arm 2 - A505 WB
33.1 104.9% 757
0.7 59.1% 1144
Arm 3 - A1 (M) NB Off Slip
9.5 79.0% 784
12.2 77.9% 1342
Arm 9 - A1(M) SB On slip
1821 0.0% 0.0
0
2
1
72
37
1
Stages
1
Min >= 7
2
Min >= 7
A
B
A
B

Network Results

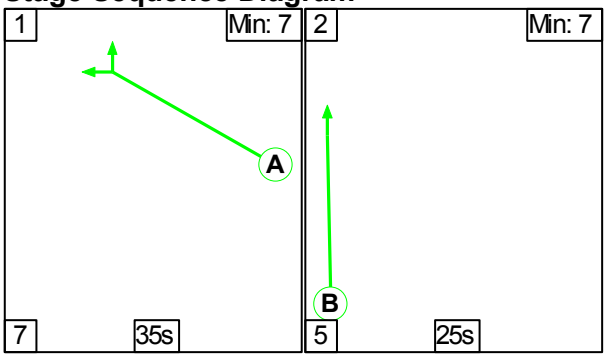
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**104.9%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**104.9%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	124	1961	245	50.7%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	161	2080	273	59.0%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1144	1936	1936	59.1%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	757	4178	722	104.9%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	784	1936	993	79.0%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	30	-	-	1342	4000	1722	77.9%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	993	1894:1834	998+182	84.2 : 84.2%
5/1	Circ Ahead	U	N/A	N/A	A		1	30	-	-	651	1714	738	85.2%
5/2	Circ Right	U	N/A	N/A	A		1	30	-	-	271	1714	738	35.0%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1613	3600	3600	44.5%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2287	3600	3600	63.4%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	842	3600	3600	23.4%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1821	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1435	Inf	Inf	0.0%
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	319	Inf	Inf	0.0%

12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1730	Inf	Inf	0.0%
Item	**Arriving (pcu)**	**Leaving (pcu)**	**Turners In Gaps (pcu)**	**Turners When Unopposed (pcu)**	**Turners In Intergreen (pcu)**	**Uniform Delay (pcuHr)**	**Rand + Oversat Delay (pcuHr)**	**Storage Area Uniform Delay (pcuHr)**	**Total Delay (pcuHr)**	**Av. Delay Per PCU (s/pcu)**	**Max. Back of Uniform Queue (pcu)**	**Rand + Oversat Queue (pcu)**	**Mean Max Queue (pcu)**	
Network: A1(m) Junction 10	**-**	**-**	**3302**	**475**	**0**	**16.0**	**37.7**	**0.0**	**53.7**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3302**	**475**	**0**	**16.0**	**37.7**	**0.0**	**53.7**	**-**	**-**	**-**	**-**	
1/1	124	124	124	0	0	0.4	0.5	-	0.9	25.1	1.6	0.5	2.1	
1/2	161	161	161	0	0	0.6	0.7	-	1.3	29.0	2.4	0.7	3.1	
2/1	1144	1144	-	-	-	0.0	0.7	-	0.7	2.3	0.0	0.7	0.7	
2/2	757	722	722	0	0	2.1	25.1	-	27.2	129.6	20.5	12.6	33.1	
3/1	784	784	309	475	0	0.3	1.8	-	2.1	9.7	7.6	1.8	9.5	
3/2	1342	1342	-	-	-	6.5	1.7	-	8.3	22.3	11.4	0.9	12.2	
4/2+4/1	993	993	1986	0	0	0.9	2.6	-	3.5	12.7	10.7	2.6	13.3	
5/1	628	628	-	-	-	3.6	2.7	-	6.4	36.4	11.2	2.7	13.9	
5/2	258	258	-	-	-	0.9	0.3	-	1.1	15.8	3.3	0.3	3.6	
6/1	1600	1600	-	-	-	0.2	0.4	-	0.6	1.4	8.2	0.2	8.4	
7/1	2282	2282	-	-	-	0.6	0.9	-	1.4	2.2	12.1	0.4	12.5	
8/1	842	842	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1821	1821	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1412	1412	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	311	311	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1725	1725	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 5.7 PRC Over All Lanes (%): -16.5 Total Delay for Signalled Lanes (pcuHr): 15.79 Total Delay Over All Lanes(pcuHr): 53.69 Cycle Time (s): 72

Scenario 7: '2033 wDev AM' (FG7: '2033 w Dev AM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



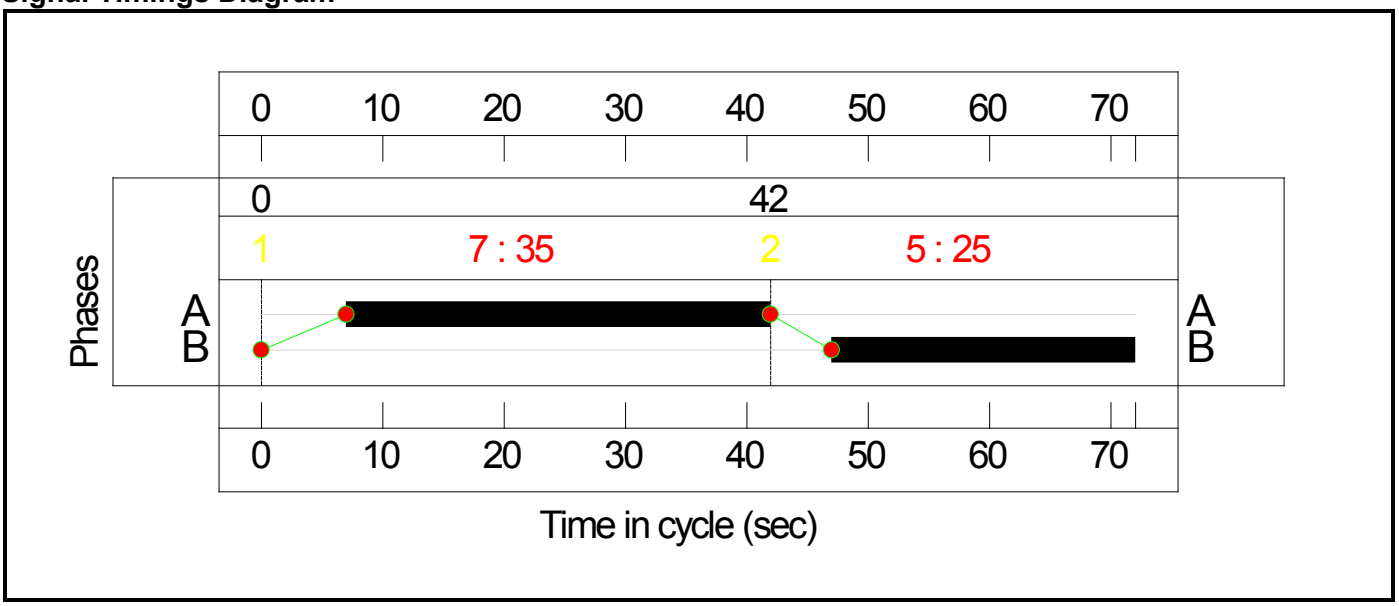
Stage Timings

Stage	1	2
Duration	35	25
Change Point	0	42

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	35	7	42
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	25	47	0

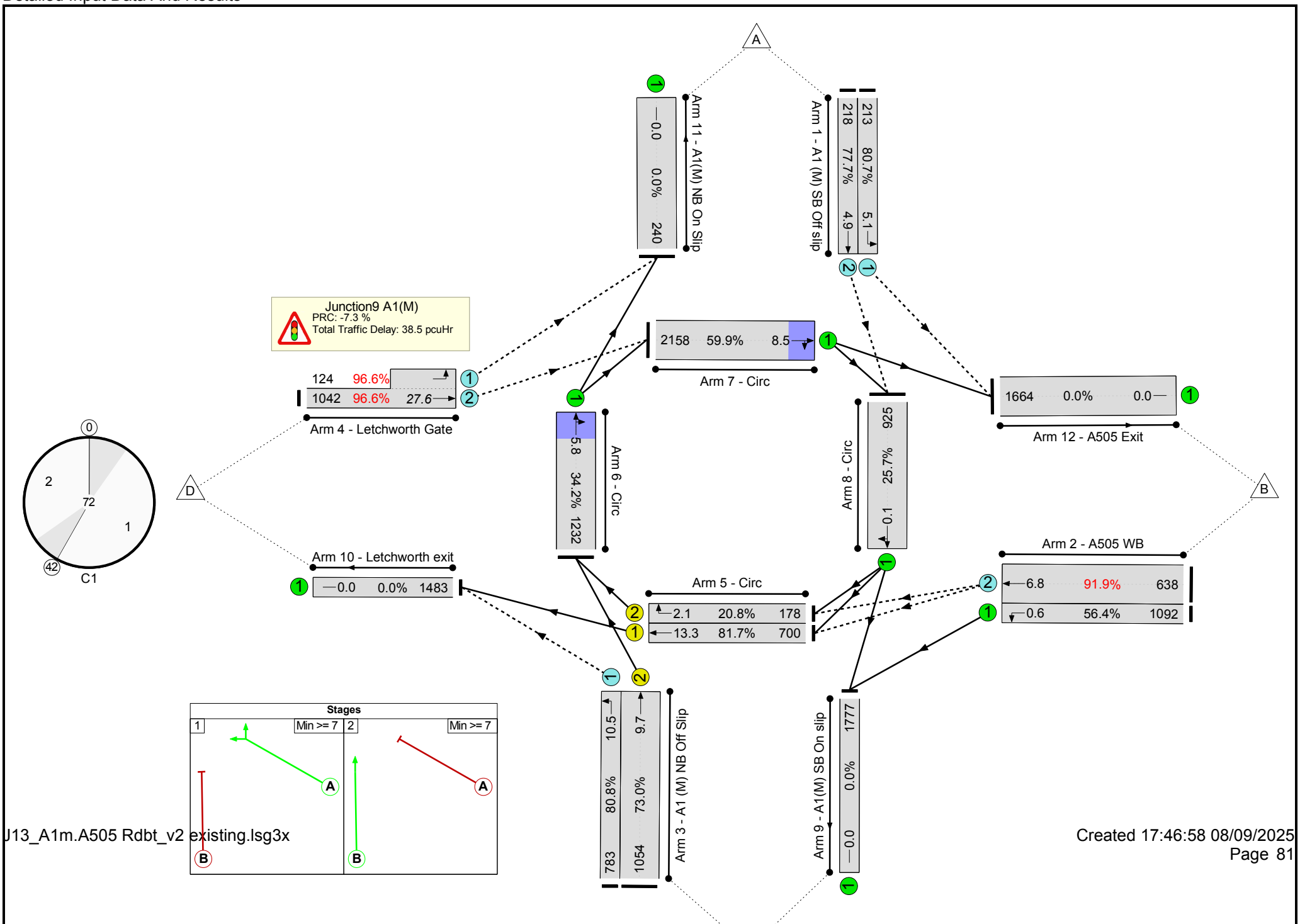
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	47	0
5/1	Circ Ahead	U	A	7	42
5/2	Circ Right	U	A	7	42

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -7.3 %
Total Traffic Delay: 38.5 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 240
Arm 1 - A1 (M) SB Off slip
218 77.7% 4.9
213 80.7% 5.1
2158 59.9% 8.5
Arm 7 - Circ
124 96.6%
1042 96.6% 27.6
Arm 4 - Letchworth Gate
1664 0.0% 0.0
Arm 12 - A505 Exit
5.8 34.2% 1232
Arm 6 - Circ
Arm 8 - Circ
925 25.7% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1483
Arm 5 - Circ
2.1 20.8% 178
13.3 81.7% 700
Arm 2 - A505 WB
6.8 91.9% 638
0.6 56.4% 1092
Arm 3 - A1 (M) NB Off Slip
10.5 80.8% 783
9.7 73.0% 1054
Arm 9 - A1(M) SB On slip
0.0 0.0% 1777
0
72
1
2
42
C1
Stages
1
Min >= 7
2
Min >= 7
A
B

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**96.6%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**96.6%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	213	1961	264	80.7%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	218	2080	281	77.7%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1092	1936	1936	56.4%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	638	4178	694	91.9%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	783	1936	969	80.8%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	25	-	-	1054	4000	1444	73.0%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	1166	1894:1834	1079+128	96.6 : 96.6%
5/1	Circ Ahead	U	N/A	N/A	A		1	35	-	-	700	1714	857	81.7%
5/2	Circ Right	U	N/A	N/A	A		1	35	-	-	178	1714	857	20.8%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1232	3600	3600	34.2%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2158	3600	3600	59.9%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	925	3600	3600	25.7%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1777	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1483	Inf	Inf	0.0%

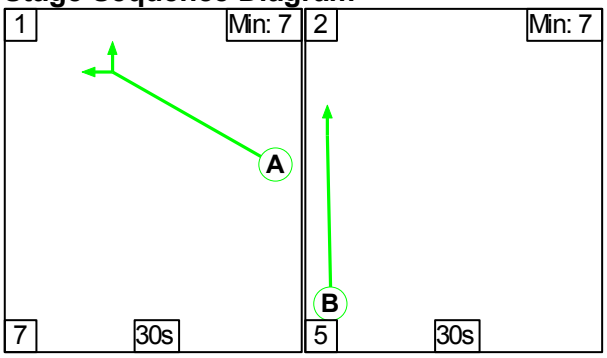
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	240	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1664	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10	**-**	**-**	**3770**	**414**	**0**	**13.0**	**25.6**	**0.0**	**38.5**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3770**	**414**	**0**	**13.0**	**25.6**	**0.0**	**38.5**	**-**	**-**	**-**	**-**	
1/1	213	213	213	0	0	0.6	1.9	-	2.5	42.4	3.2	1.9	5.1	
1/2	218	218	218	0	0	0.6	1.7	-	2.3	37.6	3.3	1.7	4.9	
2/1	1092	1092	-	-	-	0.0	0.6	-	0.6	2.1	0.0	0.6	0.6	
2/2	638	638	638	0	0	0.2	4.8	-	5.0	28.1	4.3	2.4	6.8	
3/1	783	783	369	414	0	0.3	2.1	-	2.4	10.8	8.5	2.1	10.5	
3/2	1054	1054	-	-	-	5.8	1.3	-	7.2	24.5	9.1	0.7	9.7	
4/2+4/1	1166	1166	2332	0	0	1.3	9.6	-	10.9	33.8	17.9	9.6	27.6	
5/1	700	700	-	-	-	3.3	2.2	-	5.5	28.2	11.1	2.2	13.3	
5/2	178	178	-	-	-	0.5	0.1	-	0.6	12.1	2.0	0.1	2.1	
6/1	1232	1232	-	-	-	0.1	0.3	-	0.4	1.1	5.6	0.1	5.8	
7/1	2158	2158	-	-	-	0.3	0.7	-	1.0	1.7	8.2	0.4	8.5	
8/1	925	925	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1777	1777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1483	1483	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1664	1664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 10.2 PRC Over All Lanes (%): -7.3 Total Delay for Signalled Lanes (pcuHr): 13.27 Total Delay Over All Lanes(pcuHr): 38.54 Cycle Time (s): 72

Scenario 8: '2033 wDev PM' (FG8: '2033 w Dev PM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



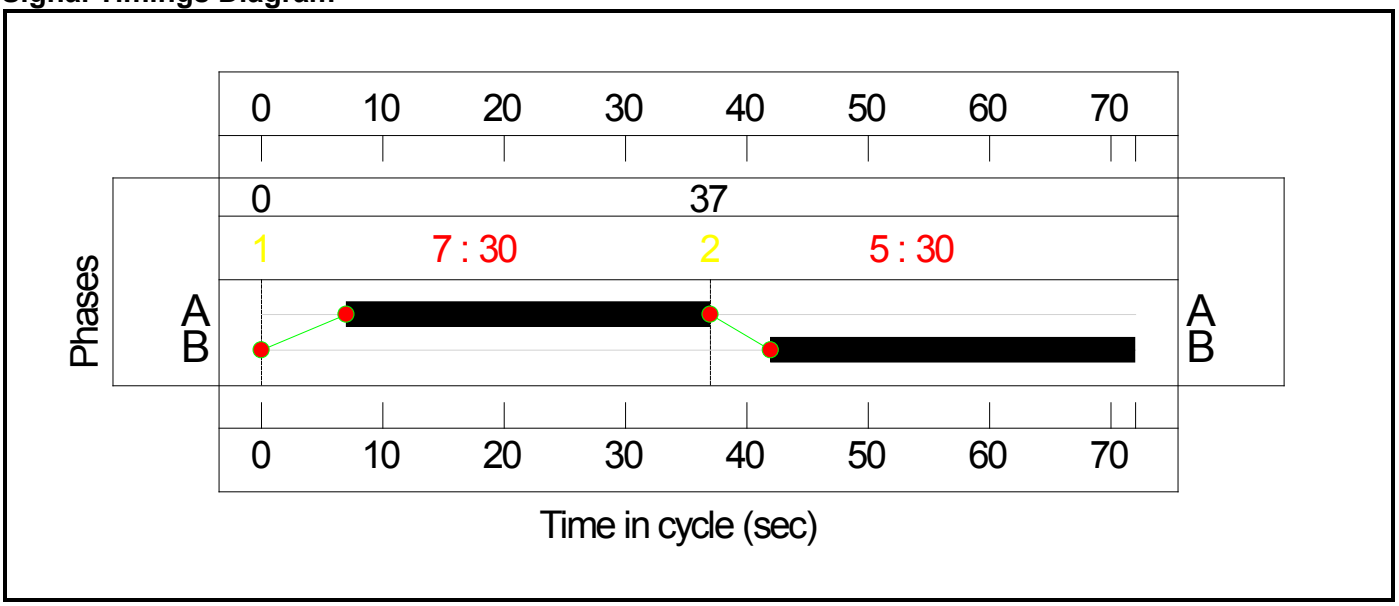
Stage Timings

Stage	1	2
Duration	30	30
Change Point	0	37

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	30	7	37
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	30	42	0

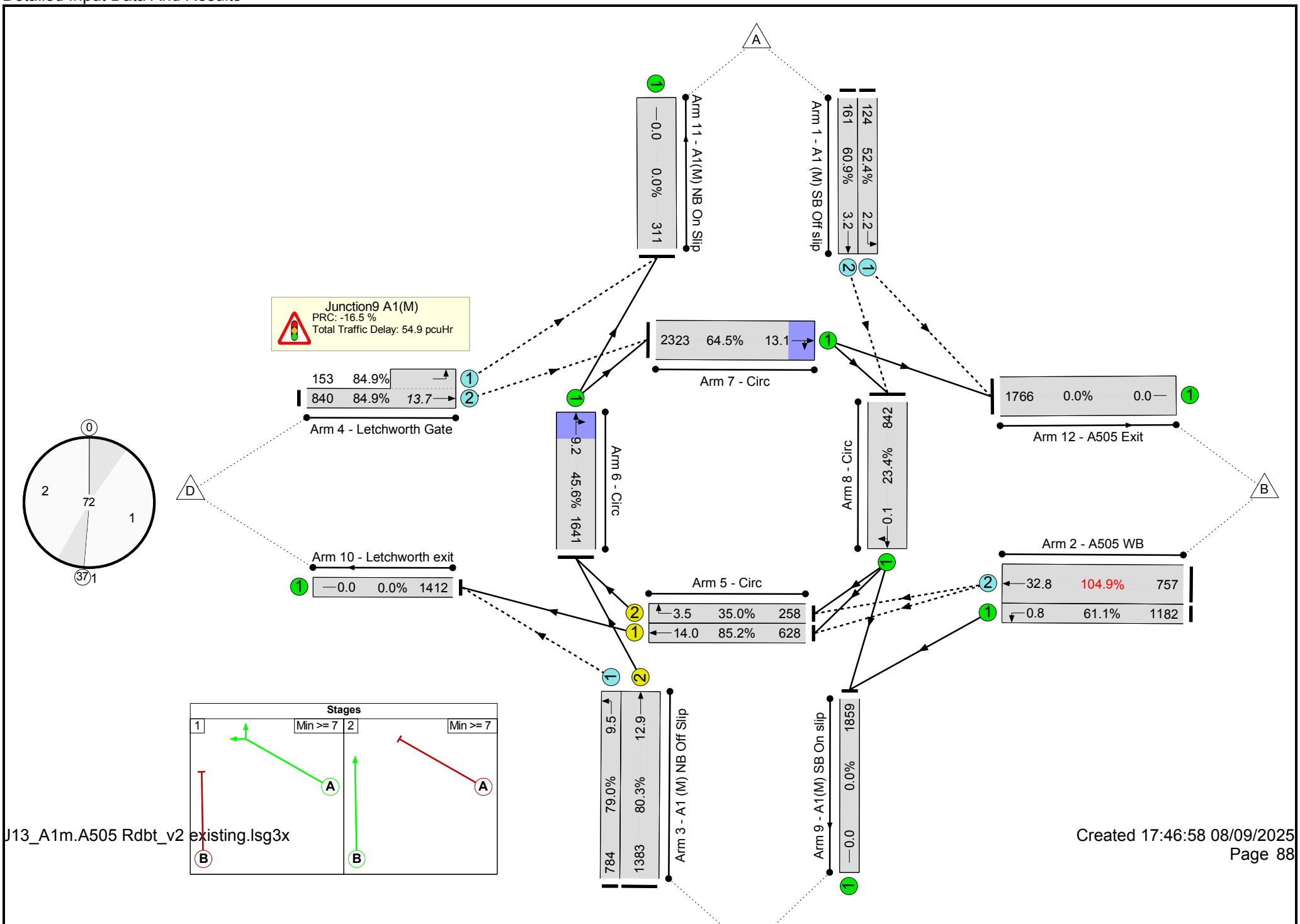
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	42	0
5/1	Circ Ahead	U	A	7	37
5/2	Circ Right	U	A	7	37

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -16.5 %
Total Traffic Delay: 54.9 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 311
Arm 1 - A1 (M) SB Off slip
161 60.9% 3.2
124 52.4% 2.2
2323 64.5% 13.1
Arm 7 - Circ
153 84.9%
840 84.9% 13.7
Arm 4 - Letchworth Gate
1766 0.0% 0.0
Arm 12 - A505 Exit
9.2 45.6% 1641
Arm 6 - Circ
Arm 8 - Circ
842 23.4% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1412
Arm 5 - Circ
3.5 35.0% 258
14.0 85.2% 628
Arm 2 - A505 WB
32.8 104.9% 757
0.8 61.1% 1182
Arm 3 - A1 (M) NB Off Slip
9.5 79.0% 784
12.9 80.3% 1383
Arm 9 - A1(M) SB On slip
1859 0.0% 0.0
0 72 1 37 2
Stages
1 Min >= 7 2 Min >= 7
A
B

Network Results

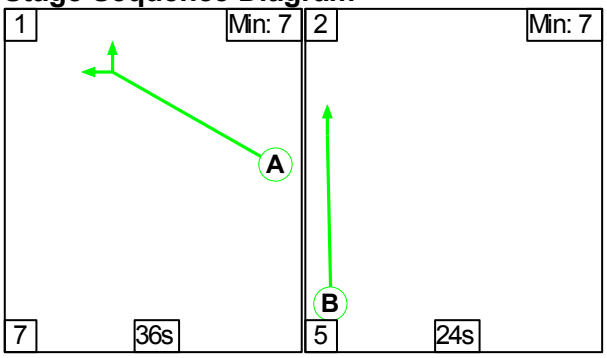
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**104.9%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**104.9%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	124	1961	237	52.4%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	161	2080	264	60.9%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1182	1936	1936	61.1%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	757	4178	722	104.9%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	784	1936	993	79.0%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	30	-	-	1383	4000	1722	80.3%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	993	1894:1834	989+180	84.9 : 84.9%
5/1	Circ Ahead	U	N/A	N/A	A		1	30	-	-	651	1714	738	85.2%
5/2	Circ Right	U	N/A	N/A	A		1	30	-	-	271	1714	738	35.0%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1654	3600	3600	45.6%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2328	3600	3600	64.5%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	842	3600	3600	23.4%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1859	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1435	Inf	Inf	0.0%
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	319	Inf	Inf	0.0%

12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1771	Inf	Inf	0.0%
Item	**Arriving (pcu)**	**Leaving (pcu)**	**Turners In Gaps (pcu)**	**Turners When Unopposed (pcu)**	**Turners In Intergreen (pcu)**	**Uniform Delay (pcuHr)**	**Rand + Oversat Delay (pcuHr)**	**Storage Area Uniform Delay (pcuHr)**	**Total Delay (pcuHr)**	**Av. Delay Per PCU (s/pcu)**	**Max. Back of Uniform Queue (pcu)**	**Rand + Oversat Queue (pcu)**	**Mean Max Queue (pcu)**	
Network: A1(m) Junction 10	**-**	**-**	**3302**	**475**	**0**	**16.6**	**38.3**	**0.0**	**54.9**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3302**	**475**	**0**	**16.6**	**38.3**	**0.0**	**54.9**	**-**	**-**	**-**	**-**	
1/1	124	124	124	0	0	0.4	0.5	-	0.9	26.9	1.7	0.5	2.2	
1/2	161	161	161	0	0	0.6	0.8	-	1.4	31.0	2.4	0.8	3.2	
2/1	1182	1182	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8	
2/2	757	722	722	0	0	2.2	25.1	-	27.3	129.6	20.3	12.6	32.8	
3/1	784	784	309	475	0	0.3	1.8	-	2.1	9.7	7.6	1.8	9.5	
3/2	1383	1383	-	-	-	6.9	2.0	-	8.9	23.1	11.9	1.0	12.9	
4/2+4/1	993	993	1986	0	0	1.0	2.7	-	3.7	13.4	11.0	2.7	13.7	
5/1	628	628	-	-	-	3.6	2.7	-	6.4	36.5	11.2	2.7	14.0	
5/2	258	258	-	-	-	0.9	0.3	-	1.1	15.6	3.2	0.3	3.5	
6/1	1641	1641	-	-	-	0.2	0.4	-	0.7	1.4	9.0	0.2	9.2	
7/1	2323	2323	-	-	-	0.6	0.9	-	1.5	2.4	12.7	0.5	13.1	
8/1	842	842	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1859	1859	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1412	1412	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	311	311	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1766	1766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 5.7 PRC Over All Lanes (%): -16.5 Total Delay for Signalled Lanes (pcuHr): 16.37 Total Delay Over All Lanes(pcuHr): 54.86 Cycle Time (s): 72

Scenario 9: '2040 AM' (FG9: '2040 AM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



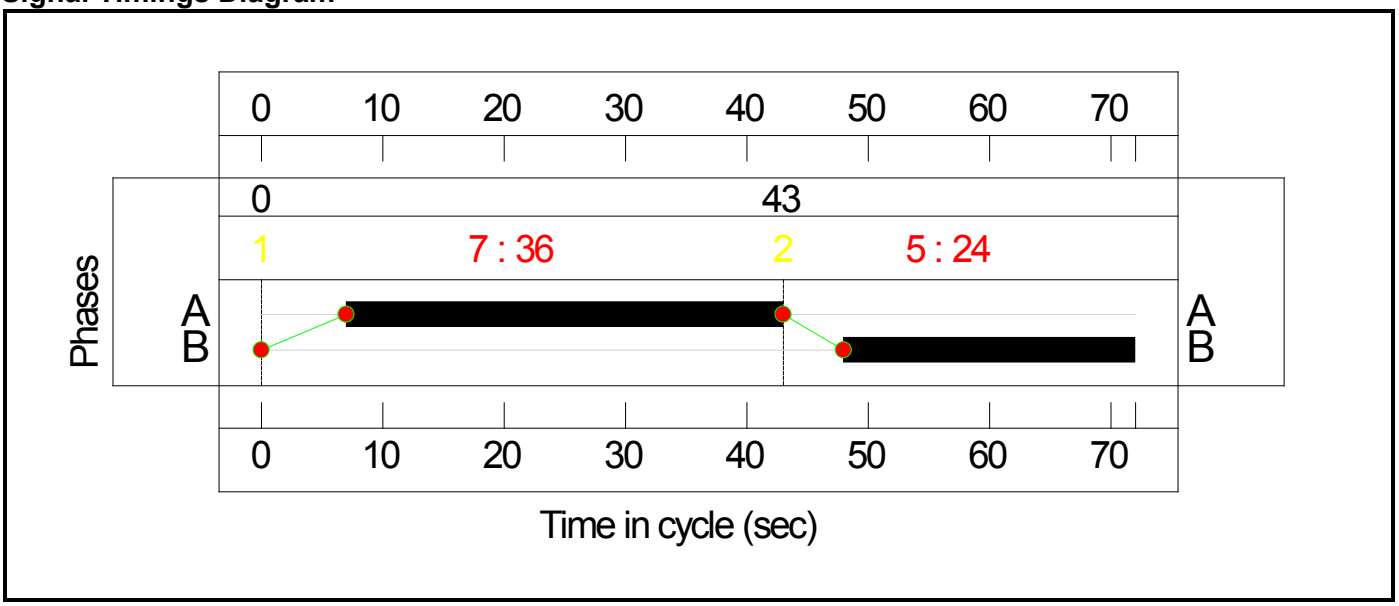
Stage Timings

Stage	1	2
Duration	36	24
Change Point	0	43

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	36	7	43
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	24	48	0

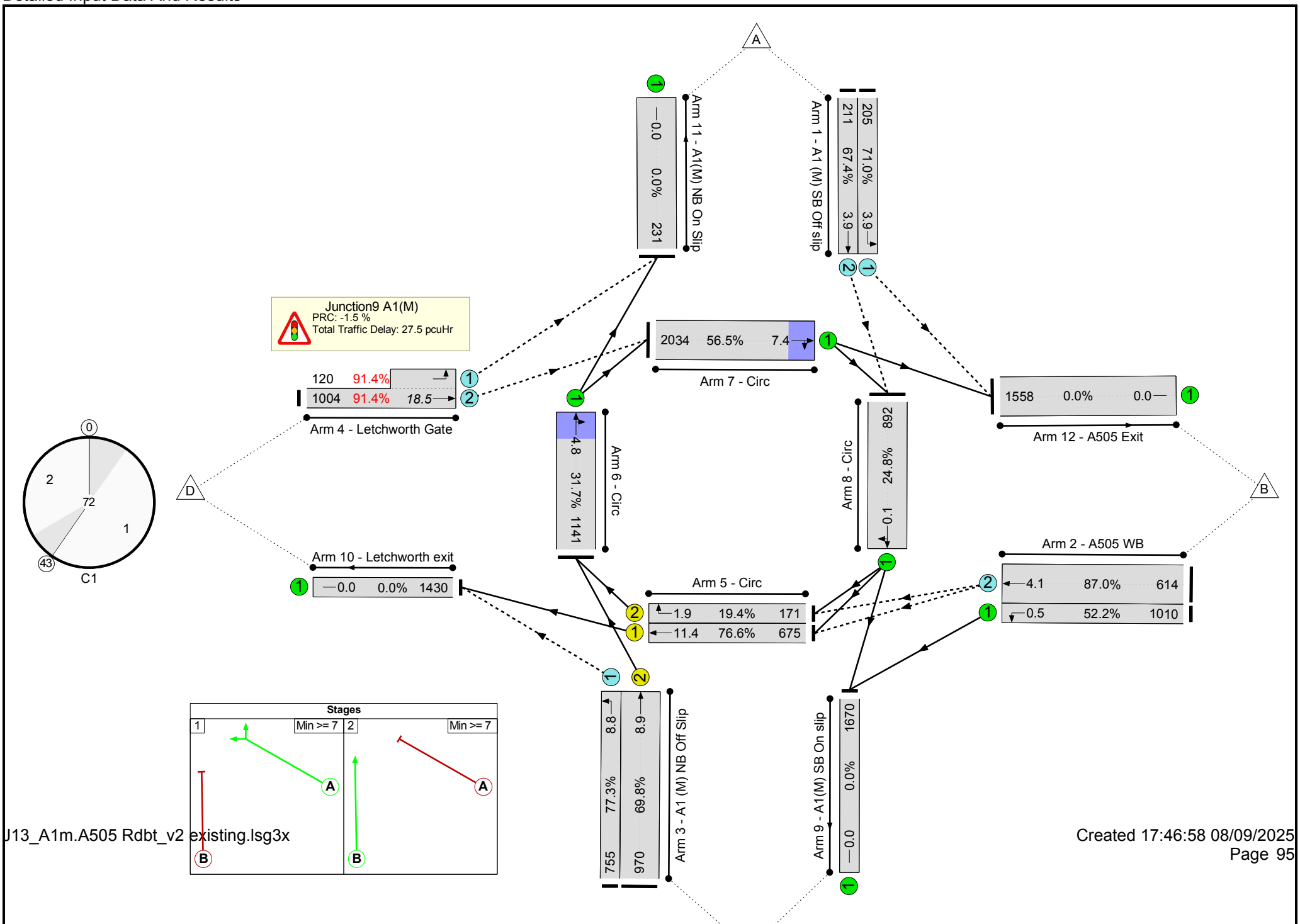
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	48	0
5/1	Circ Ahead	U	A	7	43
5/2	Circ Right	U	A	7	43

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -1.5 %
Total Traffic Delay: 27.5 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 231
Arm 1 - A1 (M) SB Off slip
211 67.4% 3.9
205 71.0% 3.9
2034 56.5% 7.4
Arm 7 - Circ
120 91.4%
1004 91.4% 18.5
Arm 4 - Letchworth Gate
1558 0.0% 0.0
Arm 12 - A505 Exit
4.8 31.7% 1141
Arm 6 - Circ
Arm 8 - Circ
892 24.8% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1430
Arm 5 - Circ
1.9 19.4% 171
11.4 76.6% 675
Arm 2 - A505 WB
4.1 87.0% 614
0.5 52.2% 1010
8.8 77.3% 755
8.9 69.8% 970
Arm 3 - A1 (M) NB Off Slip
Arm 9 - A1(M) SB On slip
1670 0.0% 0.0
0
2
72
1
43
C1
Stages
1
Min >= 7
2
Min >= 7
A
B

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**91.4%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**91.4%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	205	1961	289	71.0%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	211	2080	313	67.4%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1010	1936	1936	52.2%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	614	4178	705	87.0%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	977	77.3%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	24	-	-	970	4000	1389	69.8%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	1124	1894:1834	1099+131	91.4 : 91.4%
5/1	Circ Ahead	U	N/A	N/A	A		1	36	-	-	675	1714	881	76.6%
5/2	Circ Right	U	N/A	N/A	A		1	36	-	-	171	1714	881	19.4%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1141	3600	3600	31.7%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2034	3600	3600	56.5%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	892	3600	3600	24.8%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1670	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1430	Inf	Inf	0.0%

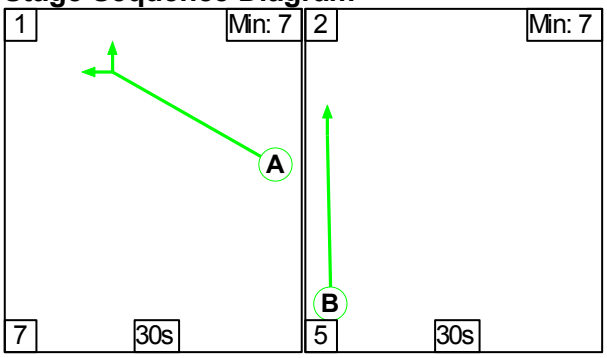
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	231	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1558	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10	**-**	**-**	**3666**	**367**	**0**	**11.1**	**16.3**	**0.0**	**27.5**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3666**	**367**	**0**	**11.1**	**16.3**	**0.0**	**27.5**	**-**	**-**	**-**	**-**	
1/1	205	205	205	0	0	0.4	1.2	-	1.6	28.5	2.7	1.2	3.9	
1/2	211	211	211	0	0	0.5	1.0	-	1.5	26.1	2.9	1.0	3.9	
2/1	1010	1010	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
2/2	614	614	614	0	0	0.0	3.1	-	3.2	18.6	2.6	1.6	4.1	
3/1	755	755	388	367	0	0.2	1.7	-	1.8	8.8	7.1	1.7	8.8	
3/2	970	970	-	-	-	5.5	1.2	-	6.6	24.5	8.4	0.6	8.9	
4/2+4/1	1124	1124	2248	0	0	0.9	4.8	-	5.7	18.3	13.7	4.8	18.5	
5/1	675	675	-	-	-	2.9	1.6	-	4.5	24.2	9.8	1.6	11.4	
5/2	171	171	-	-	-	0.4	0.1	-	0.6	12.0	1.8	0.1	1.9	
6/1	1141	1141	-	-	-	0.1	0.2	-	0.3	1.0	4.7	0.1	4.8	
7/1	2034	2034	-	-	-	0.2	0.6	-	0.9	1.5	7.0	0.3	7.4	
8/1	892	892	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1670	1670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1430	1430	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	231	231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1558	1558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 17.4 PRC Over All Lanes (%): -1.5 Total Delay for Signalled Lanes (pcuHr): 11.71 Total Delay Over All Lanes(pcuHr): 27.47 Cycle Time (s): 72

Scenario 10: '2040 PM' (FG10: '2040 PM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



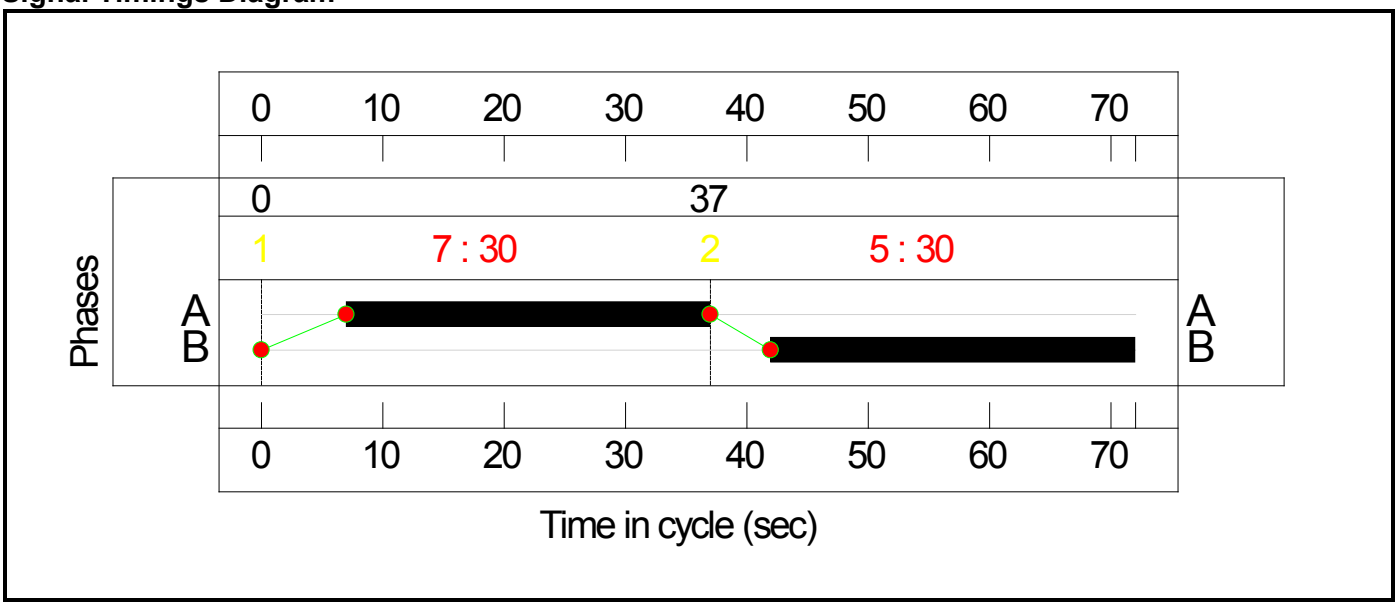
Stage Timings

Stage	1	2
Duration	30	30
Change Point	0	37

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	30	7	37
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	30	42	0

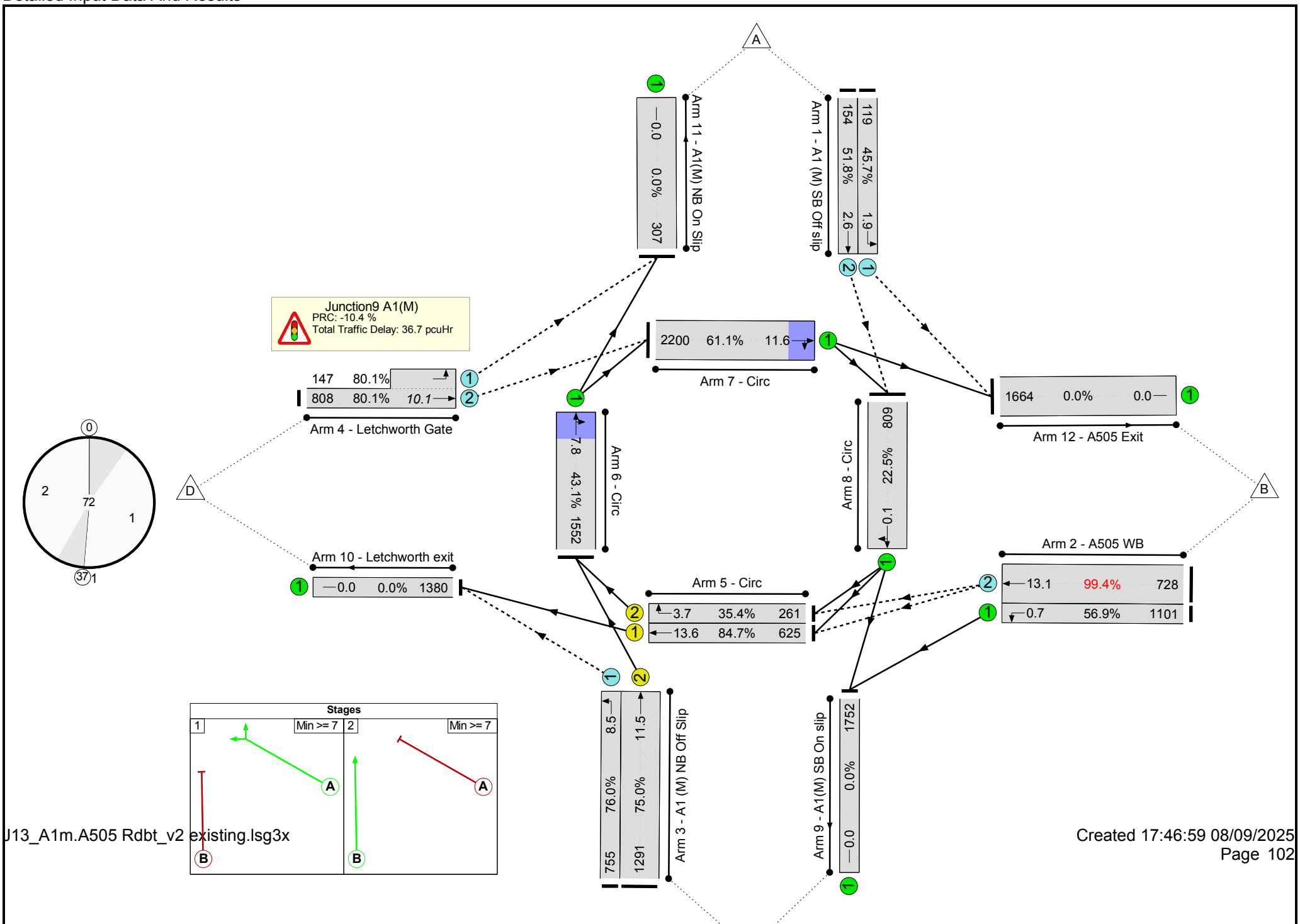
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	42	0
5/1	Circ Ahead	U	A	7	37
5/2	Circ Right	U	A	7	37

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -10.4 %
Total Traffic Delay: 36.7 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 307
Arm 1 - A1 (M) SB Off slip
154 51.8% 2.6
119 45.7% 1.9
2200 61.1% 11.6
Arm 7 - Circ
147 80.1%
808 80.1% 10.1
Arm 4 - Letchworth Gate
1664 0.0% 0.0
Arm 12 - A505 Exit
7.8 43.1% 1552
Arm 6 - Circ
Arm 8 - Circ
809 22.5% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1380
Arm 5 - Circ
3.7 35.4% 261
13.6 84.7% 625
Arm 2 - A505 WB
13.1 99.4% 728
0.7 56.9% 1101
8.5 11.5
76.0% 75.0%
755 1291
Arm 3 - A1 (M) NB Off Slip
Arm 9 - A1(M) SB On slip
1752 0.0% 0.0
Stages
1
Min >= 7
2
Min >= 7
A
B
0
2
72
1
37
1

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.4%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.4%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	119	1961	260	45.7%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	154	2080	297	51.8%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1101	1936	1936	56.9%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	728	4178	733	99.4%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	994	76.0%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	30	-	-	1291	4000	1722	75.0%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	955	1894:1834	1009+183	80.1 : 80.1%
5/1	Circ Ahead	U	N/A	N/A	A		1	30	-	-	625	1714	738	84.7%
5/2	Circ Right	U	N/A	N/A	A		1	30	-	-	261	1714	738	35.4%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1552	3600	3600	43.1%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2200	3600	3600	61.1%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	809	3600	3600	22.5%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1752	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1380	Inf	Inf	0.0%

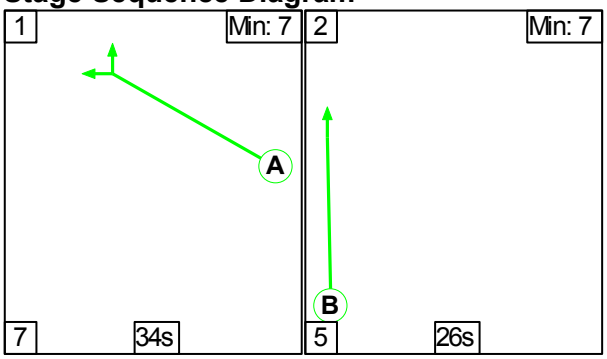
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	307	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1664	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10	**-**	**-**	**3221**	**445**	**0**	**13.5**	**23.2**	**0.0**	**36.7**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3221**	**445**	**0**	**13.5**	**23.2**	**0.0**	**36.7**	**-**	**-**	**-**	**-**	
1/1	119	119	119	0	0	0.3	0.4	-	0.7	21.8	1.5	0.4	1.9	
1/2	154	154	154	0	0	0.5	0.5	-	1.0	23.9	2.1	0.5	2.6	
2/1	1101	1101	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7	
2/2	728	728	728	0	0	0.5	12.4	-	12.8	63.5	6.9	6.2	13.1	
3/1	755	755	310	445	0	0.2	1.6	-	1.7	8.3	6.9	1.6	8.5	
3/2	1291	1291	-	-	-	6.2	1.5	-	7.7	21.4	10.8	0.7	11.5	
4/2+4/1	955	955	1910	0	0	0.7	2.0	-	2.7	10.2	8.1	2.0	10.1	
5/1	625	625	-	-	-	3.6	2.6	-	6.2	35.7	11.0	2.6	13.6	
5/2	261	261	-	-	-	0.9	0.3	-	1.2	16.5	3.5	0.3	3.7	
6/1	1552	1552	-	-	-	0.2	0.4	-	0.6	1.3	7.6	0.2	7.8	
7/1	2200	2200	-	-	-	0.5	0.8	-	1.3	2.0	11.2	0.4	11.6	
8/1	809	809	-	-	-	0.0	0.1	-	0.1	0.6	0.0	0.1	0.1	
9/1	1752	1752	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1380	1380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	307	307	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1664	1664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 6.3 PRC Over All Lanes (%): -10.4 Total Delay for Signalled Lanes (pcuHr): 15.06 Total Delay Over All Lanes(pcuHr): 36.70 Cycle Time (s): 72

Scenario 11: '2040 wDev no School AM' (FG11: '2040 w Dev no School AM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



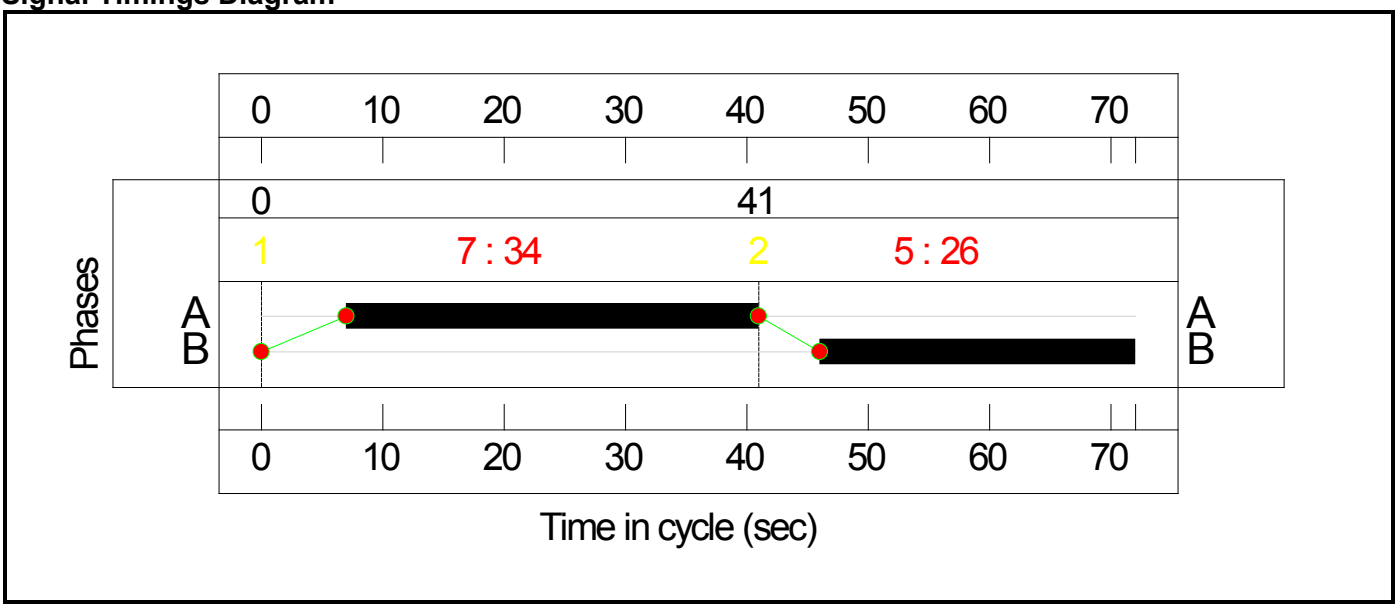
Stage Timings

Stage	1	2
Duration	34	26
Change Point	0	41

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	34	7	41
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	26	46	0

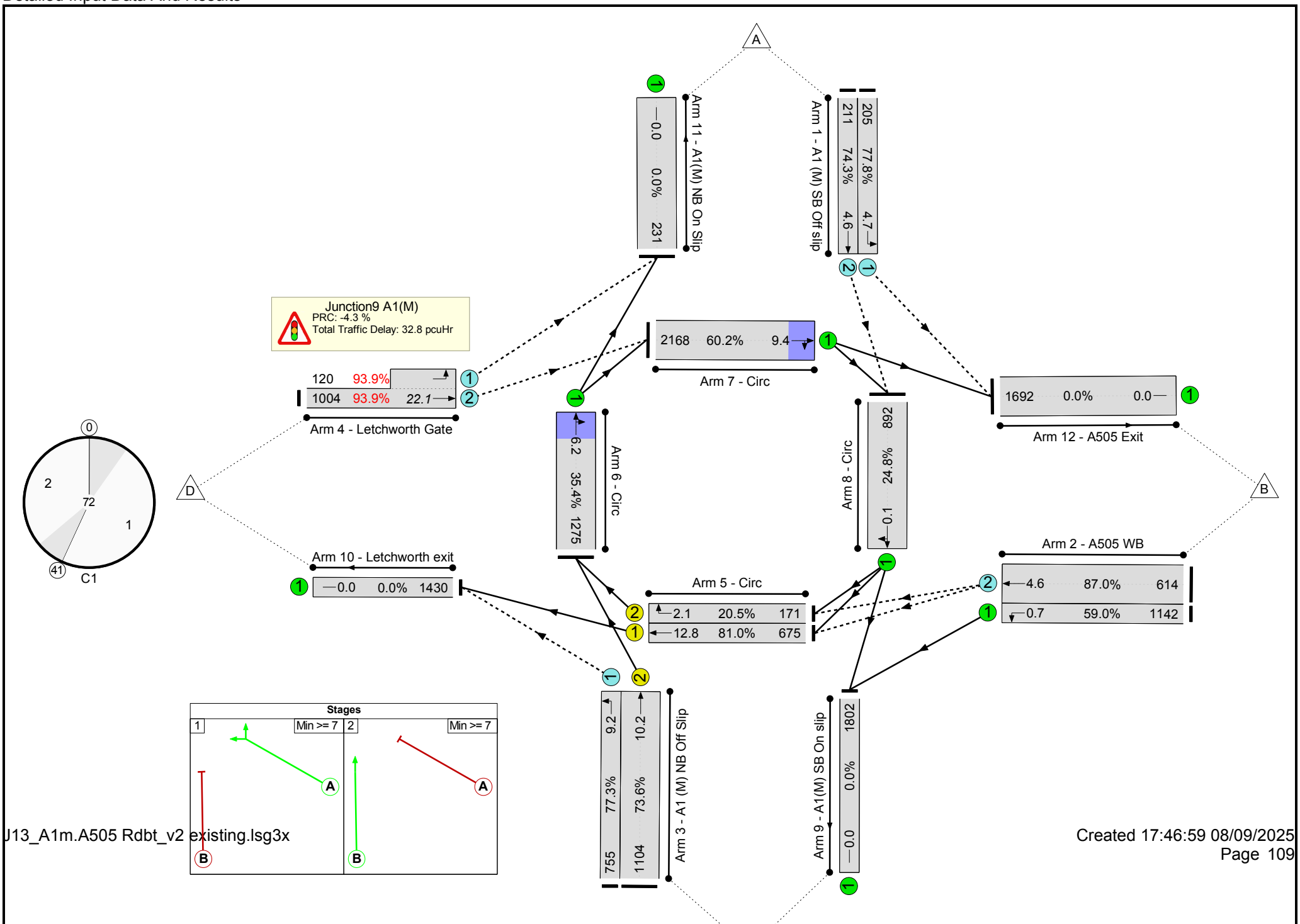
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	46	0
5/1	Circ Ahead	U	A	7	41
5/2	Circ Right	U	A	7	41

Network Layout Diagram


A
B
D
Arm 11 - A1(M) NB On Slip
0.0 0.0% 231
Arm 1 - A1 (M) SB Off slip
211 74.3% 4.6
205 77.8% 4.7
Junction9 A1(M)
PRC: -4.3 %
Total Traffic Delay: 32.8 pcuHr
120 93.9%
1004 93.9% 22.1
Arm 4 - Letchworth Gate
2168 60.2% 9.4
Arm 7 - Circ
1692 0.0% 0.0
Arm 12 - A505 Exit
6.2 35.4% 1275
Arm 6 - Circ
Arm 8 - Circ
892 24.8% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1430
Arm 5 - Circ
2.1 20.5% 171
12.8 81.0% 675
Arm 2 - A505 WB
4.6 87.0% 614
0.7 59.0% 1142
9.2 77.3% 755
10.2 73.6% 1104
Arm 3 - A1 (M) NB Off Slip
Arm 9 - A1(M) SB On slip
1802 0.0% 0.0
0
2
72
1
41
C1
Stages
1
Min >= 7
2
Min >= 7
A
B

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.9%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.9%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	205	1961	263	77.8%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	211	2080	284	74.3%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1142	1936	1936	59.0%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	614	4178	705	87.0%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	977	77.3%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	26	-	-	1104	4000	1500	73.6%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	1124	1894:1834	1069+128	93.9 : 93.9%
5/1	Circ Ahead	U	N/A	N/A	A		1	34	-	-	675	1714	833	81.0%
5/2	Circ Right	U	N/A	N/A	A		1	34	-	-	171	1714	833	20.5%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1275	3600	3600	35.4%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2168	3600	3600	60.2%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	892	3600	3600	24.8%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1802	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1430	Inf	Inf	0.0%

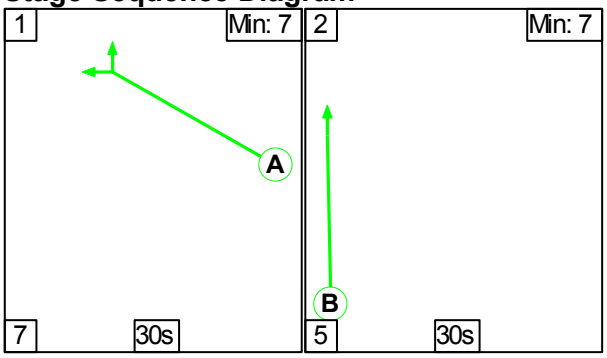
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	231	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1692	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10	**-**	**-**	**3639**	**394**	**0**	**12.9**	**19.9**	**0.0**	**32.8**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3639**	**394**	**0**	**12.9**	**19.9**	**0.0**	**32.8**	**-**	**-**	**-**	**-**	
1/1	205	205	205	0	0	0.6	1.7	-	2.2	39.1	3.1	1.7	4.7	
1/2	211	211	211	0	0	0.6	1.4	-	2.0	34.7	3.2	1.4	4.6	
2/1	1142	1142	-	-	-	0.0	0.7	-	0.7	2.3	0.0	0.7	0.7	
2/2	614	614	614	0	0	0.0	3.1	-	3.2	18.7	3.1	1.6	4.6	
3/1	755	755	361	394	0	0.2	1.7	-	1.9	8.9	7.5	1.7	9.2	
3/2	1104	1104	-	-	-	6.0	1.4	-	7.3	23.9	9.5	0.7	10.2	
4/2+4/1	1124	1124	2248	0	0	1.2	6.5	-	7.7	24.6	15.6	6.5	22.1	
5/1	675	675	-	-	-	3.4	2.1	-	5.5	29.2	10.7	2.1	12.8	
5/2	171	171	-	-	-	0.5	0.1	-	0.6	13.1	2.0	0.1	2.1	
6/1	1275	1275	-	-	-	0.1	0.3	-	0.4	1.1	6.1	0.1	6.2	
7/1	2168	2168	-	-	-	0.3	0.8	-	1.1	1.8	9.0	0.4	9.4	
8/1	892	892	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1802	1802	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1430	1430	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	231	231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1692	1692	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 11.1 Total Delay for Signalled Lanes (pcuHr): 13.43 Cycle Time (s): 72
PRC Over All Lanes (%): -4.3 Total Delay Over All Lanes(pcuHr): 32.78

Scenario 12: '2040 wDev no School PM' (FG12: '2040 wDev no School PM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



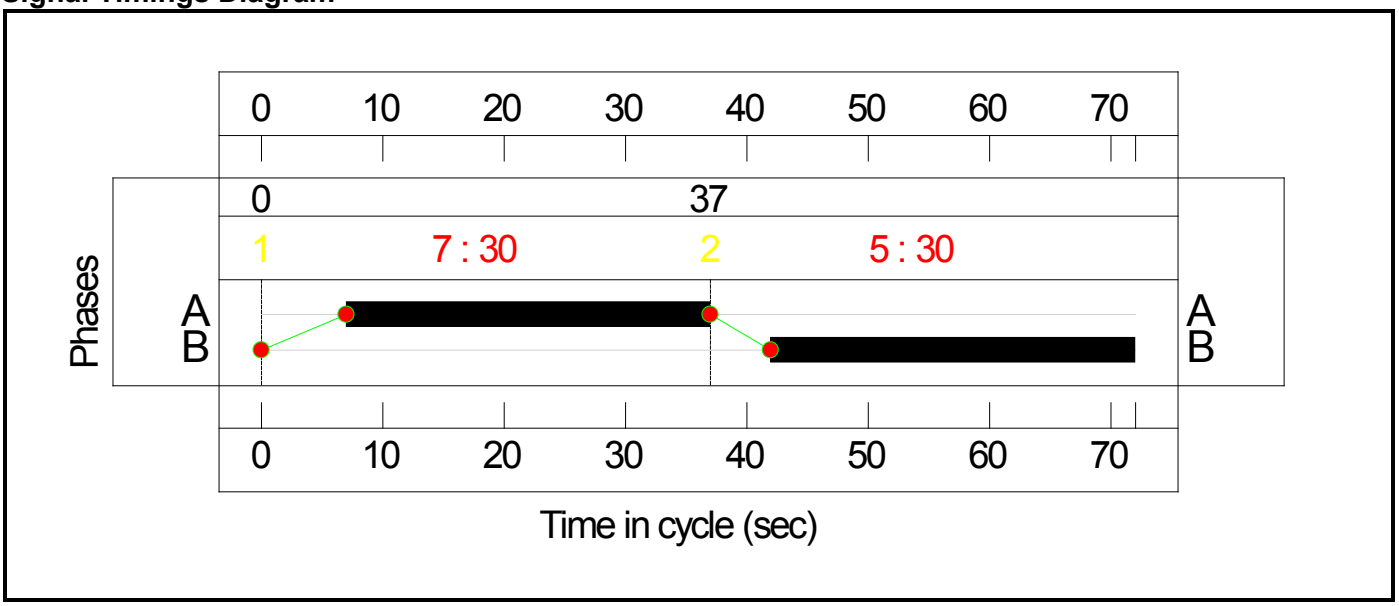
Stage Timings

Stage	1	2
Duration	30	30
Change Point	0	37

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	30	7	37
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	30	42	0

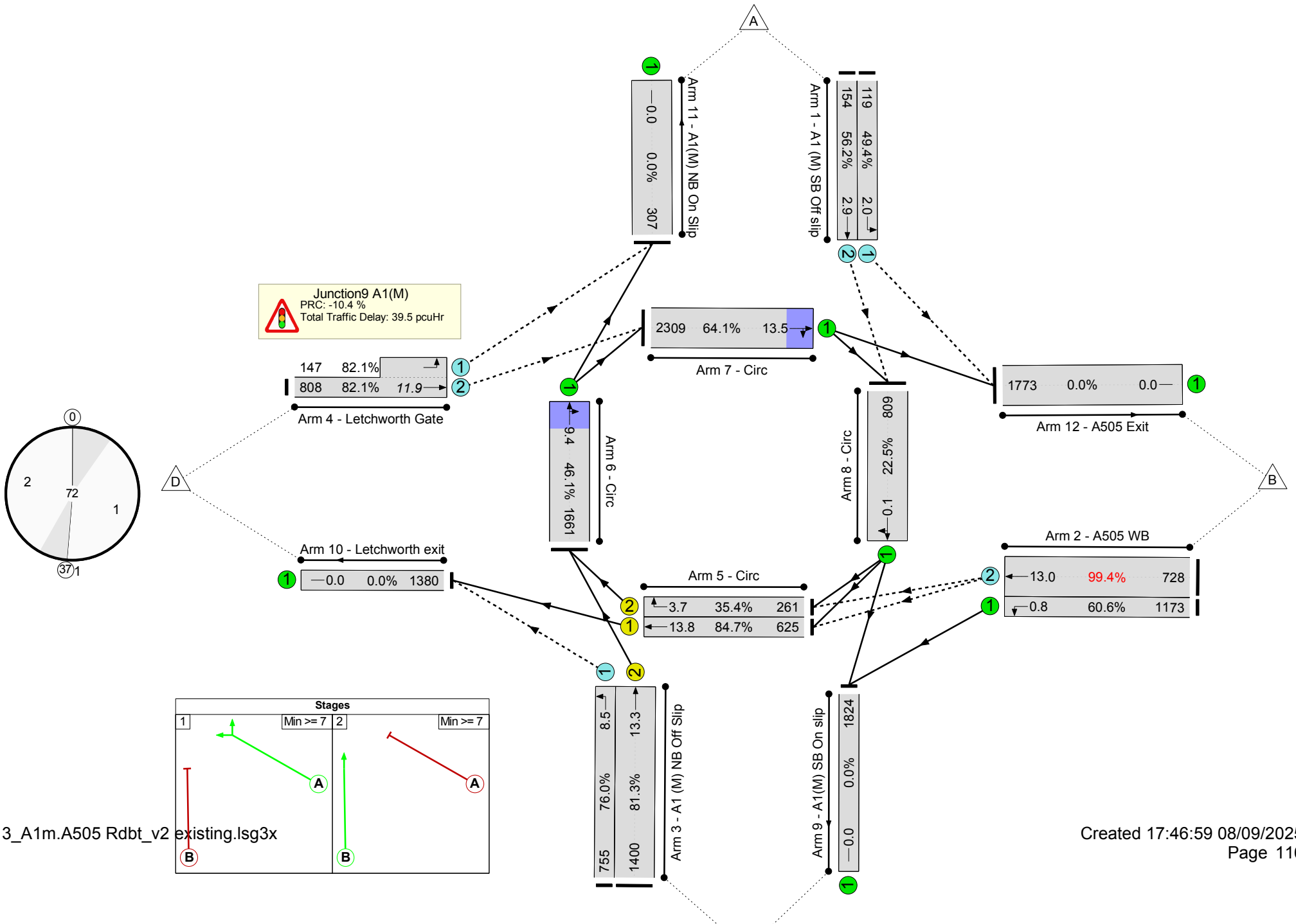
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	42	0
5/1	Circ Ahead	U	A	7	37
5/2	Circ Right	U	A	7	37

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -10.4 %
Total Traffic Delay: 39.5 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 307
Arm 1 - A1 (M) SB Off slip
154 56.2% 2.9
119 49.4% 2.0
2309 64.1% 13.5
Arm 7 - Circ
147 82.1%
808 82.1% 11.9
Arm 4 - Letchworth Gate
1773 0.0% 0.0
Arm 12 - A505 Exit
9.4 46.1% 1661
Arm 6 - Circ
Arm 8 - Circ
809 22.5% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1380
Arm 5 - Circ
3.7 35.4% 261
13.8 84.7% 625
Arm 2 - A505 WB
13.0 99.4% 728
0.8 60.6% 1173
8.5 13.3
76.0% 81.3%
755 1400
Arm 3 - A1 (M) NB Off Slip
Arm 9 - A1(M) SB On slip
1824 0.0% 0.0
0 72 1 2 37 1
Stages
1 Min >= 7 2 Min >= 7
A
B

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.4%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.4%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	119	1961	241	49.4%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	154	2080	274	56.2%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1173	1936	1936	60.6%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	728	4178	733	99.4%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	994	76.0%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	30	-	-	1400	4000	1722	81.3%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	955	1894:1834	985+179	82.1 : 82.1%
5/1	Circ Ahead	U	N/A	N/A	A		1	30	-	-	625	1714	738	84.7%
5/2	Circ Right	U	N/A	N/A	A		1	30	-	-	261	1714	738	35.4%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1661	3600	3600	46.1%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2309	3600	3600	64.1%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	809	3600	3600	22.5%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1824	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1380	Inf	Inf	0.0%

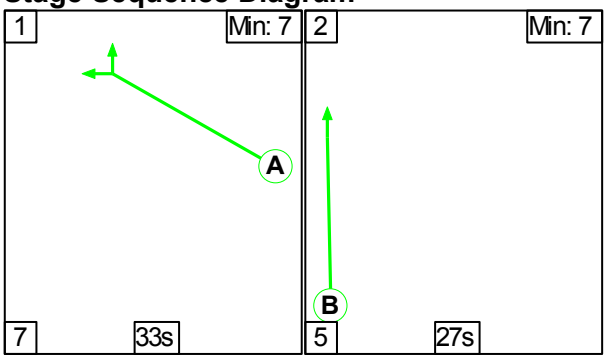
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	307	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1773	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10	**-**	**-**	**3221**	**445**	**0**	**14.9**	**24.6**	**0.0**	**39.5**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3221**	**445**	**0**	**14.9**	**24.6**	**0.0**	**39.5**	**-**	**-**	**-**	**-**	
1/1	119	119	119	0	0	0.4	0.5	-	0.8	25.7	1.6	0.5	2.0	
1/2	154	154	154	0	0	0.6	0.6	-	1.2	28.3	2.2	0.6	2.9	
2/1	1173	1173	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8	
2/2	728	728	728	0	0	0.6	12.4	-	12.9	63.8	6.8	6.2	13.0	
3/1	755	755	310	445	0	0.2	1.6	-	1.8	8.3	6.9	1.6	8.5	
3/2	1400	1400	-	-	-	7.0	2.1	-	9.1	23.5	12.3	1.1	13.3	
4/2+4/1	955	955	1910	0	0	0.8	2.2	-	3.1	11.6	9.7	2.2	11.9	
5/1	625	625	-	-	-	3.6	2.6	-	6.3	36.2	11.2	2.6	13.8	
5/2	261	261	-	-	-	0.9	0.3	-	1.2	15.9	3.4	0.3	3.7	
6/1	1661	1661	-	-	-	0.2	0.4	-	0.7	1.5	9.2	0.2	9.4	
7/1	2309	2309	-	-	-	0.6	0.9	-	1.5	2.4	13.0	0.4	13.5	
8/1	809	809	-	-	-	0.0	0.1	-	0.1	0.6	0.0	0.1	0.1	
9/1	1824	1824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1380	1380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	307	307	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1773	1773	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 6.3 PRC Over All Lanes (%): -10.4 Total Delay for Signalled Lanes (pcuHr): 16.57 Total Delay Over All Lanes(pcuHr): 39.49 Cycle Time (s): 72

Scenario 13: '2040 wDev w School AM' (FG13: '2040 w Dev with School AM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



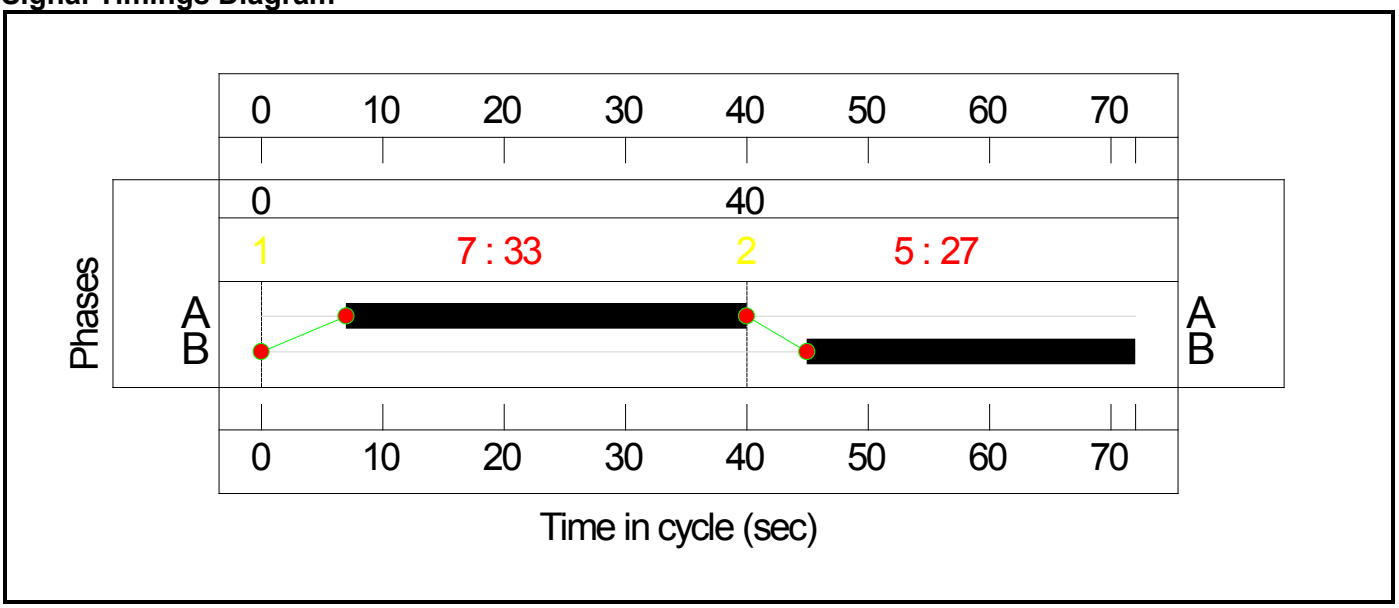
Stage Timings

Stage	1	2
Duration	33	27
Change Point	0	40

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	33	7	40
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	27	45	0

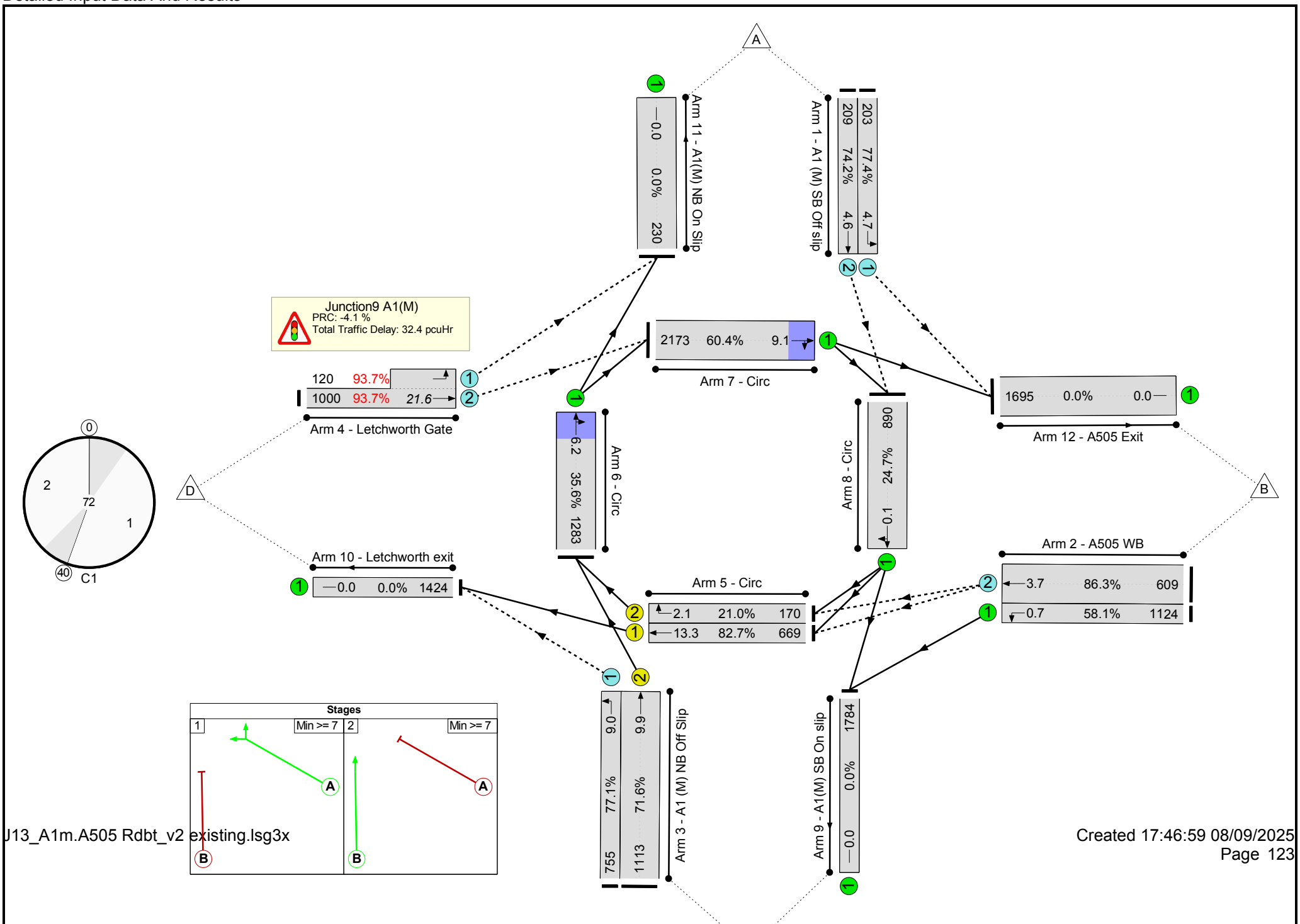
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	45	0
5/1	Circ Ahead	U	A	7	40
5/2	Circ Right	U	A	7	40

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -4.1 %
Total Traffic Delay: 32.4 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 230
Arm 1 - A1 (M) SB Off slip
209 74.2% 4.6
203 77.4% 4.7
2173 60.4% 9.1
Arm 7 - Circ
120 93.7%
1000 93.7% 21.6
Arm 4 - Letchworth Gate
1695 0.0% 0.0
Arm 12 - A505 Exit
6.2 35.6% 1283
Arm 6 - Circ
Arm 8 - Circ
890 24.7% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1424
Arm 5 - Circ
2.1 21.0% 170
13.3 82.7% 669
Arm 2 - A505 WB
3.7 86.3% 609
0.7 58.1% 1124
Arm 3 - A1 (M) NB Off Slip
9.0 77.1% 755
9.9 71.6% 1113
Arm 9 - A1(M) SB On slip
1784 0.0% 0.0
0
2
72
1
40
C1
Stages
1
Min >= 7
2
Min >= 7
A
B
A
B

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.7%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.7%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	203	1961	262	77.4%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	209	2080	282	74.2%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1124	1936	1936	58.1%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	609	4178	706	86.3%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	979	77.1%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	27	-	-	1113	4000	1556	71.6%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	1120	1894:1834	1068+128	93.7 : 93.7%
5/1	Circ Ahead	U	N/A	N/A	A		1	33	-	-	669	1714	809	82.7%
5/2	Circ Right	U	N/A	N/A	A		1	33	-	-	170	1714	809	21.0%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1283	3600	3600	35.6%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2173	3600	3600	60.4%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	890	3600	3600	24.7%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1784	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1424	Inf	Inf	0.0%

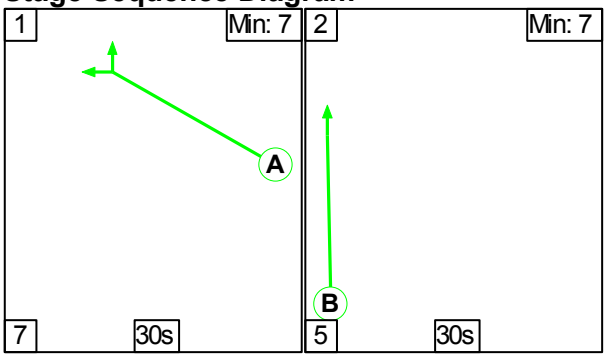
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	230	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1695	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10	**-**	**-**	**3607**	**409**	**0**	**12.8**	**19.5**	**0.0**	**32.4**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3607**	**409**	**0**	**12.8**	**19.5**	**0.0**	**32.4**	**-**	**-**	**-**	**-**	
1/1	203	203	203	0	0	0.6	1.6	-	2.2	38.8	3.0	1.6	4.7	
1/2	209	209	209	0	0	0.6	1.4	-	2.0	35.0	3.3	1.4	4.6	
2/1	1124	1124	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7	
2/2	609	609	609	0	0	0.0	3.0	-	3.0	17.7	2.2	1.5	3.7	
3/1	755	755	346	409	0	0.2	1.7	-	1.9	8.9	7.3	1.7	9.0	
3/2	1113	1113	-	-	-	5.8	1.3	-	7.0	22.7	9.3	0.6	9.9	
4/2+4/1	1120	1120	2240	0	0	1.2	6.3	-	7.5	24.1	15.3	6.3	21.6	
5/1	669	669	-	-	-	3.5	2.3	-	5.8	31.4	11.0	2.3	13.3	
5/2	170	170	-	-	-	0.5	0.1	-	0.7	13.9	2.0	0.1	2.1	
6/1	1283	1283	-	-	-	0.1	0.3	-	0.4	1.1	6.0	0.1	6.2	
7/1	2173	2173	-	-	-	0.3	0.8	-	1.1	1.8	8.7	0.4	9.1	
8/1	890	890	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1784	1784	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1424	1424	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	230	230	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1695	1695	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 8.9 PRC Over All Lanes (%): -4.1 Total Delay for Signalled Lanes (pcuHr): 13.49 Total Delay Over All Lanes(pcuHr): 32.37 Cycle Time (s): 72

Scenario 14: '2040 wDev w School PM' (FG14: '2040 wDev with School PM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



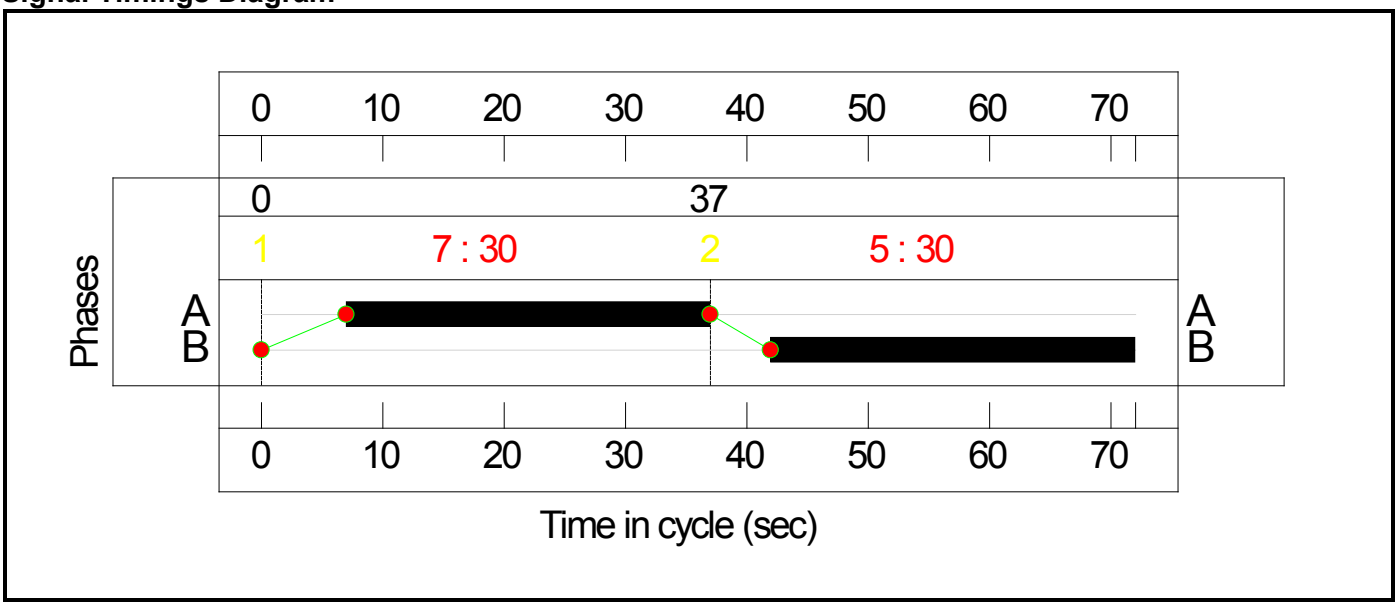
Stage Timings

Stage	1	2
Duration	30	30
Change Point	0	37

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	30	7	37
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	30	42	0

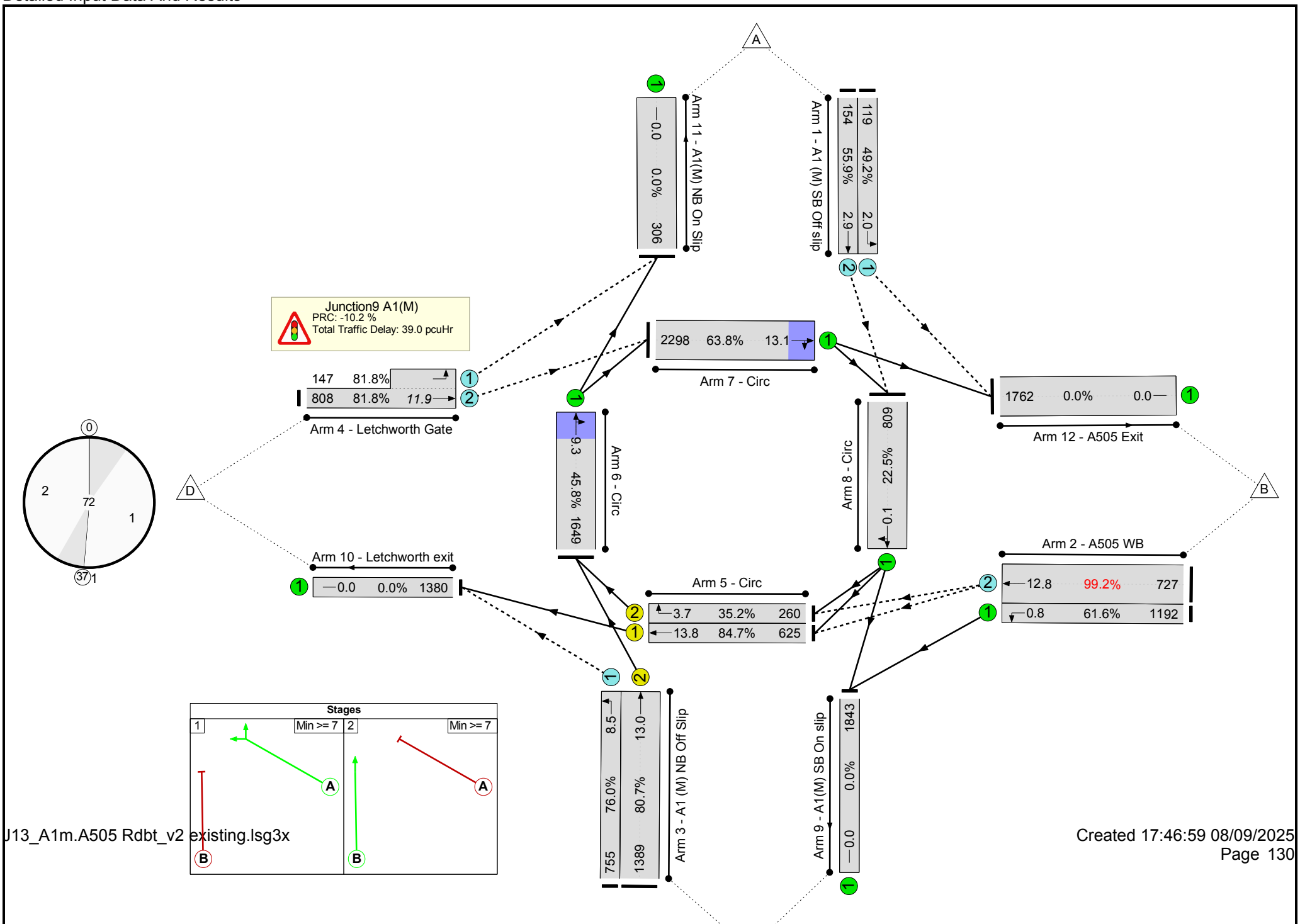
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	42	0
5/1	Circ Ahead	U	A	7	37
5/2	Circ Right	U	A	7	37

Network Layout Diagram


A
B
D
Arm 11 - A1(M) NB On Slip
0.0 0.0% 306
Arm 1 - A1 (M) SB Off slip
154 55.9% 2.9
119 49.2% 2.0
Junction9 A1(M)
PRC: -10.2 %
Total Traffic Delay: 39.0 pcuHr
147 81.8%
808 81.8% 11.9
Arm 4 - Letchworth Gate
2298 63.8% 13.1
Arm 7 - Circ
1762 0.0% 0.0
Arm 12 - A505 Exit
9.3 45.8% 1649
Arm 6 - Circ
Arm 8 - Circ
809 22.5% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1380
Arm 5 - Circ
3.7 35.2% 260
13.8 84.7% 625
Arm 2 - A505 WB
12.8 99.2% 727
0.8 61.6% 1192
8.5 76.0% 755
13.0 80.7% 1389
Arm 3 - A1 (M) NB Off Slip
Arm 9 - A1(M) SB On slip
1843 0.0% 0.0
0
2
72
1
37
1
Stages
1
Min >= 7
2
Min >= 7
A
B
A
B

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.2%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.2%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	119	1961	242	49.2%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	154	2080	276	55.9%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1192	1936	1936	61.6%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	727	4178	733	99.2%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	994	76.0%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	30	-	-	1389	4000	1722	80.7%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	955	1894:1834	987+180	81.8 : 81.8%
5/1	Circ Ahead	U	N/A	N/A	A		1	30	-	-	625	1714	738	84.7%
5/2	Circ Right	U	N/A	N/A	A		1	30	-	-	260	1714	738	35.2%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1649	3600	3600	45.8%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2298	3600	3600	63.8%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	809	3600	3600	22.5%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1843	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1380	Inf	Inf	0.0%

11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	306	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1762	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10	**-**	**-**	**3220**	**445**	**0**	**14.8**	**24.2**	**0.0**	**39.0**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3220**	**445**	**0**	**14.8**	**24.2**	**0.0**	**39.0**	**-**	**-**	**-**	**-**	
1/1	119	119	119	0	0	0.4	0.5	-	0.8	25.5	1.6	0.5	2.0	
1/2	154	154	154	0	0	0.6	0.6	-	1.2	28.0	2.2	0.6	2.9	
2/1	1192	1192	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8	
2/2	727	727	727	0	0	0.5	12.1	-	12.7	62.7	6.8	6.1	12.8	
3/1	755	755	310	445	0	0.2	1.6	-	1.8	8.3	6.9	1.6	8.5	
3/2	1389	1389	-	-	-	6.9	2.1	-	9.0	23.2	12.0	1.0	13.0	
4/2+4/1	955	955	1910	0	0	0.8	2.2	-	3.0	11.4	9.7	2.2	11.9	
5/1	625	625	-	-	-	3.6	2.6	-	6.3	36.2	11.2	2.6	13.8	
5/2	260	260	-	-	-	0.9	0.3	-	1.2	16.0	3.4	0.3	3.7	
6/1	1649	1649	-	-	-	0.2	0.4	-	0.7	1.4	9.1	0.2	9.3	
7/1	2298	2298	-	-	-	0.6	0.9	-	1.5	2.4	12.7	0.4	13.1	
8/1	809	809	-	-	-	0.0	0.1	-	0.1	0.6	0.0	0.1	0.1	
9/1	1843	1843	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1380	1380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	306	306	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1762	1762	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

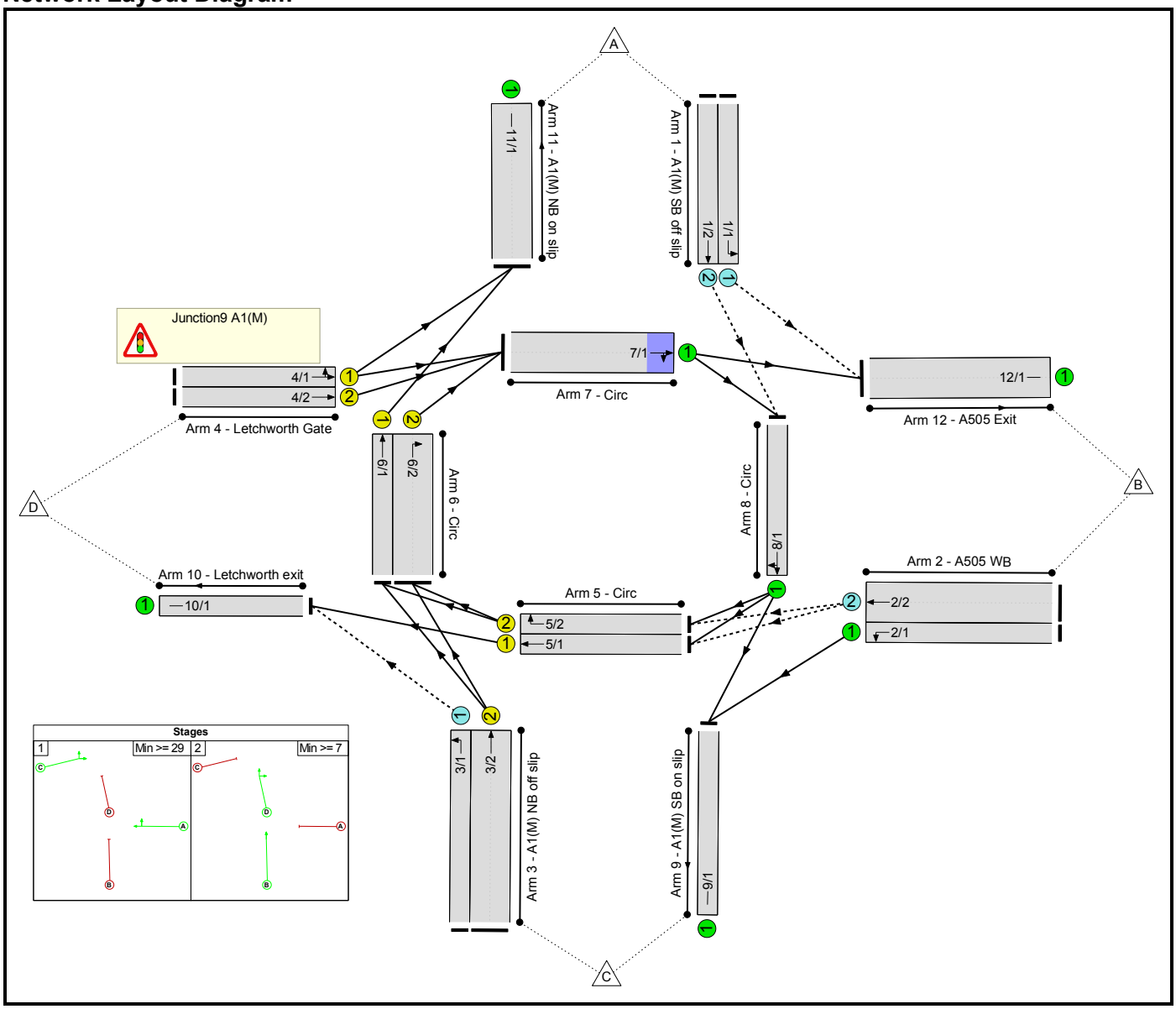
C1 PRC for Signalled Lanes (%): 6.3 PRC Over All Lanes (%): -10.2 Total Delay for Signalled Lanes (pcuHr): 16.40 Total Delay Over All Lanes(pcuHr): 38.99 Cycle Time (s): 72

Detailed Input Data And Results

User and Project Details

Project:	**Growing Baldock**
Title:	**A1(m) Junction 10 - PROPOSED**
Location:	Baldock, SG6 2EA
Client:	Urban & Civic
Site Ref(s):	J13
Design Layout Ref:	-
Date Started:	05.08.2025
Date Completed:	-
Checked By:	NL/ZT
Additional detail:	
File name:	J13_A1m.A505 Rdbt_v2 PROPOSED_zt.lsg3x
Author:	Jay James
Company:	ITP by Haskoning
Address:	
Linsig Version:	3, 3, 0, 6

Network Layout Diagram



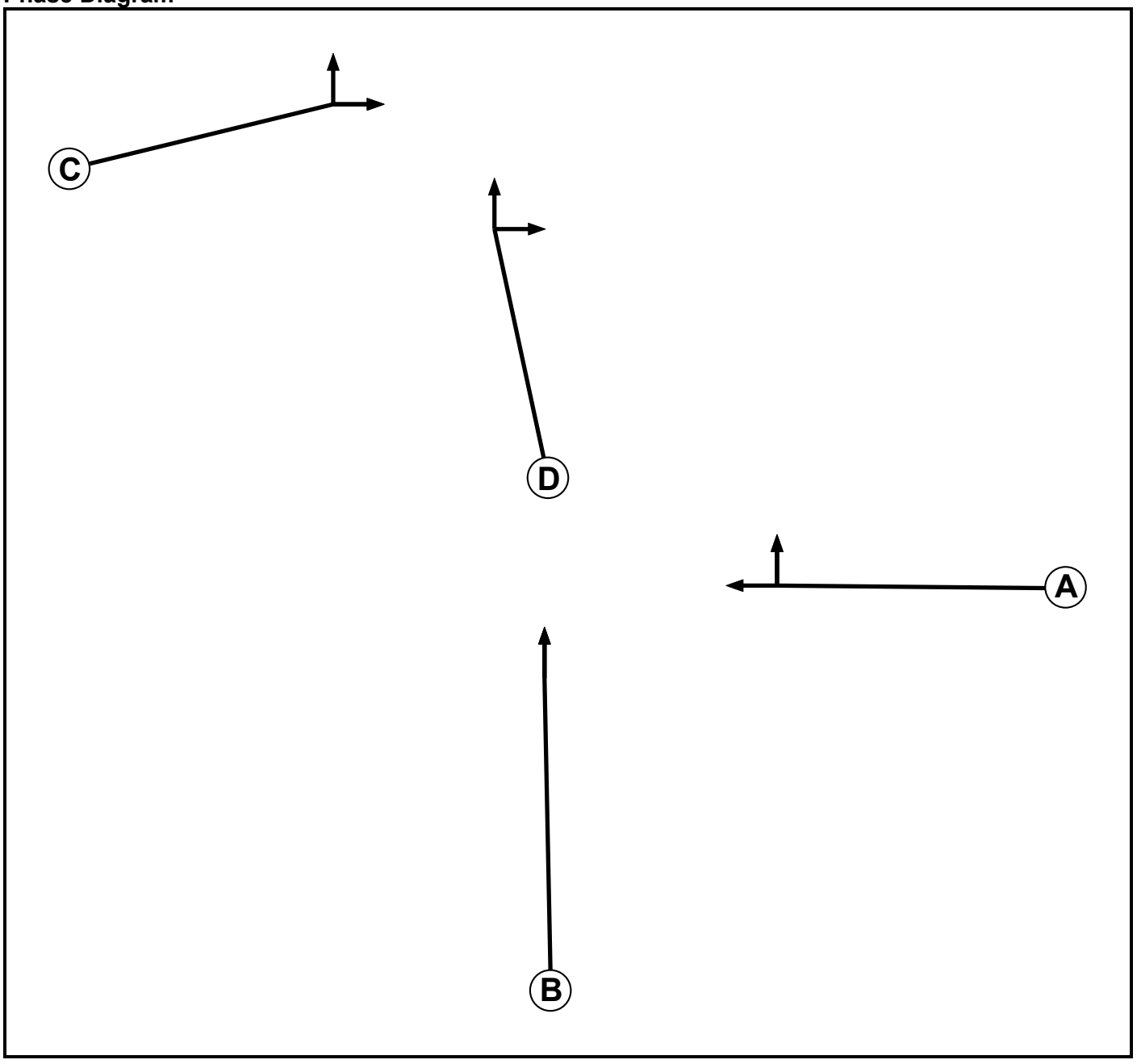
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2033 wDev AM	2033 w Dev AM	Network Control Plan 1	08:00 - 09:00	80	-2.1	43.71
2	2033 wDev PM	2033 w Dev PM	Network Control Plan 1	17:00 - 18:00	80	-16.5	76.59
3	2040 wDev no School AM	2040 w Dev no School AM	Network Control Plan 1	08:00 - 09:00	80	-0.0	40.83
4	2040 wDev no School PM	2040 wDev no School PM	Network Control Plan 1	17:00 - 18:00	80	-10.4	62.34
5	2040 wDev w School AM	2040 w Dev with School AM	Network Control Plan 1	08:00 - 09:00	80	0.2	40.50
6	2040 wDev w School PM	2040 wDev with School PM	Network Control Plan 1	17:00 - 18:00	80	-10.2	60.89

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1	Gen		Stage Stream 1	4	2	Junction9 A1(M)	

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		-9999	29
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Traffic		-9999	7

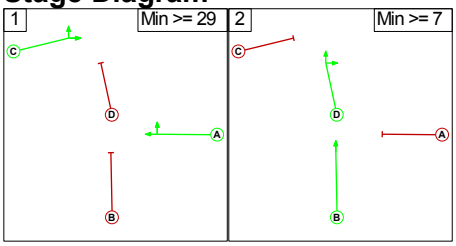
Phase Intergreens Matrix

Terminating Phase	Starting Phase A	B	C	D
A		7	-	-
B	5		-	-
C	-	-		5
D	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	B D

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	C	Losing	7	7
2	1	B	Losing	5	5

Prohibited Stage Change

From Stage	To Stage 1	2
1		12
2	10	

Lane Input Data

Junction: Junction9 A1(M)												
Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A1(M) SB off slip)	O		2	3	60.0	Geom	-	3.46	0.00	Y	Arm 12 Left	Inf
1/2 (A1(M) SB off slip)	O		2	3	60.0	Geom	-	3.25	0.00	N	Arm 8 Ahead	Inf
2/1 (A505 WB)	U		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 9 Left	100.00
2/2 (A505 WB)	O		2	3	60.0	User	4178	-	-	-	-	-
3/1 (A1(M) NB off slip)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 10 Left	100.00
3/2 (A1(M) NB off slip)	U	B	2	3	60.0	User	4000	-	-	-	-	-
4/1 (Letchworth Gate)	U	C	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 7 Ahead	Inf
											Arm 11 Left	26.00
4/2 (Letchworth Gate)	U	C	2	3	60.0	Geom	-	3.50	0.00	N	Arm 7 Ahead	40.00
5/1 (Circ)	U	A	2	3	20.5	User	1714	-	-	-	-	-
5/2 (Circ)	U	A	2	3	20.5	User	1714	-	-	-	-	-
6/1 (Circ)	U	D	2	3	14.0	Geom	-	3.50	0.00	Y	Arm 11 Ahead	133.00
6/2 (Circ)	U	D	2	3	14.0	User	4178	-	-	-	-	-
7/1 (Circ)	U		2	3	16.7	User	3600	-	-	-	-	-
8/1 (Circ)	U		2	3	14.3	Geom	-	3.80	0.00	Y	Arm 5 Right	62.00
											Arm 9 Ahead	62.00
9/1 (A1(M) SB on slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1 (Letchworth exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (A1(M) NB on slip)	U		2	3	60.0	Inf	-	-	-	-	-	-

12/1 (A505 Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: Junction9 A1(M)

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (A1(M) SB off slip)	12/1 (Left)	715	0	7/1	0.22	All	-	-	-	-	-
1/2 (A1(M) SB off slip)	8/1 (Ahead)	1000	0	7/1	0.40	All	-	-	-	-	-
2/2 (A505 WB)	5/1 (Ahead)	1000	0	8/1	0.33	All	-	-	-	-	-
	5/2 (Ahead)	1000	0	8/1	0.33	All					
3/1 (A1(M) NB off slip)	10/1 (Left)	1200	0	5/1	0.33	All	-	-	-	-	-

Lane Connector Input Data

Junction: Junction9 A1(M)				
Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	12/1	Internal	5	35
1/2	8/1	Internal	5	35
2/1	9/1	Internal	26	35
2/2	5/1	Internal	9	35
2/2	5/2	Internal	9	35
3/1	10/1	Internal	26	35
3/2	6/1	Internal	6	35
3/2	6/2	Internal	6	35
4/1	7/1	Internal	7	35
4/1	11/1	Internal	26	35
4/2	7/1	Internal	7	35
5/1	10/1	Internal	26	35
5/2	6/1	Internal	6	35
5/2	6/2	Internal	6	35
6/1	11/1	Internal	26	35
6/2	7/1	Internal	7	35
7/1	8/1	Internal	6	35
7/1	12/1	Internal	26	35
8/1	5/1	Internal	9	35
8/1	5/2	Internal	9	35
8/1	9/1	Internal	19	35

Scenario 1: '2033 wDev AM' (FG7: '2033 w Dev AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1(M) SB off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1(M) SB off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1(M) NB off slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1(M) NB off slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.20	0.00	Y	Arm 7 Ahead	Inf	77.8 %	1911	1911
				Arm 11 Left	26.00	22.2 %		
4/2 (Letchworth Gate)	3.50	0.00	N	Arm 7 Ahead	40.00	100.0 %	2029	2029
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ)	3.50	0.00	Y	Arm 11 Ahead	133.00	100.0 %	1943	1943
6/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ)	3.80	0.00	Y	Arm 5 Right	62.00	25.9 %	1948	1948
				Arm 9 Ahead	62.00	74.1 %		
9/1 (A1(M) SB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2033 wDev PM' (FG8: '2033 w Dev PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1(M) SB off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1(M) SB off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1(M) NB off slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1(M) NB off slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.20	0.00	Y	Arm 7 Ahead	Inf	67.7 %	1900	1900
				Arm 11 Left	26.00	32.3 %		
4/2 (Letchworth Gate)	3.50	0.00	N	Arm 7 Ahead	40.00	100.0 %	2029	2029
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ)	3.50	0.00	Y	Arm 11 Ahead	133.00	100.0 %	1943	1943
6/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ)	3.80	0.00	Y	Arm 5 Right	62.00	19.6 %	1948	1948
				Arm 9 Ahead	62.00	80.4 %		
9/1 (A1(M) SB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2040 wDev no School AM' (FG11: '2040 w Dev no School AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1(M) SB off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1(M) SB off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1(M) NB off slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1(M) NB off slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.20	0.00	Y	Arm 7 Ahead	Inf	77.7 %	1910	1910
				Arm 11 Left	26.00	22.3 %		
4/2 (Letchworth Gate)	3.50	0.00	N	Arm 7 Ahead	40.00	100.0 %	2029	2029
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ)	3.50	0.00	Y	Arm 11 Ahead	133.00	100.0 %	1943	1943
6/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ)	3.80	0.00	Y	Arm 5 Right	62.00	26.0 %	1948	1948
				Arm 9 Ahead	62.00	74.0 %		
9/1 (A1(M) SB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2040 wDev no School PM' (FG12: '2040 wDev no School PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1(M) SB off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1(M) SB off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1(M) NB off slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1(M) NB off slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.20	0.00	Y	Arm 7 Ahead	Inf	67.7 %	1900	1900
				Arm 11 Left	26.00	32.3 %		
4/2 (Letchworth Gate)	3.50	0.00	N	Arm 7 Ahead	40.00	100.0 %	2029	2029
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ)	3.50	0.00	Y	Arm 11 Ahead	133.00	100.0 %	1943	1943
6/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ)	3.80	0.00	Y	Arm 5 Right	62.00	19.5 %	1948	1948
				Arm 9 Ahead	62.00	80.5 %		
9/1 (A1(M) SB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Scenario 5: '2040 wDev w School AM' (FG13: '2040 w Dev with School AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1(M) SB off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1(M) SB off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1(M) NB off slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1(M) NB off slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.20	0.00	Y	Arm 7 Ahead	Inf	77.6 %	1910	1910
				Arm 11 Left	26.00	22.4 %		
4/2 (Letchworth Gate)	3.50	0.00	N	Arm 7 Ahead	40.00	100.0 %	2029	2029
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ)	3.50	0.00	Y	Arm 11 Ahead	133.00	100.0 %	1943	1943
6/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ)	3.80	0.00	Y	Arm 5 Right	62.00	25.8 %	1948	1948
				Arm 9 Ahead	62.00	74.2 %		
9/1 (A1(M) SB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Scenario 6: '2040 wDev w School PM' (FG14: '2040 wDev with School PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1(M) SB off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1(M) SB off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1(M) NB off slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1(M) NB off slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.20	0.00	Y	Arm 7 Ahead	Inf	67.7 %	1900	1900
				Arm 11 Left	26.00	32.3 %		
4/2 (Letchworth Gate)	3.50	0.00	N	Arm 7 Ahead	40.00	100.0 %	2029	2029
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ)	3.50	0.00	Y	Arm 11 Ahead	133.00	100.0 %	1943	1943
6/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ)	3.80	0.00	Y	Arm 5 Right	62.00	19.5 %	1948	1948
				Arm 9 Ahead	62.00	80.5 %		
9/1 (A1(M) SB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 AM'	08:00	09:00	01:00	
2: '2022 PM'	17:00	18:00	01:00	
3: '2028 AM'	08:00	09:00	01:00	
4: '2028 PM'	17:00	18:00	01:00	
5: '2033 AM'	08:00	09:00	01:00	
6: '2033 PM'	17:00	18:00	01:00	
7: '2033 w Dev AM'	08:00	09:00	01:00	
8: '2033 w Dev PM'	17:00	18:00	01:00	
9: '2040 AM'	08:00	09:00	01:00	
10: '2040 PM'	17:00	18:00	01:00	
11: '2040 w Dev no School AM'	08:00	09:00	01:00	
12: '2040 wDev no School PM'	17:00	18:00	01:00	
13: '2040 w Dev with School AM'	08:00	09:00	01:00	
14: '2040 wDev with School PM'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2022 AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	199	2	200	403
	B	105	59	978	431	1573
	C	1	938	1	731	1671
	D	116	314	636	22	1088
	Tot.	224	1510	1617	1384	4735

FG2: '2022 PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	116	0	150	266
	B	153	100	1070	454	1777
	C	2	1252	0	733	1987
	D	143	149	633	4	929
	Tot.	298	1617	1703	1341	4959

FG3: '2028 AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	209	2	210	423
	B	110	62	1025	452	1649
	C	1	983	1	767	1752
	D	122	329	667	23	1141
	Tot.	235	1583	1695	1452	4965

FG4: '2028 PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	122	0	157	279
	B	160	105	1120	475	1860
	C	2	1311	0	767	2080
	D	150	156	663	4	973
	Tot.	312	1694	1783	1403	5192

FG5: '2033 AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	213	2	214	431
	B	113	63	1048	462	1686
	C	1	1005	1	783	1790
	D	124	336	682	24	1166
	Tot.	240	1617	1733	1483	5073

FG6: '2033 PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	124	0	161	285
	B	164	107	1144	486	1901
	C	2	1340	0	784	2126
	D	153	159	677	4	993
	Tot.	319	1730	1821	1435	5305

FG7: '2033 w Dev AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	213	2	214	431
	B	113	63	1092	462	1730
	C	1	1052	1	783	1837
	D	124	336	682	24	1166
	Tot.	240	1664	1777	1483	5164

FG8: '2033 w Dev PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	124	0	161	285
	B	164	107	1182	486	1939
	C	2	1381	0	784	2167
	D	153	159	677	4	993
	Tot.	319	1771	1859	1435	5384

FG9: '2040 AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	205	2	207	416
	B	108	61	1010	445	1624
	C	1	968	1	755	1725
	D	120	324	657	23	1124
	Tot.	231	1558	1670	1430	4889

FG10: '2040 PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	154	273
	B	158	103	1101	467	1829
	C	2	1289	0	755	2046
	D	147	153	651	4	955
	Tot.	307	1664	1752	1380	5103

FG11: '2040 w Dev no School AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	205	2	207	416
	B	108	61	1142	445	1756
	C	1	1102	1	755	1859
	D	120	324	657	23	1124
	Tot.	231	1692	1802	1430	5155

FG12: '2040 wDev no School PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	154	273
	B	158	103	1173	467	1901
	C	2	1398	0	755	2155
	D	147	153	651	4	955
	Tot.	307	1773	1824	1380	5284

FG13: '2040 w Dev with School AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	203	2	205	412
	B	107	61	1124	441	1733
	C	1	1111	1	755	1868
	D	120	320	657	23	1120
	Tot.	230	1695	1784	1424	5133

FG14: '2040 wDev with School PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	154	273
	B	157	103	1192	467	1919
	C	2	1387	0	755	2144
	D	147	153	651	4	955
	Tot.	306	1762	1843	1380	5291

Scenario 1: '2033 wDev AM' (FG7: '2033 w Dev AM', Plan 1: 'Network Control Plan 1')
Traffic Flows, Actual
Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	213	2	214	431
	B	113	63	1092	462	1730
	C	1	1052	1	783	1837
	D	124	336	682	24	1166
	Tot.	240	1664	1777	1483	5164

Traffic Flows, Difference
Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 2: '2033 wDev PM' (FG8: '2033 w Dev PM', Plan 1: 'Network Control Plan 1')
Traffic Flows, Actual
Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	124	0	161	285
	B	164	107	1182	486	1939
	C	2	1381	0	784	2167
	D	153	159	677	4	993
	Tot.	319	1771	1859	1435	5384

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 3: '2040 wDev no School AM' (FG11: '2040 w Dev no School AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	205	2	207	416
	B	108	61	1142	445	1756
	C	1	1102	1	755	1859
	D	120	324	657	23	1124
	Tot.	231	1692	1802	1430	5155

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 4: '2040 wDev no School PM' (FG12: '2040 wDev no School PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	154	273
	B	158	103	1173	467	1901
	C	2	1398	0	755	2155
	D	147	153	651	4	955
	Tot.	307	1773	1824	1380	5284

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 5: '2040 wDev w School AM' (FG13: '2040 w Dev with School AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	203	2	205	412
	B	107	61	1124	441	1733
	C	1	1111	1	755	1868
	D	120	320	657	23	1120
	Tot.	230	1695	1784	1424	5133

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 6: '2040 wDev w School PM' (FG14: '2040 wDev with School PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	154	273
	B	157	103	1192	467	1919
	C	2	1387	0	755	2144
	D	147	153	651	4	955
	Tot.	306	1762	1843	1380	5291

Traffic Flows, Difference

Difference :

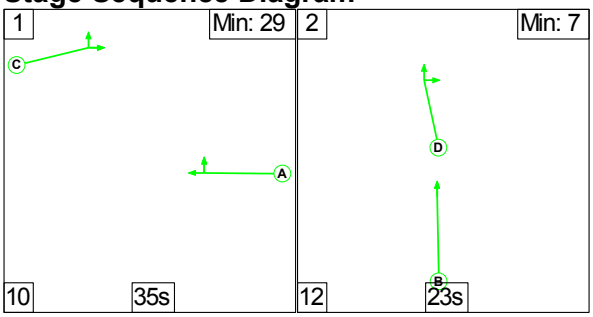
		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Traffic Lane Flows

Lane	Scenario 1: 2033 wDev AM	Scenario 2: 2033 wDev PM	Scenario 3: 2040 wDev no School AM	Scenario 4: 2040 wDev no School PM	Scenario 5: 2040 wDev w School AM	Scenario 6: 2040 wDev w School PM
Junction: Junction9 A1(M)						
1/1	213	124	205	119	203	119
1/2	218	161	211	154	209	154
2/1	1092	1182	1142	1173	1124	1192
2/2	638	757	614	728	609	727
3/1	783	784	755	755	755	755
3/2	1054	1383	1104	1400	1113	1389
4/1	558	473	537	455	536	455
4/2	608	520	587	500	584	500
5/1	700	651	675	625	669	625
5/2	178	271	171	261	170	260
6/1	116	166	111	160	110	159
6/2	1116	1488	1164	1501	1173	1490
7/1	2158	2328	2168	2309	2173	2298
8/1	925	842	892	809	890	809
9/1	1777	1859	1802	1824	1784	1843
10/1	1483	1435	1430	1380	1424	1380
11/1	240	319	231	307	230	306
12/1	1664	1771	1692	1773	1695	1762

Scenario 1: '2033 wDev AM' (FG7: '2033 w Dev AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



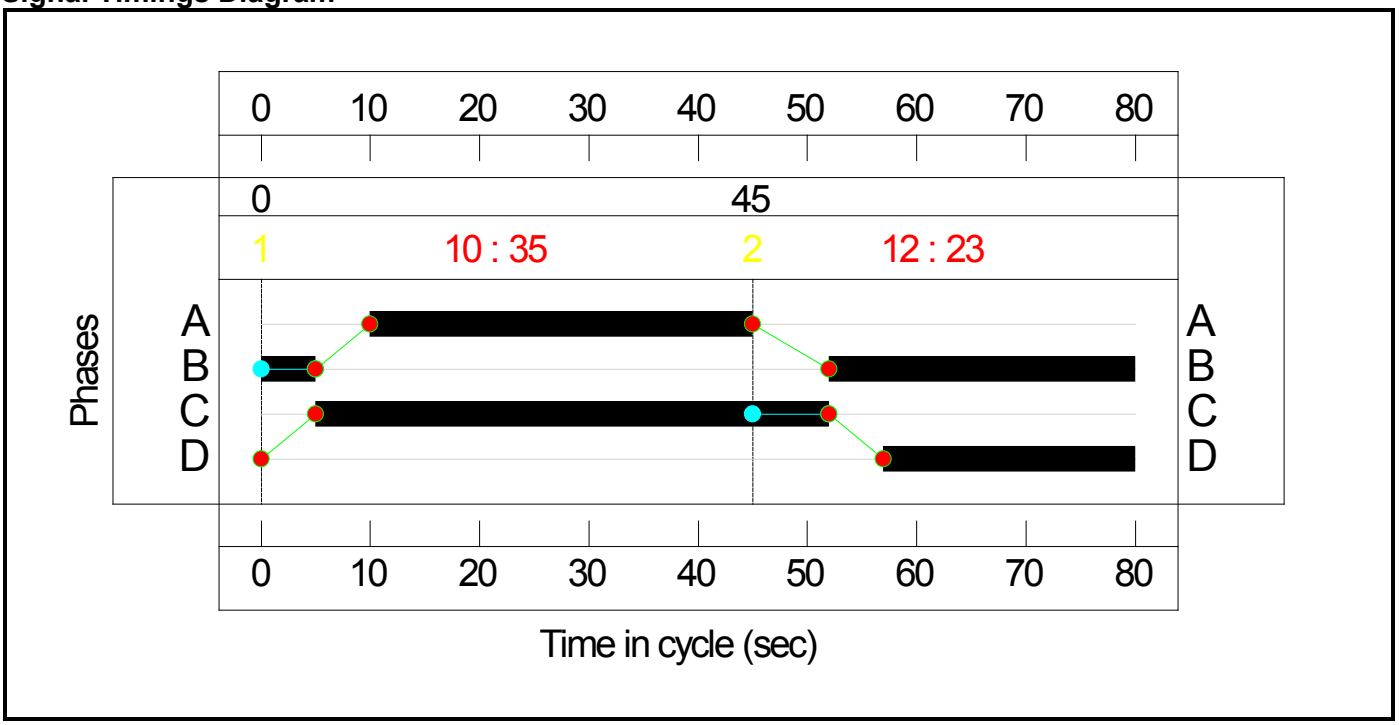
Stage Timings

Stage	1	2
Duration	35	23
Change Point	0	45

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	35	10	45
B	A1(M) NB off slip Ahead A1(m) NB	Traffic	33	52	5
C	Letchworth Gate Ahead Left Letchworth Gate	Traffic	47	5	52
D	Circ Right Ahead Circulatory	Traffic	23	57	0

Signal Timings Diagram

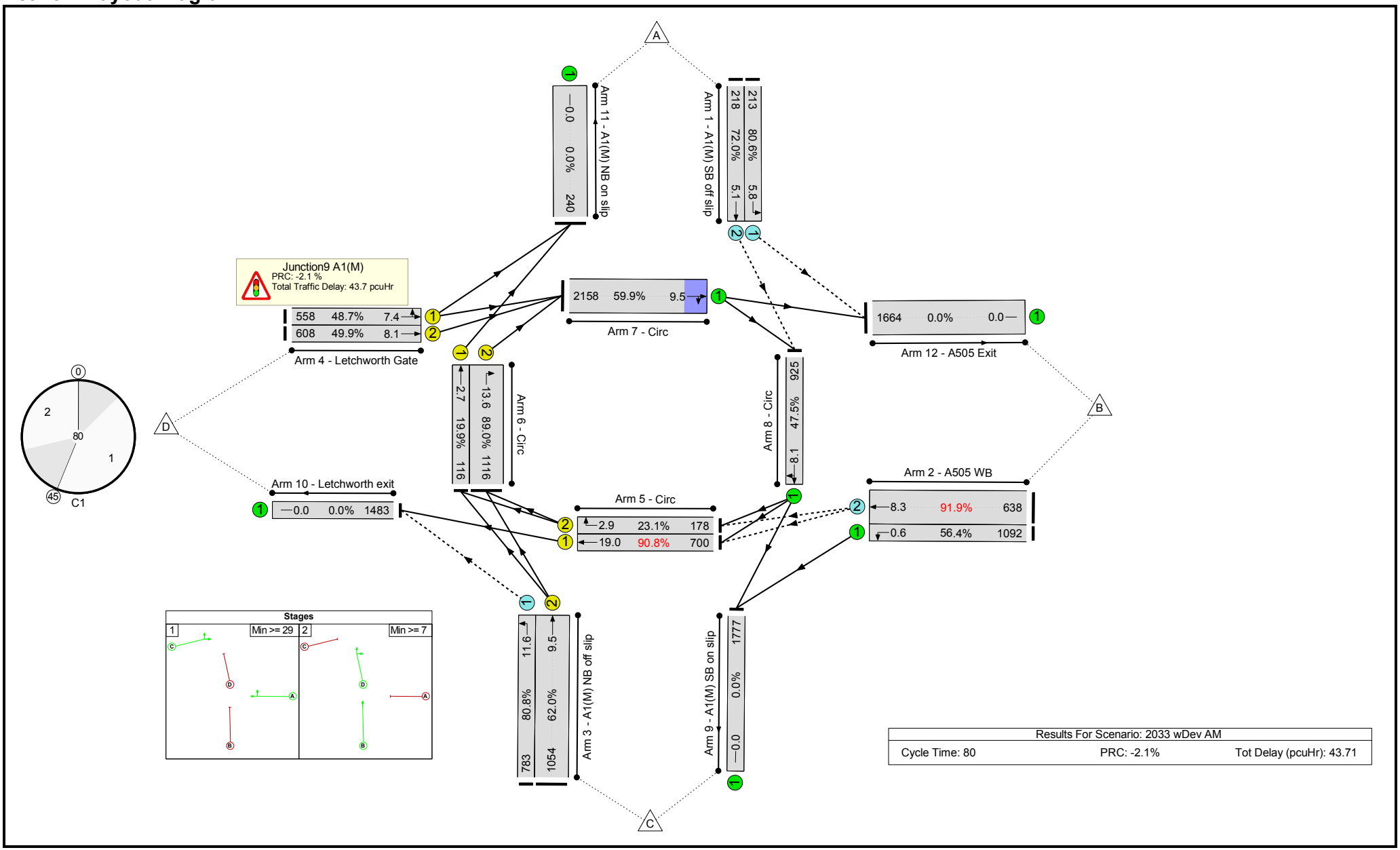


Lane Green Times

Junction: Junction9 A1(M)

Lane	Description	Type	Phases	Start Green	End Green
3/2	A1(M) NB off slip Ahead	U	B	52	5
4/1	Letchworth Gate Ahead Left	U	C	5	52
4/2	Letchworth Gate Ahead	U	C	5	52
5/1	Circ Ahead	U	A	10	45
5/2	Circ Right	U	A	10	45
6/1	Circ Ahead	U	D	57	0
6/2	Circ Right	U	D	57	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10 - PROPOSED	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**91.9%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**91.9%**
1/1	A1(M) SB off slip Left	O	N/A	N/A	-		-	-	-	-	213	1961	264	80.6%
1/2	A1(M) SB off slip Ahead	O	N/A	N/A	-		-	-	-	-	218	2080	303	72.0%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1092	1936	1936	56.4%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	638	4178	694	91.9%
3/1	A1(M) NB off slip Left	O	N/A	N/A	-		-	-	-	-	783	1936	969	80.8%
3/2	A1(M) NB off slip Ahead	U	N/A	N/A	B		1	33	-	-	1054	4000	1700	62.0%
4/1	Letchworth Gate Ahead Left	U	N/A	N/A	C		1	47	-	-	558	1911	1147	48.7%
4/2	Letchworth Gate Ahead	U	N/A	N/A	C		1	47	-	-	608	2029	1217	49.9%
5/1	Circ Ahead	U	N/A	N/A	A		1	35	-	-	700	1714	771	90.8%
5/2	Circ Right	U	N/A	N/A	A		1	35	-	-	178	1714	771	23.1%
6/1	Circ Ahead	U	N/A	N/A	D		1	23	-	-	116	1943	583	19.9%
6/2	Circ Right	U	N/A	N/A	D		1	23	-	-	1116	4178	1253	89.0%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2158	3600	3600	59.9%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	925	1948	1948	47.5%
9/1	A1(M) SB on slip	U	N/A	N/A	-		-	-	-	-	1777	Inf	Inf	0.0%

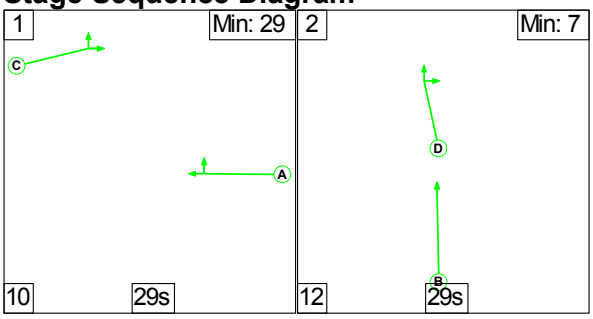
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1483	Inf	Inf	0.0%
11/1	A1(M) NB on slip	U	N/A	N/A	-		-	-	-	-	240	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1664	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10 - PROPOSED	**-**	**-**	**1378**	**474**	**0**	**21.5**	**22.2**	**0.0**	**43.7**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**1378**	**474**	**0**	**21.5**	**22.2**	**0.0**	**43.7**	**-**	**-**	**-**	**-**	
1/1	213	213	213	0	0	0.8	1.9	-	2.7	45.7	3.9	1.9	5.8	
1/2	218	218	218	0	0	0.8	1.3	-	2.1	34.2	3.8	1.3	5.1	
2/1	1092	1092	-	-	-	0.0	0.6	-	0.6	2.1	0.0	0.6	0.6	
2/2	638	638	638	0	0	0.9	4.8	-	5.7	32.2	5.8	2.4	8.3	
3/1	783	783	309	474	0	0.4	2.1	-	2.4	11.2	9.6	2.1	11.6	
3/2	1054	1054	-	-	-	5.3	0.8	-	6.1	20.7	9.1	0.4	9.5	
4/1	558	558	-	-	-	1.4	0.5	-	1.9	12.1	7.0	0.5	7.4	
4/2	608	608	-	-	-	1.5	0.5	-	2.0	12.1	7.6	0.5	8.1	
5/1	700	700	-	-	-	5.0	4.4	-	9.4	48.1	14.6	4.4	19.0	
5/2	178	178	-	-	-	0.7	0.1	-	0.8	16.4	2.7	0.1	2.9	
6/1	116	116	-	-	-	1.1	0.1	-	1.2	38.6	2.6	0.1	2.7	
6/2	1116	1116	-	-	-	3.4	3.8	-	7.2	23.3	11.7	1.9	13.6	
7/1	2158	2158	-	-	-	0.3	0.7	-	1.0	1.7	9.2	0.4	9.5	
8/1	925	925	-	-	-	0.1	0.5	-	0.5	2.0	7.6	0.5	8.1	
9/1	1777	1777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1483	1483	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1664	1664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1	PRC for Signalled Lanes (%):	-0.8	Total Delay for Signalled Lanes (pcuHr):	28.62	Cycle Time (s):	80
	PRC Over All Lanes (%):	-2.1	Total Delay Over All Lanes(pcuHr):	43.71		

Scenario 2: '2033 wDev PM' (FG8: '2033 w Dev PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



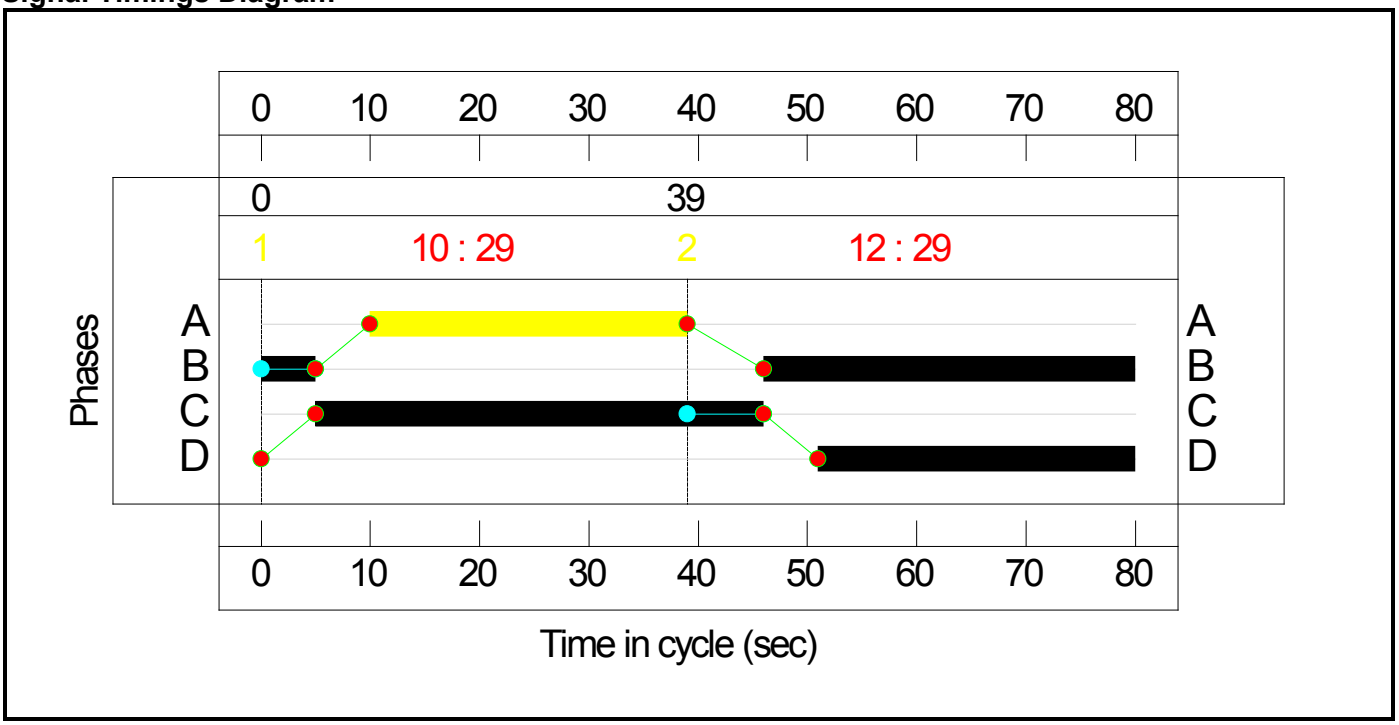
Stage Timings

Stage	1	2
Duration	29	29
Change Point	0	39

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	29	10	39
B	A1(M) NB off slip Ahead A1(m) NB	Traffic	39	46	5
C	Letchworth Gate Ahead Left Letchworth Gate	Traffic	41	5	46
D	Circ Right Ahead Circulatory	Traffic	29	51	0

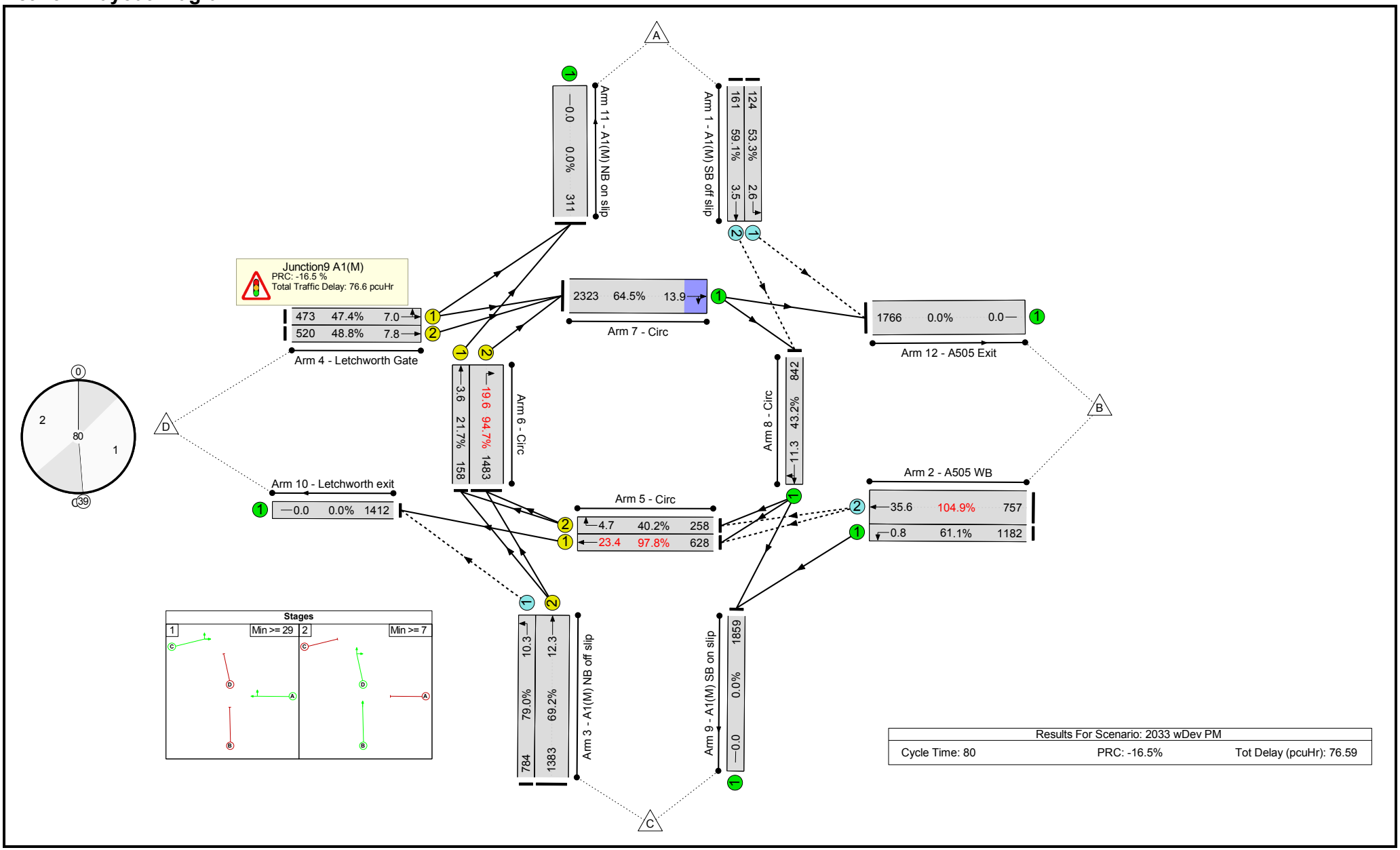
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1(M) NB off slip Ahead	U	B	46	5
4/1	Letchworth Gate Ahead Left	U	C	5	46
4/2	Letchworth Gate Ahead	U	C	5	46
5/1	Circ Ahead	U	A	10	39
5/2	Circ Right	U	A	10	39
6/1	Circ Ahead	U	D	51	0
6/2	Circ Right	U	D	51	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10 - PROPOSED	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**104.9%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**104.9%**
1/1	A1(M) SB off slip Left	O	N/A	N/A	-		-	-	-	-	124	1961	233	53.3%
1/2	A1(M) SB off slip Ahead	O	N/A	N/A	-		-	-	-	-	161	2080	272	59.1%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1182	1936	1936	61.1%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	757	4178	722	104.9%
3/1	A1(M) NB off slip Left	O	N/A	N/A	-		-	-	-	-	784	1936	993	79.0%
3/2	A1(M) NB off slip Ahead	U	N/A	N/A	B		1	39	-	-	1383	4000	2000	69.2%
4/1	Letchworth Gate Ahead Left	U	N/A	N/A	C		1	41	-	-	473	1900	997	47.4%
4/2	Letchworth Gate Ahead	U	N/A	N/A	C		1	41	-	-	520	2029	1065	48.8%
5/1	Circ Ahead	U	N/A	N/A	A		1	29	-	-	651	1714	643	97.8%
5/2	Circ Right	U	N/A	N/A	A		1	29	-	-	271	1714	643	40.2%
6/1	Circ Ahead	U	N/A	N/A	D		1	29	-	-	166	1943	729	21.7%
6/2	Circ Right	U	N/A	N/A	D		1	29	-	-	1488	4178	1567	94.7%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2328	3600	3600	64.5%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	842	1948	1948	43.2%
9/1	A1(M) SB on slip	U	N/A	N/A	-		-	-	-	-	1859	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1435	Inf	Inf	0.0%

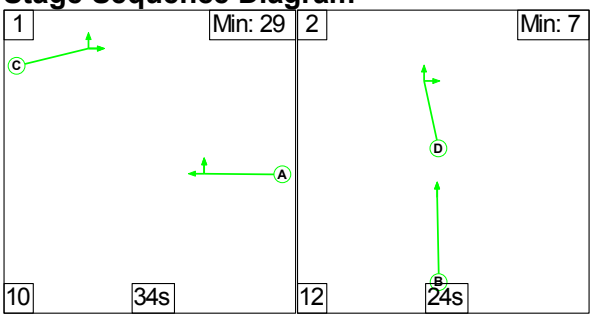
11/1	A1(M) NB on slip	U	N/A	N/A	-		-	-	-	-	319	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1771	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10 - PROPOSED	**-**	**-**	**1249**	**541**	**0**	**26.8**	**49.8**	**0.0**	**76.6**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**1249**	**541**	**0**	**26.8**	**49.8**	**0.0**	**76.6**	**-**	**-**	**-**	**-**	
1/1	124	124	124	0	0	0.5	0.6	-	1.1	30.9	2.0	0.6	2.6	
1/2	161	161	161	0	0	0.8	0.7	-	1.5	33.8	2.8	0.7	3.5	
2/1	1182	1182	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8	
2/2	757	722	722	0	0	3.3	25.1	-	28.4	135.1	23.0	12.6	35.6	
3/1	784	784	243	541	0	0.3	1.8	-	2.2	9.9	8.5	1.8	10.3	
3/2	1383	1383	-	-	-	5.9	1.1	-	7.0	18.2	11.7	0.6	12.3	
4/1	473	473	-	-	-	1.6	0.5	-	2.0	15.4	6.6	0.5	7.0	
4/2	520	520	-	-	-	1.8	0.5	-	2.2	15.4	7.4	0.5	7.8	
5/1	628	628	-	-	-	5.0	9.5	-	14.4	82.5	13.9	9.5	23.4	
5/2	258	258	-	-	-	1.1	0.3	-	1.4	19.5	4.3	0.3	4.7	
6/1	158	158	-	-	-	1.3	0.1	-	1.4	32.7	3.5	0.1	3.6	
6/2	1483	1483	-	-	-	4.6	7.5	-	12.1	29.4	15.9	3.8	19.6	
7/1	2323	2323	-	-	-	0.6	0.9	-	1.5	2.3	13.4	0.5	13.9	
8/1	842	842	-	-	-	0.2	0.4	-	0.5	2.3	10.9	0.4	11.3	
9/1	1859	1859	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1412	1412	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	311	311	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1766	1766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): -8.6 Total Delay for Signalled Lanes (pcuHr): 40.61 Cycle Time (s): 80
PRC Over All Lanes (%): -16.5 Total Delay Over All Lanes(pcuHr): 76.59

Scenario 3: '2040 wDev no School AM' (FG11: '2040 w Dev no School AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



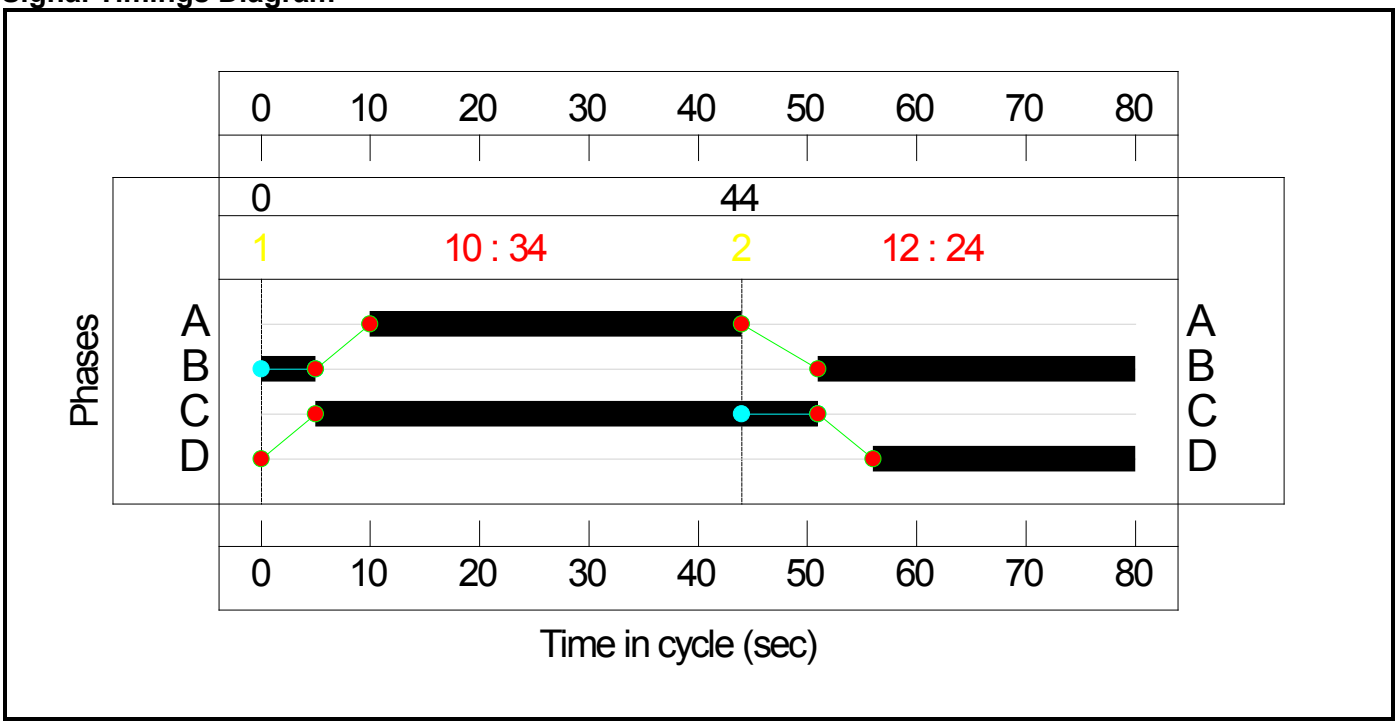
Stage Timings

Stage	1	2
Duration	34	24
Change Point	0	44

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	34	10	44
B	A1(M) NB off slip Ahead A1(m) NB	Traffic	34	51	5
C	Letchworth Gate Ahead Left Letchworth Gate	Traffic	46	5	51
D	Circ Right Ahead Circulatory	Traffic	24	56	0

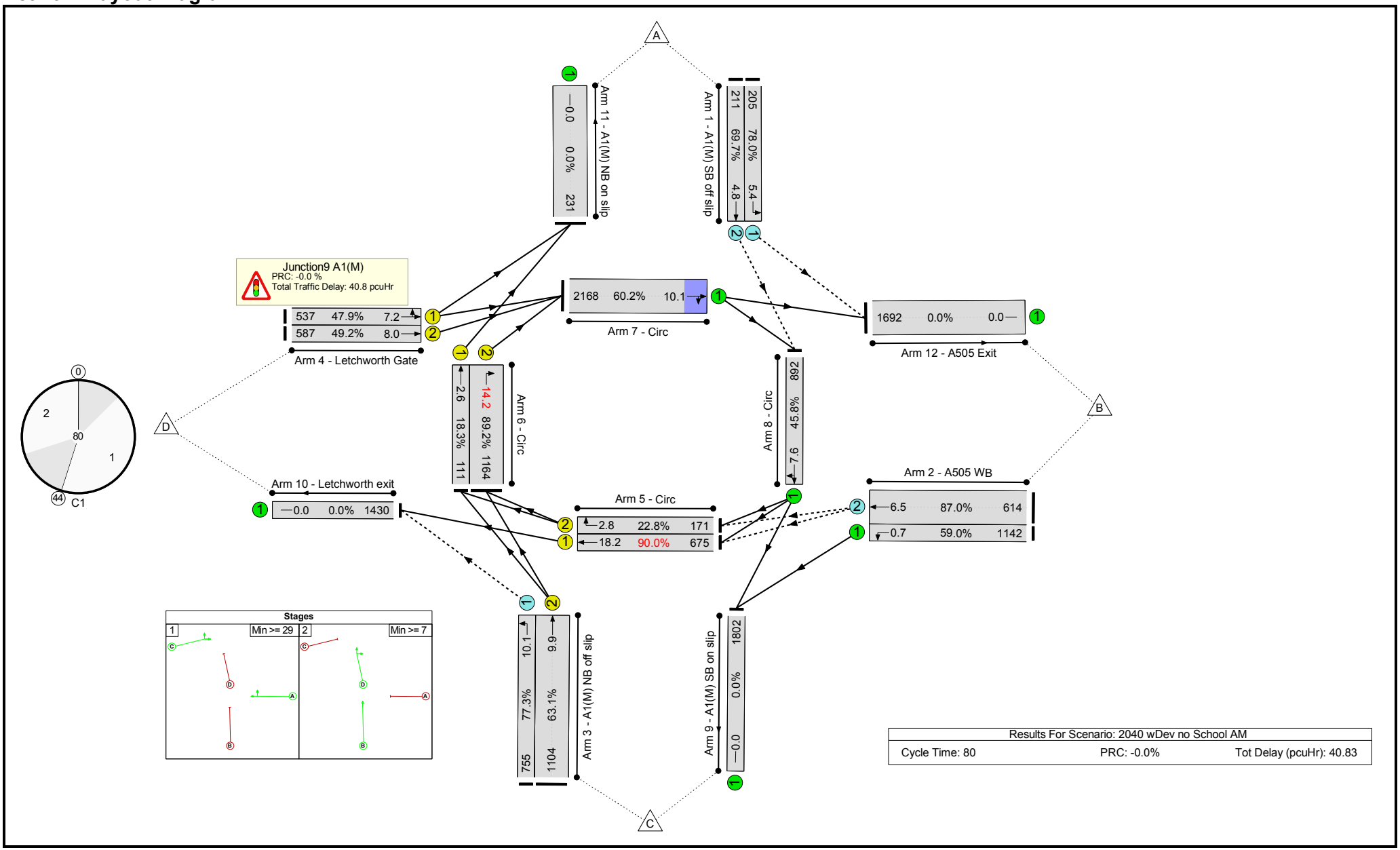
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1(M) NB off slip Ahead	U	B	51	5
4/1	Letchworth Gate Ahead Left	U	C	5	51
4/2	Letchworth Gate Ahead	U	C	5	51
5/1	Circ Ahead	U	A	10	44
5/2	Circ Right	U	A	10	44
6/1	Circ Ahead	U	D	56	0
6/2	Circ Right	U	D	56	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10 - PROPOSED	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.0%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.0%**
1/1	A1(M) SB off slip Left	O	N/A	N/A	-		-	-	-	-	205	1961	263	78.0%
1/2	A1(M) SB off slip Ahead	O	N/A	N/A	-		-	-	-	-	211	2080	303	69.7%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1142	1936	1936	59.0%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	614	4178	705	87.0%
3/1	A1(M) NB off slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	977	77.3%
3/2	A1(M) NB off slip Ahead	U	N/A	N/A	B		1	34	-	-	1104	4000	1750	63.1%
4/1	Letchworth Gate Ahead Left	U	N/A	N/A	C		1	46	-	-	537	1910	1122	47.9%
4/2	Letchworth Gate Ahead	U	N/A	N/A	C		1	46	-	-	587	2029	1192	49.2%
5/1	Circ Ahead	U	N/A	N/A	A		1	34	-	-	675	1714	750	90.0%
5/2	Circ Right	U	N/A	N/A	A		1	34	-	-	171	1714	750	22.8%
6/1	Circ Ahead	U	N/A	N/A	D		1	24	-	-	111	1943	607	18.3%
6/2	Circ Right	U	N/A	N/A	D		1	24	-	-	1164	4178	1306	89.2%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2168	3600	3600	60.2%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	892	1948	1948	45.8%
9/1	A1(M) SB on slip	U	N/A	N/A	-		-	-	-	-	1802	Inf	Inf	0.0%

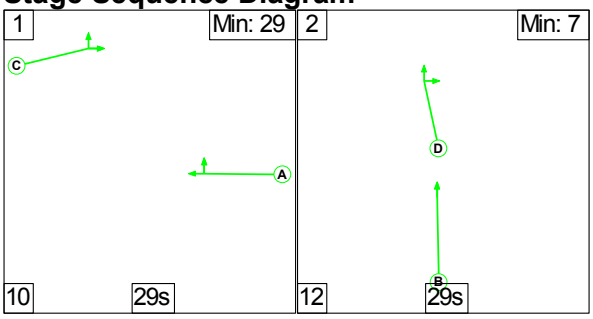
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1430	Inf	Inf	0.0%
11/1	A1(M) NB on slip	U	N/A	N/A	-		-	-	-	-	231	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1692	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10 - PROPOSED	**-**	**-**	**1332**	**453**	**0**	**21.3**	**19.5**	**0.0**	**40.8**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**1332**	**453**	**0**	**21.3**	**19.5**	**0.0**	**40.8**	**-**	**-**	**-**	**-**	
1/1	205	205	205	0	0	0.7	1.7	-	2.4	42.5	3.7	1.7	5.4	
1/2	211	211	211	0	0	0.8	1.1	-	1.9	32.9	3.6	1.1	4.8	
2/1	1142	1142	-	-	-	0.0	0.7	-	0.7	2.3	0.0	0.7	0.7	
2/2	614	614	614	0	0	0.7	3.1	-	3.8	22.3	4.9	1.6	6.5	
3/1	755	755	302	453	0	0.3	1.7	-	1.9	9.2	8.4	1.7	10.1	
3/2	1104	1104	-	-	-	5.4	0.9	-	6.2	20.3	9.5	0.4	9.9	
4/1	537	537	-	-	-	1.4	0.5	-	1.9	12.5	6.7	0.5	7.2	
4/2	587	587	-	-	-	1.6	0.5	-	2.0	12.6	7.5	0.5	8.0	
5/1	675	675	-	-	-	5.0	4.1	-	9.0	48.2	14.1	4.1	18.2	
5/2	171	171	-	-	-	0.7	0.1	-	0.8	17.7	2.7	0.1	2.8	
6/1	111	111	-	-	-	1.0	0.1	-	1.2	37.5	2.4	0.1	2.6	
6/2	1164	1164	-	-	-	3.4	3.9	-	7.3	22.7	12.2	1.9	14.2	
7/1	2168	2168	-	-	-	0.3	0.8	-	1.1	1.8	9.7	0.4	10.1	
8/1	892	892	-	-	-	0.0	0.4	-	0.5	1.9	7.2	0.4	7.6	
9/1	1802	1802	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1430	1430	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	231	231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1692	1692	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1	PRC for Signalled Lanes (%):	-0.0	Total Delay for Signalled Lanes (pcuHr):	28.50	Cycle Time (s):	80
	PRC Over All Lanes (%):	-0.0	Total Delay Over All Lanes(pcuHr):	40.83		

Scenario 4: '2040 wDev no School PM' (FG12: '2040 wDev no School PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



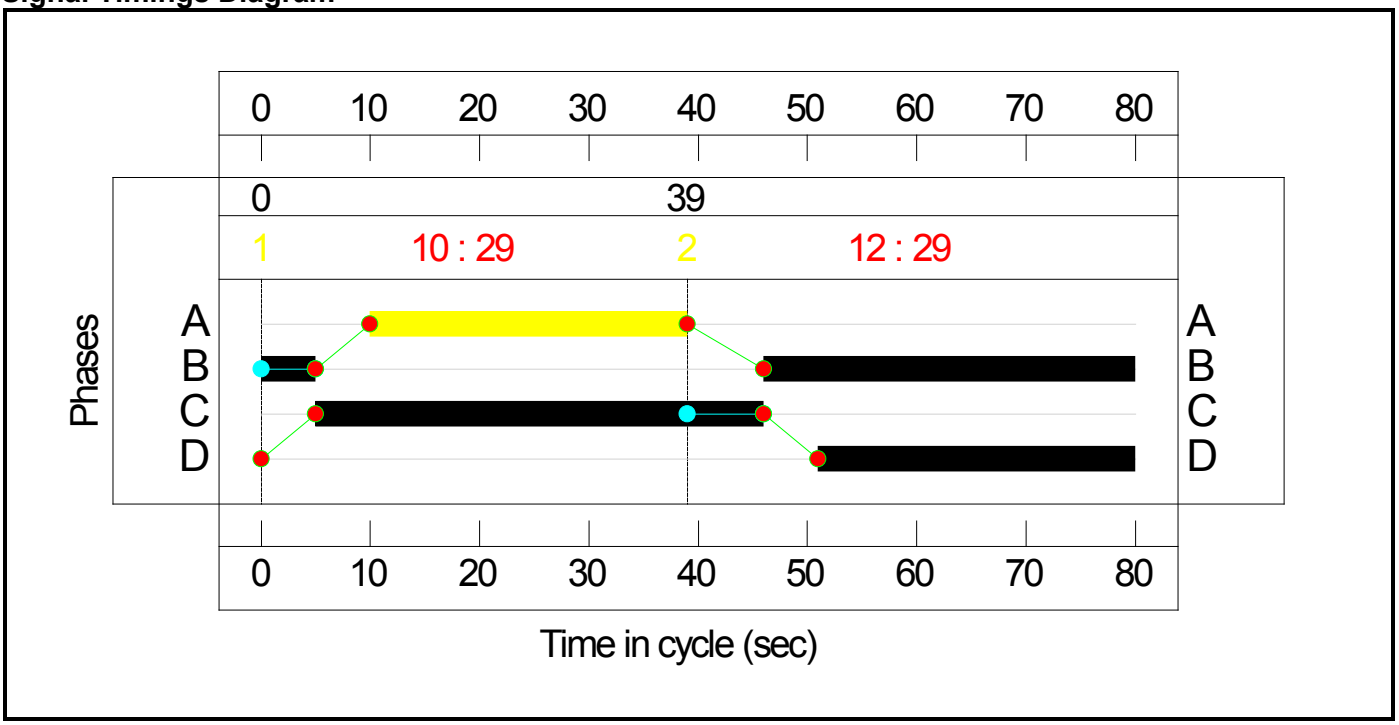
Stage Timings

Stage	1	2
Duration	29	29
Change Point	0	39

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	29	10	39
B	A1(M) NB off slip Ahead A1(m) NB	Traffic	39	46	5
C	Letchworth Gate Ahead Left Letchworth Gate	Traffic	41	5	46
D	Circ Right Ahead Circulatory	Traffic	29	51	0

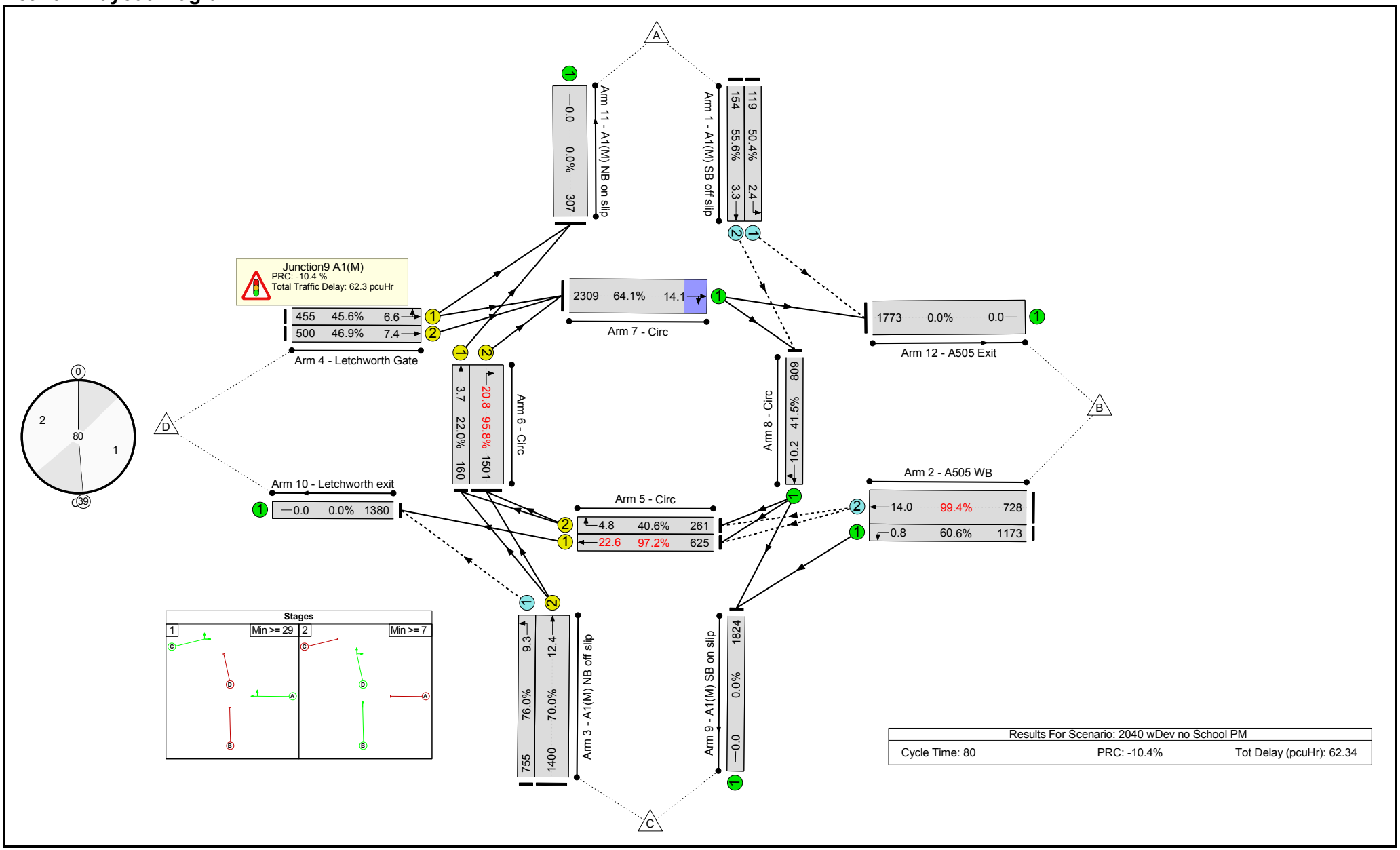
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1(M) NB off slip Ahead	U	B	46	5
4/1	Letchworth Gate Ahead Left	U	C	5	46
4/2	Letchworth Gate Ahead	U	C	5	46
5/1	Circ Ahead	U	A	10	39
5/2	Circ Right	U	A	10	39
6/1	Circ Ahead	U	D	51	0
6/2	Circ Right	U	D	51	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10 - PROPOSED	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.4%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.4%**
1/1	A1(M) SB off slip Left	O	N/A	N/A	-		-	-	-	-	119	1961	236	50.4%
1/2	A1(M) SB off slip Ahead	O	N/A	N/A	-		-	-	-	-	154	2080	277	55.6%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1173	1936	1936	60.6%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	728	4178	733	99.4%
3/1	A1(M) NB off slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	994	76.0%
3/2	A1(M) NB off slip Ahead	U	N/A	N/A	B		1	39	-	-	1400	4000	2000	70.0%
4/1	Letchworth Gate Ahead Left	U	N/A	N/A	C		1	41	-	-	455	1900	997	45.6%
4/2	Letchworth Gate Ahead	U	N/A	N/A	C		1	41	-	-	500	2029	1065	46.9%
5/1	Circ Ahead	U	N/A	N/A	A		1	29	-	-	625	1714	643	97.2%
5/2	Circ Right	U	N/A	N/A	A		1	29	-	-	261	1714	643	40.6%
6/1	Circ Ahead	U	N/A	N/A	D		1	29	-	-	160	1943	729	22.0%
6/2	Circ Right	U	N/A	N/A	D		1	29	-	-	1501	4178	1567	95.8%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2309	3600	3600	64.1%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	809	1948	1948	41.5%
9/1	A1(M) SB on slip	U	N/A	N/A	-		-	-	-	-	1824	Inf	Inf	0.0%

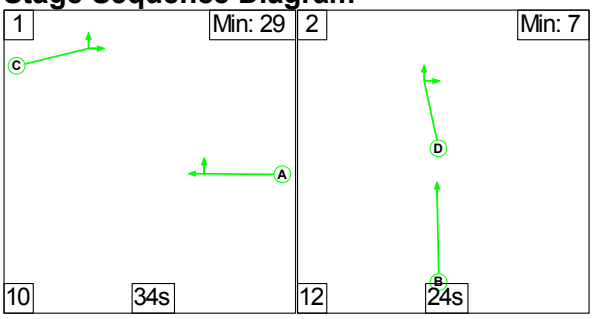
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1380	Inf	Inf	0.0%
11/1	A1(M) NB on slip	U	N/A	N/A	-		-	-	-	-	307	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1773	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10 - PROPOSED	**-**	**-**	**1245**	**511**	**0**	**25.0**	**37.4**	**0.0**	**62.3**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**1245**	**511**	**0**	**25.0**	**37.4**	**0.0**	**62.3**	**-**	**-**	**-**	**-**	
1/1	119	119	119	0	0	0.5	0.5	-	1.0	29.8	1.9	0.5	2.4	
1/2	154	154	154	0	0	0.8	0.6	-	1.4	32.5	2.7	0.6	3.3	
2/1	1173	1173	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8	
2/2	728	728	728	0	0	1.5	12.4	-	13.8	68.3	7.8	6.2	14.0	
3/1	755	755	244	511	0	0.2	1.6	-	1.8	8.5	7.8	1.6	9.3	
3/2	1400	1400	-	-	-	6.0	1.2	-	7.1	18.4	11.9	0.6	12.4	
4/1	455	455	-	-	-	1.5	0.4	-	1.9	15.2	6.2	0.4	6.6	
4/2	500	500	-	-	-	1.7	0.4	-	2.1	15.2	6.9	0.4	7.4	
5/1	625	625	-	-	-	5.0	8.8	-	13.9	79.8	13.8	8.8	22.6	
5/2	261	261	-	-	-	1.1	0.3	-	1.4	19.9	4.4	0.3	4.8	
6/1	160	160	-	-	-	1.3	0.1	-	1.5	32.8	3.5	0.1	3.7	
6/2	1501	1501	-	-	-	4.7	9.0	-	13.7	32.8	16.3	4.5	20.8	
7/1	2309	2309	-	-	-	0.6	0.9	-	1.5	2.4	13.7	0.4	14.1	
8/1	809	809	-	-	-	0.1	0.4	-	0.5	2.2	9.8	0.4	10.2	
9/1	1824	1824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1380	1380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	307	307	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1773	1773	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1	PRC for Signalled Lanes (%):	-8.0	Total Delay for Signalled Lanes (pcuHr):	41.59	Cycle Time (s):	80	
	PRC Over All Lanes (%):	-10.4	Total Delay Over All Lanes(pcuHr):	62.34			

Scenario 5: '2040 wDev w School AM' (FG13: '2040 w Dev with School AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



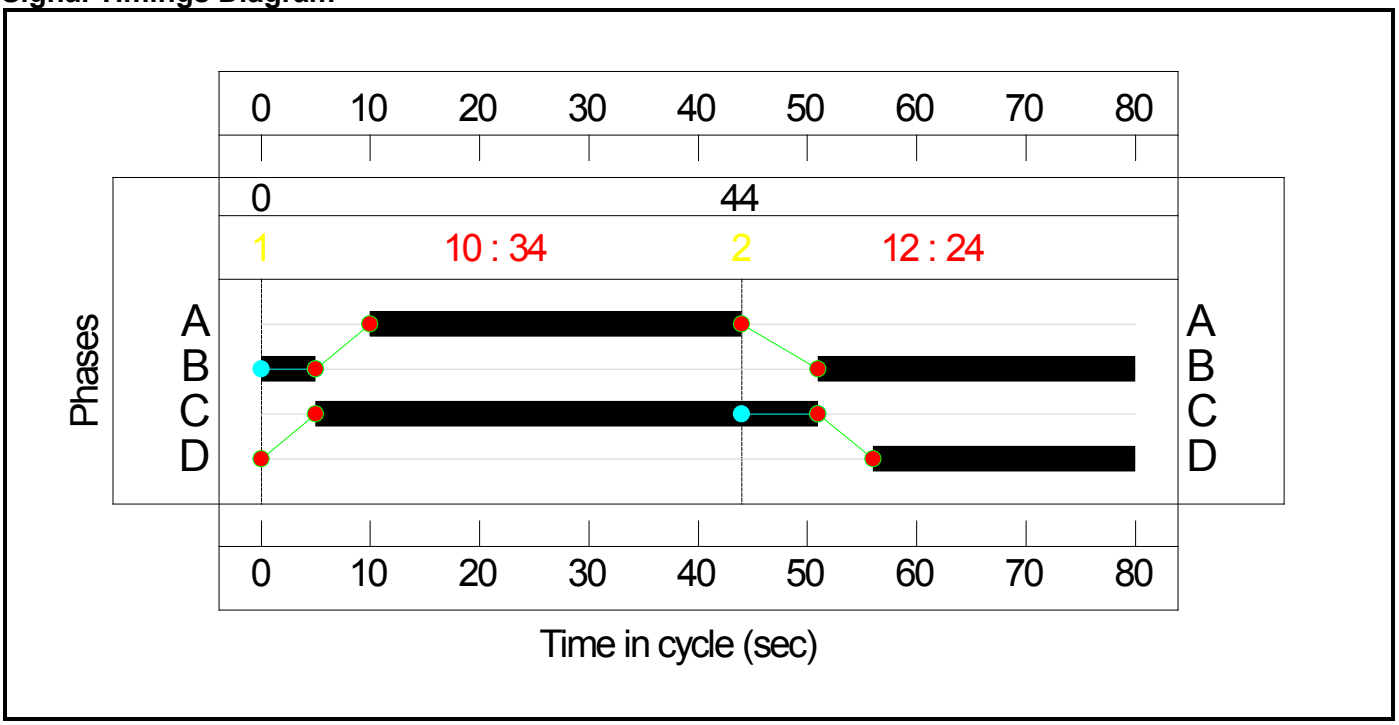
Stage Timings

Stage	1	2
Duration	34	24
Change Point	0	44

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	34	10	44
B	A1(M) NB off slip Ahead A1(m) NB	Traffic	34	51	5
C	Letchworth Gate Ahead Left Letchworth Gate	Traffic	46	5	51
D	Circ Right Ahead Circulatory	Traffic	24	56	0

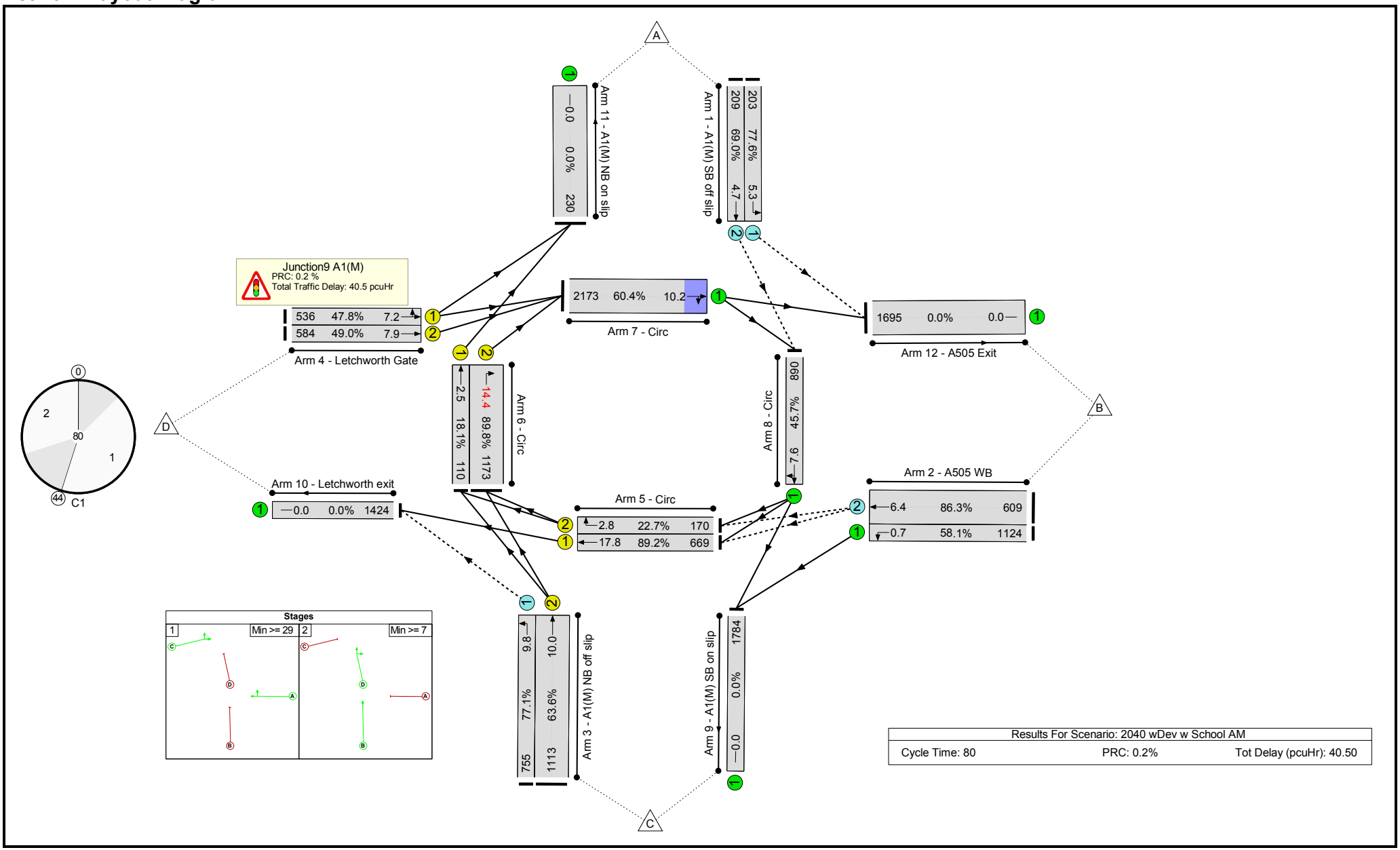
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1(M) NB off slip Ahead	U	B	51	5
4/1	Letchworth Gate Ahead Left	U	C	5	51
4/2	Letchworth Gate Ahead	U	C	5	51
5/1	Circ Ahead	U	A	10	44
5/2	Circ Right	U	A	10	44
6/1	Circ Ahead	U	D	56	0
6/2	Circ Right	U	D	56	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10 - PROPOSED	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**89.8%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**89.8%**
1/1	A1(M) SB off slip Left	O	N/A	N/A	-		-	-	-	-	203	1961	262	77.6%
1/2	A1(M) SB off slip Ahead	O	N/A	N/A	-		-	-	-	-	209	2080	303	69.0%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1124	1936	1936	58.1%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	609	4178	706	86.3%
3/1	A1(M) NB off slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	979	77.1%
3/2	A1(M) NB off slip Ahead	U	N/A	N/A	B		1	34	-	-	1113	4000	1750	63.6%
4/1	Letchworth Gate Ahead Left	U	N/A	N/A	C		1	46	-	-	536	1910	1122	47.8%
4/2	Letchworth Gate Ahead	U	N/A	N/A	C		1	46	-	-	584	2029	1192	49.0%
5/1	Circ Ahead	U	N/A	N/A	A		1	34	-	-	669	1714	750	89.2%
5/2	Circ Right	U	N/A	N/A	A		1	34	-	-	170	1714	750	22.7%
6/1	Circ Ahead	U	N/A	N/A	D		1	24	-	-	110	1943	607	18.1%
6/2	Circ Right	U	N/A	N/A	D		1	24	-	-	1173	4178	1306	89.8%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2173	3600	3600	60.4%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	890	1948	1948	45.7%
9/1	A1(M) SB on slip	U	N/A	N/A	-		-	-	-	-	1784	Inf	Inf	0.0%

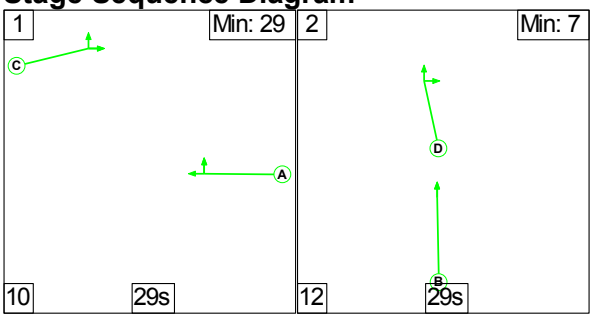
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1424	Inf	Inf	0.0%
11/1	A1(M) NB on slip	U	N/A	N/A	-		-	-	-	-	230	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1695	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10 - PROPOSED	**-**	**-**	**1325**	**451**	**0**	**21.3**	**19.2**	**0.0**	**40.5**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**1325**	**451**	**0**	**21.3**	**19.2**	**0.0**	**40.5**	**-**	**-**	**-**	**-**	
1/1	203	203	203	0	0	0.7	1.6	-	2.4	42.3	3.7	1.6	5.3	
1/2	209	209	209	0	0	0.8	1.1	-	1.9	32.4	3.6	1.1	4.7	
2/1	1124	1124	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7	
2/2	609	609	609	0	0	0.6	3.0	-	3.6	21.2	4.9	1.5	6.4	
3/1	755	755	304	451	0	0.3	1.7	-	1.9	9.1	8.2	1.7	9.8	
3/2	1113	1113	-	-	-	5.4	0.9	-	6.3	20.4	9.6	0.4	10.0	
4/1	536	536	-	-	-	1.4	0.5	-	1.9	12.5	6.7	0.5	7.2	
4/2	584	584	-	-	-	1.6	0.5	-	2.0	12.5	7.5	0.5	7.9	
5/1	669	669	-	-	-	4.9	3.8	-	8.7	46.8	14.0	3.8	17.8	
5/2	170	170	-	-	-	0.7	0.1	-	0.8	17.7	2.6	0.1	2.8	
6/1	110	110	-	-	-	1.0	0.1	-	1.1	37.5	2.4	0.1	2.5	
6/2	1173	1173	-	-	-	3.5	4.2	-	7.6	23.4	12.3	2.1	14.4	
7/1	2173	2173	-	-	-	0.3	0.8	-	1.1	1.8	9.8	0.4	10.2	
8/1	890	890	-	-	-	0.0	0.4	-	0.5	1.9	7.2	0.4	7.6	
9/1	1784	1784	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1424	1424	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	230	230	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1695	1695	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1	PRC for Signalled Lanes (%):	0.2	Total Delay for Signalled Lanes (pcuHr):	28.51	Cycle Time (s):	80
	PRC Over All Lanes (%):	0.2	Total Delay Over All Lanes(pcuHr):	40.50		

Scenario 6: '2040 wDev w School PM' (FG14: '2040 wDev with School PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



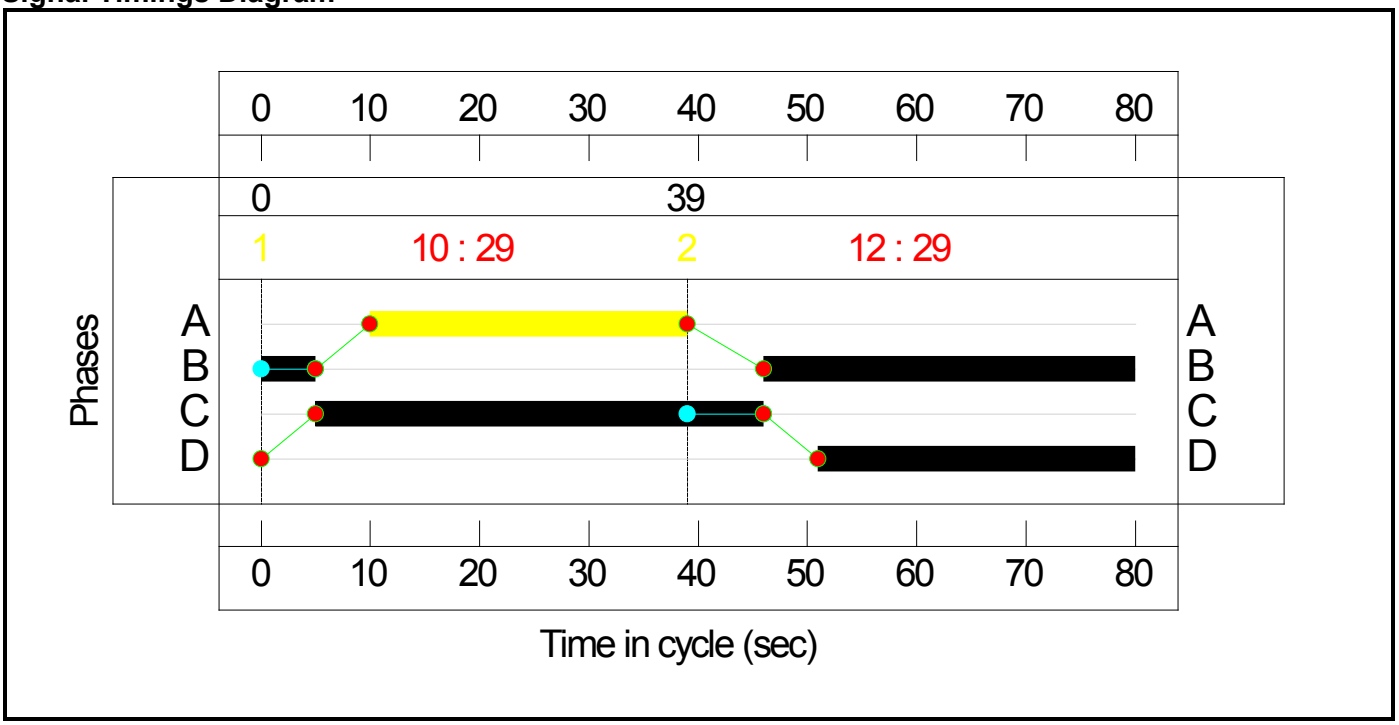
Stage Timings

Stage	1	2
Duration	29	29
Change Point	0	39

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	29	10	39
B	A1(M) NB off slip Ahead A1(m) NB	Traffic	39	46	5
C	Letchworth Gate Ahead Left Letchworth Gate	Traffic	41	5	46
D	Circ Right Ahead Circulatory	Traffic	29	51	0

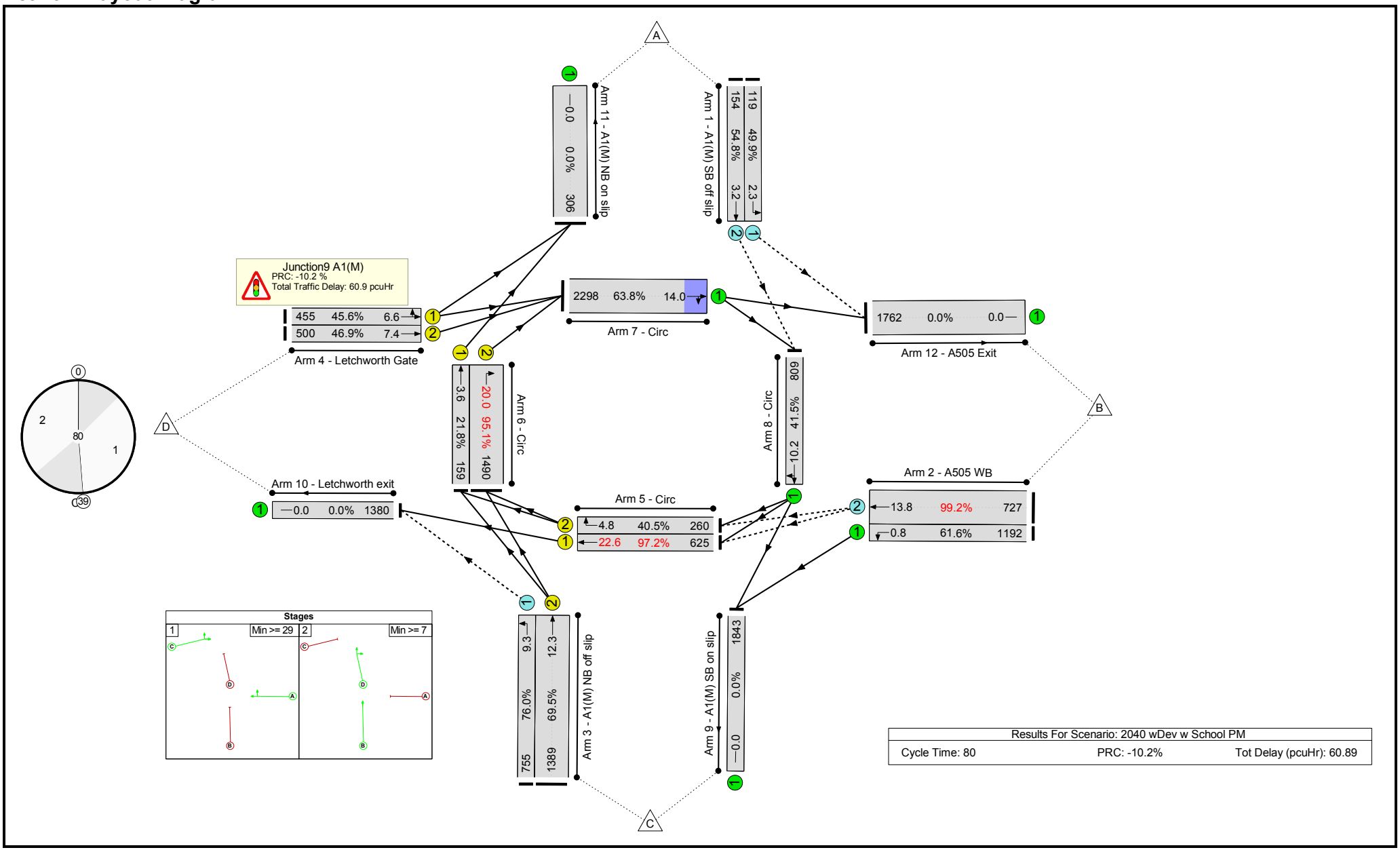
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1(M) NB off slip Ahead	U	B	46	5
4/1	Letchworth Gate Ahead Left	U	C	5	46
4/2	Letchworth Gate Ahead	U	C	5	46
5/1	Circ Ahead	U	A	10	39
5/2	Circ Right	U	A	10	39
6/1	Circ Ahead	U	D	51	0
6/2	Circ Right	U	D	51	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10 - PROPOSED	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.2%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.2%**
1/1	A1(M) SB off slip Left	O	N/A	N/A	-		-	-	-	-	119	1961	239	49.9%
1/2	A1(M) SB off slip Ahead	O	N/A	N/A	-		-	-	-	-	154	2080	281	54.8%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1192	1936	1936	61.6%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	727	4178	733	99.2%
3/1	A1(M) NB off slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	994	76.0%
3/2	A1(M) NB off slip Ahead	U	N/A	N/A	B		1	39	-	-	1389	4000	2000	69.5%
4/1	Letchworth Gate Ahead Left	U	N/A	N/A	C		1	41	-	-	455	1900	997	45.6%
4/2	Letchworth Gate Ahead	U	N/A	N/A	C		1	41	-	-	500	2029	1065	46.9%
5/1	Circ Ahead	U	N/A	N/A	A		1	29	-	-	625	1714	643	97.2%
5/2	Circ Right	U	N/A	N/A	A		1	29	-	-	260	1714	643	40.5%
6/1	Circ Ahead	U	N/A	N/A	D		1	29	-	-	159	1943	729	21.8%
6/2	Circ Right	U	N/A	N/A	D		1	29	-	-	1490	4178	1567	95.1%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2298	3600	3600	63.8%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	809	1948	1948	41.5%
9/1	A1(M) SB on slip	U	N/A	N/A	-		-	-	-	-	1843	Inf	Inf	0.0%

10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1380	Inf	Inf	0.0%
11/1	A1(M) NB on slip	U	N/A	N/A	-		-	-	-	-	306	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1762	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10 - PROPOSED	**-**	**-**	**1244**	**511**	**0**	**24.8**	**36.1**	**0.0**	**60.9**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**1244**	**511**	**0**	**24.8**	**36.1**	**0.0**	**60.9**	**-**	**-**	**-**	**-**	
1/1	119	119	119	0	0	0.5	0.5	-	1.0	29.0	1.9	0.5	2.3	
1/2	154	154	154	0	0	0.7	0.6	-	1.3	31.4	2.6	0.6	3.2	
2/1	1192	1192	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8	
2/2	727	727	727	0	0	1.5	12.1	-	13.6	67.2	7.8	6.1	13.8	
3/1	755	755	244	511	0	0.2	1.6	-	1.8	8.5	7.8	1.6	9.3	
3/2	1389	1389	-	-	-	5.9	1.1	-	7.0	18.3	11.8	0.6	12.3	
4/1	455	455	-	-	-	1.5	0.4	-	1.9	15.2	6.2	0.4	6.6	
4/2	500	500	-	-	-	1.7	0.4	-	2.1	15.2	6.9	0.4	7.4	
5/1	625	625	-	-	-	5.0	8.8	-	13.8	79.6	13.8	8.8	22.6	
5/2	260	260	-	-	-	1.1	0.3	-	1.4	20.0	4.4	0.3	4.8	
6/1	159	159	-	-	-	1.3	0.1	-	1.4	32.8	3.5	0.1	3.6	
6/2	1490	1490	-	-	-	4.7	8.0	-	12.7	30.6	15.9	4.0	20.0	
7/1	2298	2298	-	-	-	0.6	0.9	-	1.5	2.3	13.5	0.4	14.0	
8/1	809	809	-	-	-	0.1	0.4	-	0.5	2.2	9.9	0.4	10.2	
9/1	1843	1843	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1380	1380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	306	306	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1762	1762	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1	PRC for Signalled Lanes (%):	-8.0	Total Delay for Signalled Lanes (pcuHr):	40.45	Cycle Time (s):	80
	PRC Over All Lanes (%):	-10.2	Total Delay Over All Lanes(pcuHr):	60.89		

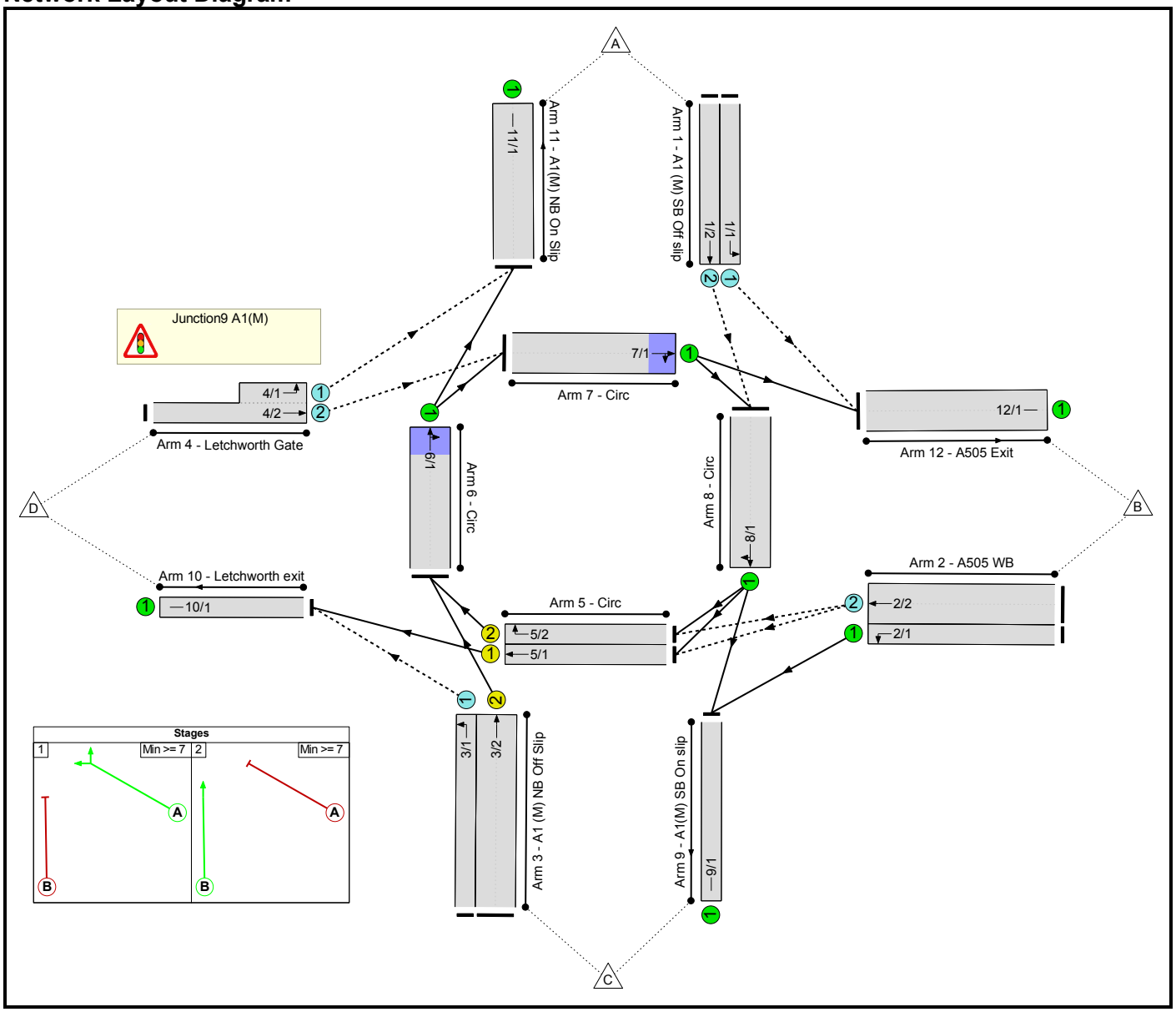
A1 Junction 9 Reassignment Assumptions

Detailed Input Data And Results

User and Project Details

Project:	**Growing Baldock**
Title:	**A1(m) Junction 10**
Location:	Baldock, SG6 2EA
Client:	Urban & Civic
Site Ref(s):	J13
Design Layout Ref:	-
Date Started:	01.08.2025
Date Completed:	-
Checked By:	NL/ZT
Additional detail:	
File name:	J13_A1m.A505 Rdbt_existing_SensitivityTest.lsg3x
Author:	Jay James
Company:	ITP by Haskoning
Address:	
Linsig Version:	3, 3, 0, 6

Network Layout Diagram



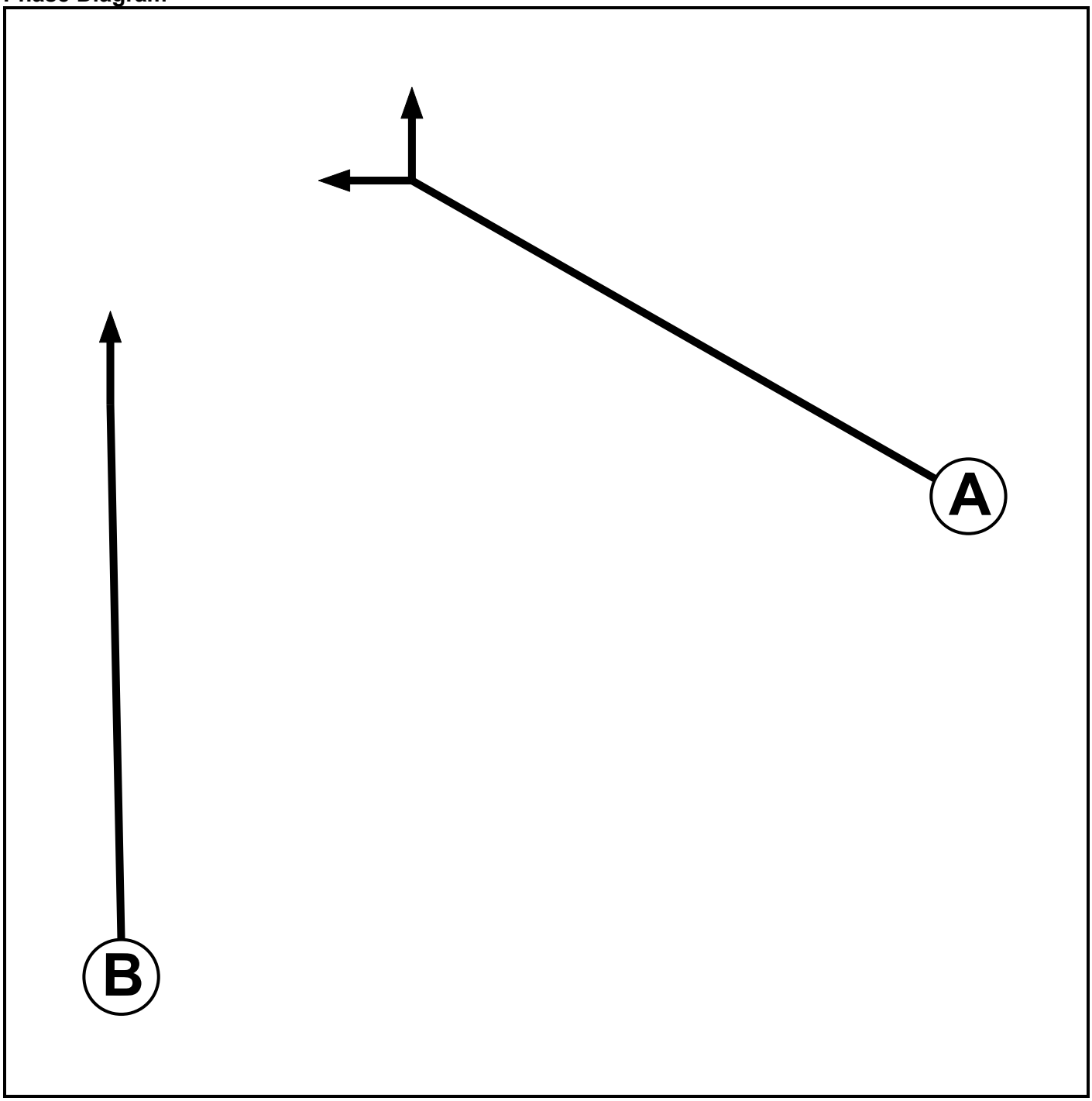
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2040 wDev no School AM	2040 w Dev no School AM	Base Network Control Plan 1	08:00 - 09:00	72	-11.8	57.51
2	2040 wDev no School PM	2040 wDev no School PM	Base Network Control Plan 1	17:00 - 18:00	72	-19.3	67.29
3	2040 wDev w School AM	2040 w Dev with School AM	Base Network Control Plan 1	08:00 - 09:00	72	-11.5	70.29
4	2040 wDev w School PM	2040 wDev with School PM	Base Network Control Plan 1	17:00 - 18:00	72	-19.0	65.93

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1	Gen		Stage Stream 1	2	2	Junction9 A1(M)	

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7

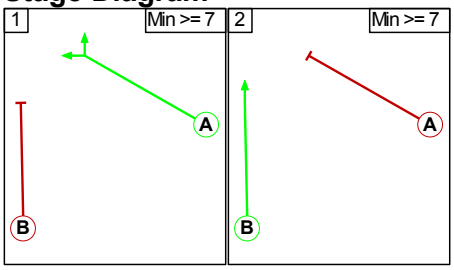
Phase Intergreens Matrix

Terminating Phase	Starting Phase		
		A	B
	A		5
	B	7	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		5
	2	7	

Lane Input Data

Junction: Junction9 A1(M)

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A1 (M) SB Off slip)	O		2	3	60.0	Geom	-	3.46	0.00	Y	Arm 12 Left	Inf
1/2 (A1 (M) SB Off slip)	O		2	3	60.0	Geom	-	3.25	0.00	N	Arm 8 Ahead	Inf
2/1 (A505 WB)	U		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 9 Left	100.00
2/2 (A505 WB)	O		2	3	60.0	User	4178	-	-	-	-	-
3/1 (A1 (M) NB Off Slip)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 10 Left	100.00
3/2 (A1 (M) NB Off Slip)	U	B	2	3	60.0	User	4000	-	-	-	-	-
4/1 (Letchworth Gate)	O		2	3	5.0	Geom	-	3.25	0.00	Y	Arm 11 Left	26.00
4/2 (Letchworth Gate)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 7 Ahead	40.00
5/1 (Circ)	U	A	2	3	20.5	User	1714	-	-	-	-	-
5/2 (Circ)	U	A	2	3	20.5	User	1714	-	-	-	-	-
6/1 (Circ)	U		2	3	14.3	User	3600	-	-	-	-	-
7/1 (Circ)	U		2	3	16.7	User	3600	-	-	-	-	-
8/1 (Circ)	U		2	3	14.3	User	3600	-	-	-	-	-
9/1 (A1(M) SB On slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1 (Letchworth exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (A1(M) NB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1 (A505 Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: Junction9 A1(M)

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (A1 (M) SB Off slip)	12/1 (Left)	715	0	7/1	0.22	All	-	-	-	-	-
1/2 (A1 (M) SB Off slip)	8/1 (Ahead)	1000	0	7/1	0.40	All	-	-	-	-	-
2/2 (A505 WB)	5/1 (Ahead)	1000	0	8/1	0.33	All	-	-	-	-	-
	5/2 (Ahead)	1000	0	8/1	0.33	All					
3/1 (A1 (M) NB Off Slip)	10/1 (Left)	1200	0	5/1	0.33	All	-	-	-	-	-
4/1 (Letchworth Gate)	11/1 (Left)	1439	0	6/1	1.09	All	-	-	-	-	-
4/2 (Letchworth Gate)	7/1 (Ahead)	1350	0	6/1	0.22	All	-	-	-	-	-

Lane Connector Input Data

Junction: Junction9 A1(M)				
Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	12/1	Internal	5	35
1/2	8/1	Internal	5	35
2/1	9/1	Internal	26	35
2/2	5/1	Internal	9	35
2/2	5/2	Internal	9	35
3/1	10/1	Internal	26	35
3/2	6/1	Internal	6	35
4/1	11/1	Internal	5	35
4/2	7/1	Internal	7	35
5/1	10/1	Internal	26	35
5/2	6/1	Internal	6	35
6/1	7/1	Internal	7	35
6/1	11/1	Internal	26	35
7/1	8/1	Internal	6	35
7/1	12/1	Internal	26	35
8/1	5/1	Internal	9	35
8/1	5/2	Internal	9	35
8/1	9/1	Internal	26	35

Scenario 1: '2040 wDev no School AM' (FG1: '2040 w Dev no School AM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2040 wDev no School PM' (FG2: '2040 wDev no School PM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2040 wDev w School AM' (FG3: '2040 w Dev with School AM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2040 wDev w School PM' (FG4: '2040 wDev with School PM', Plan 1: 'Base Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1 (M) SB Off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1 (M) SB Off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1 (M) NB Off Slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1 (M) NB Off Slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.25	0.00	Y	Arm 11 Left	26.00	100.0 %	1834	1834
4/2 (Letchworth Gate)	3.50	0.00	Y	Arm 7 Ahead	40.00	100.0 %	1894	1894
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
9/1 (A1(M) SB On slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB On Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2040 w Dev no School AM'	08:00	09:00	01:00	
2: '2040 wDev no School PM'	17:00	18:00	01:00	
3: '2040 w Dev with School AM'	08:00	09:00	01:00	
4: '2040 wDev with School PM'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2040 w Dev no School AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	205	2	244	453
	B	108	61	1142	492	1803
	C	1	1102	1	755	1859
	D	169	396	657	23	1245
	Tot.	280	1764	1802	1514	5360

FG2: '2040 wDev no School PM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	196	315
	B	158	103	1173	511	1945
	C	2	1398	0	755	2155
	D	230	214	651	4	1099
	Tot.	390	1834	1824	1466	5514

FG3: '2040 w Dev with School AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	203	2	244	451
	B	107	61	1124	487	1779
	C	1	1111	1	755	1868
	D	169	392	657	23	1241
	Tot.	279	1767	1784	1509	5339

FG4: '2040 wDev with School PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	196	315
	B	157	103	1192	510	1962
	C	2	1387	0	755	2144
	D	230	214	651	4	1099
	Tot.	389	1823	1843	1465	5520

Scenario 1: '2040 wDev no School AM' (FG1: '2040 w Dev no School AM', Plan 1: 'Base Network Control Plan 1')
Traffic Flows, Actual
Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	205	2	244	453
	B	108	61	1142	492	1803
	C	1	1102	1	755	1859
	D	169	396	657	23	1245
	Tot.	280	1764	1802	1514	5360

Traffic Flows, Difference
Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 2: '2040 wDev no School PM' (FG2: '2040 wDev no School PM', Plan 1: 'Base Network Control Plan 1')
Traffic Flows, Actual
Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	196	315
	B	158	103	1173	511	1945
	C	2	1398	0	755	2155
	D	230	214	651	4	1099
	Tot.	390	1834	1824	1466	5514

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 3: '2040 wDev w School AM' (FG3: '2040 w Dev with School AM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	203	2	244	451
	B	107	61	1124	487	1779
	C	1	1111	1	755	1868
	D	169	392	657	23	1241
	Tot.	279	1767	1784	1509	5339

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 4: '2040 wDev w School PM' (FG4: '2040 wDev with School PM', Plan 1: 'Base Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	196	315
	B	157	103	1192	510	1962
	C	2	1387	0	755	2144
	D	230	214	651	4	1099
	Tot.	389	1823	1843	1465	5520

Traffic Flows, Difference

Difference :

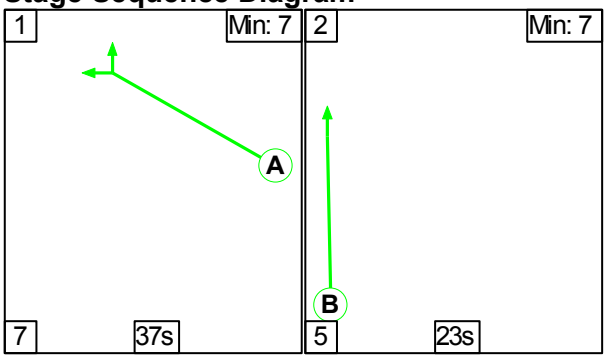
		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Traffic Lane Flows

Lane	Scenario 1: 2040 wDev no School AM	Scenario 2: 2040 wDev no School PM	Scenario 3: 2040 wDev w School AM	Scenario 4: 2040 wDev w School PM
Junction: Junction9 A1(M)				
1/1	205	119	203	119
1/2	248	196	248	196
2/1	1142	1173	1124	1192
2/2	661	772	655	770
3/1	755	755	755	755
3/2	1104	1400	1113	1389
4/1 (short)	169	230	169	230
4/2 (with short)	1245(In) 1076(Out)	1099(In) 869(Out)	1241(In) 1072(Out)	1099(In) 869(Out)
5/1	759	711	754	710
5/2	171	261	170	260
6/1	1275	1661	1283	1649
7/1	2240	2370	2245	2359
8/1	929	851	929	851
9/1	1802	1824	1784	1843
10/1	1514	1466	1509	1465
11/1	280	390	279	389
12/1	1764	1834	1767	1823

Scenario 1: '2040 wDev no School AM' (FG1: '2040 w Dev no School AM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



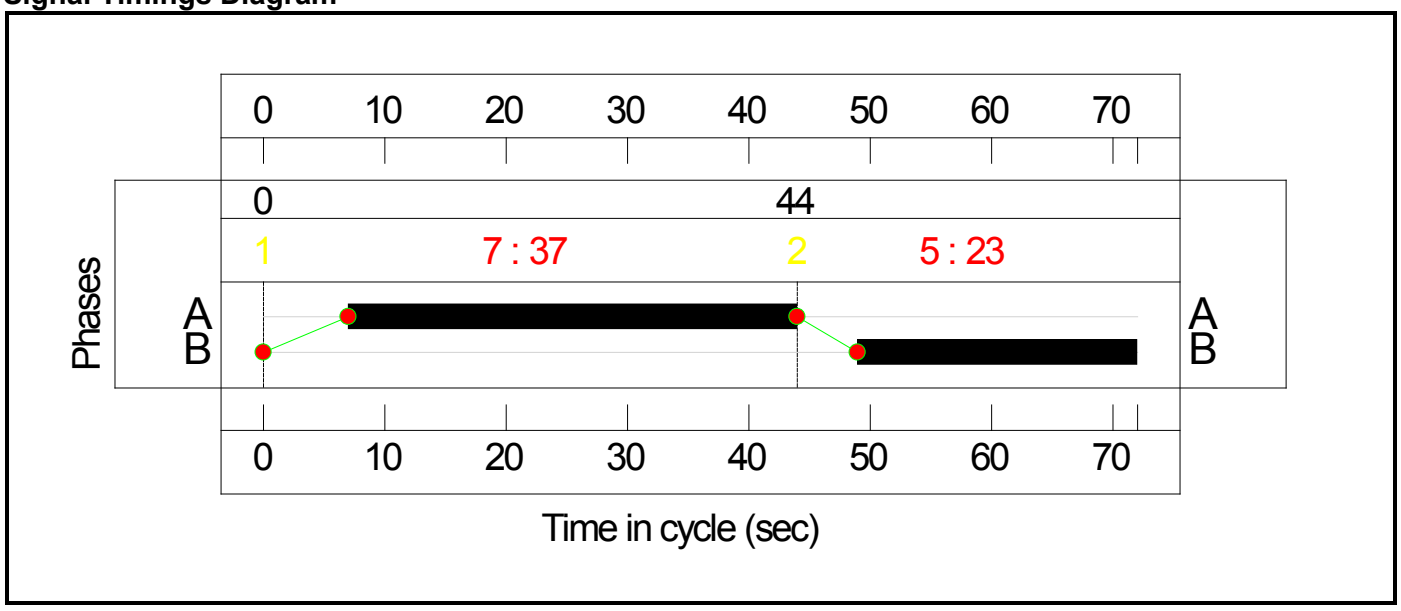
Stage Timings

Stage	1	2
Duration	37	23
Change Point	0	44

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	37	7	44
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	23	49	0

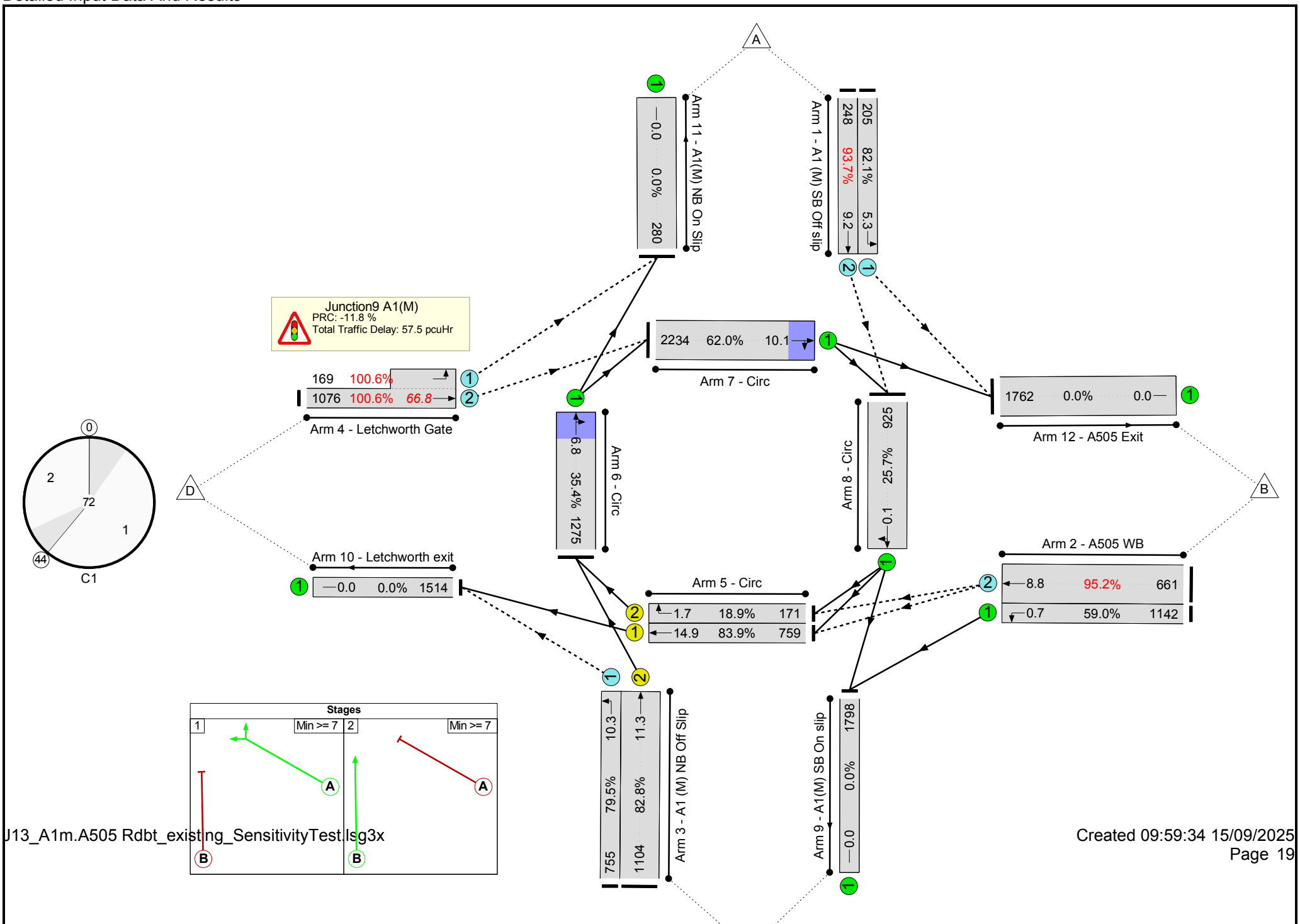
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	49	0
5/1	Circ Ahead	U	A	7	44
5/2	Circ Right	U	A	7	44

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -11.8 %
Total Traffic Delay: 57.5 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 280
Arm 1 - A1 (M) SB Off slip
248 93.7% 9.2
205 82.1% 5.3
2234 62.0% 10.1
Arm 7 - Circ
169 100.6%
1076 100.6% 66.8
Arm 4 - Letchworth Gate
1762 0.0% 0.0
Arm 12 - A505 Exit
6.8 35.4% 1275
Arm 6 - Circ
Arm 8 - Circ
925 25.7% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1514
Arm 5 - Circ
1.7 18.9% 171
14.9 83.9% 759
Arm 2 - A505 WB
8.8 95.2% 661
0.7 59.0% 1142
Arm 3 - A1 (M) NB Off Slip
10.3 79.5% 755
11.3 82.8% 1104
Arm 9 - A1(M) SB On slip
1798 0.0% 0.0
0
2
72
1
44
C1
Stages
1
Min >= 7
2
Min >= 7
A
B

Network Results

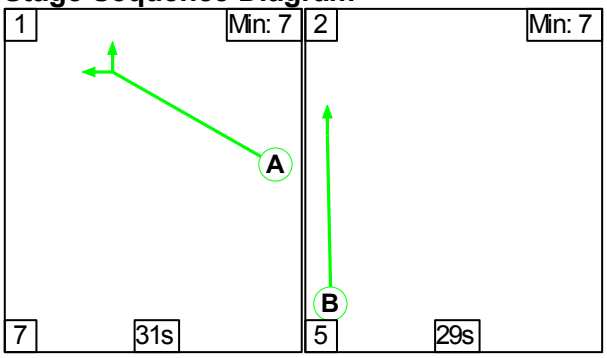
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**100.6%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**100.6%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	205	1961	250	82.1%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	248	2080	265	93.7%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1142	1936	1936	59.0%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	661	4178	695	95.2%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	950	79.5%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	23	-	-	1104	4000	1333	82.8%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	1245	1894:1834	1069+168	100.6 : 100.6%
5/1	Circ Ahead	U	N/A	N/A	A		1	37	-	-	759	1714	905	83.9%
5/2	Circ Right	U	N/A	N/A	A		1	37	-	-	171	1714	905	18.9%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1275	3600	3600	35.4%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2240	3600	3600	62.0%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	929	3600	3600	25.7%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1802	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1514	Inf	Inf	0.0%
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	280	Inf	Inf	0.0%

12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1764	Inf	Inf	0.0%
Item	**Arriving (pcu)**	**Leaving (pcu)**	**Turners In Gaps (pcu)**	**Turners When Unopposed (pcu)**	**Turners In Intergreen (pcu)**	**Uniform Delay (pcuHr)**	**Rand + Oversat Delay (pcuHr)**	**Storage Area Uniform Delay (pcuHr)**	**Total Delay (pcuHr)**	**Av. Delay Per PCU (s/pcu)**	**Max. Back of Uniform Queue (pcu)**	**Rand + Oversat Queue (pcu)**	**Mean Max Queue (pcu)**	
Network: A1(m) Junction 10	**-**	**-**	**3974**	**372**	**0**	**15.2**	**42.3**	**0.0**	**57.5**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3974**	**372**	**0**	**15.2**	**42.3**	**0.0**	**57.5**	**-**	**-**	**-**	**-**	
1/1	205	205	205	0	0	0.6	2.1	-	2.7	47.3	3.2	2.1	5.3	
1/2	248	248	248	0	0	0.9	4.7	-	5.7	82.1	4.5	4.7	9.2	
2/1	1142	1142	-	-	-	0.0	0.7	-	0.7	2.3	0.0	0.7	0.7	
2/2	661	661	661	0	0	0.3	7.0	-	7.3	39.6	5.3	3.5	8.8	
3/1	755	755	383	372	0	0.3	1.9	-	2.2	10.3	8.4	1.9	10.3	
3/2	1104	1104	-	-	-	6.8	2.4	-	9.1	29.8	10.1	1.2	11.3	
4/2+4/1	1245	1238	2477	0	0	2.0	19.6	-	21.6	62.5	47.2	19.6	66.8	
5/1	759	759	-	-	-	3.5	2.5	-	6.0	28.4	12.4	2.5	14.9	
5/2	171	171	-	-	-	0.4	0.1	-	0.5	10.4	1.6	0.1	1.7	
6/1	1275	1275	-	-	-	0.1	0.3	-	0.4	1.2	6.7	0.1	6.8	
7/1	2234	2234	-	-	-	0.4	0.8	-	1.2	1.9	9.7	0.4	10.1	
8/1	925	925	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1798	1798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1514	1514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	280	280	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1762	1762	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 7.3 Total Delay for Signalled Lanes (pcuHr): 15.61 Cycle Time (s): 72
PRC Over All Lanes (%): -11.8 Total Delay Over All Lanes(pcuHr): 57.51

Scenario 2: '2040 wDev no School PM' (FG2: '2040 wDev no School PM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



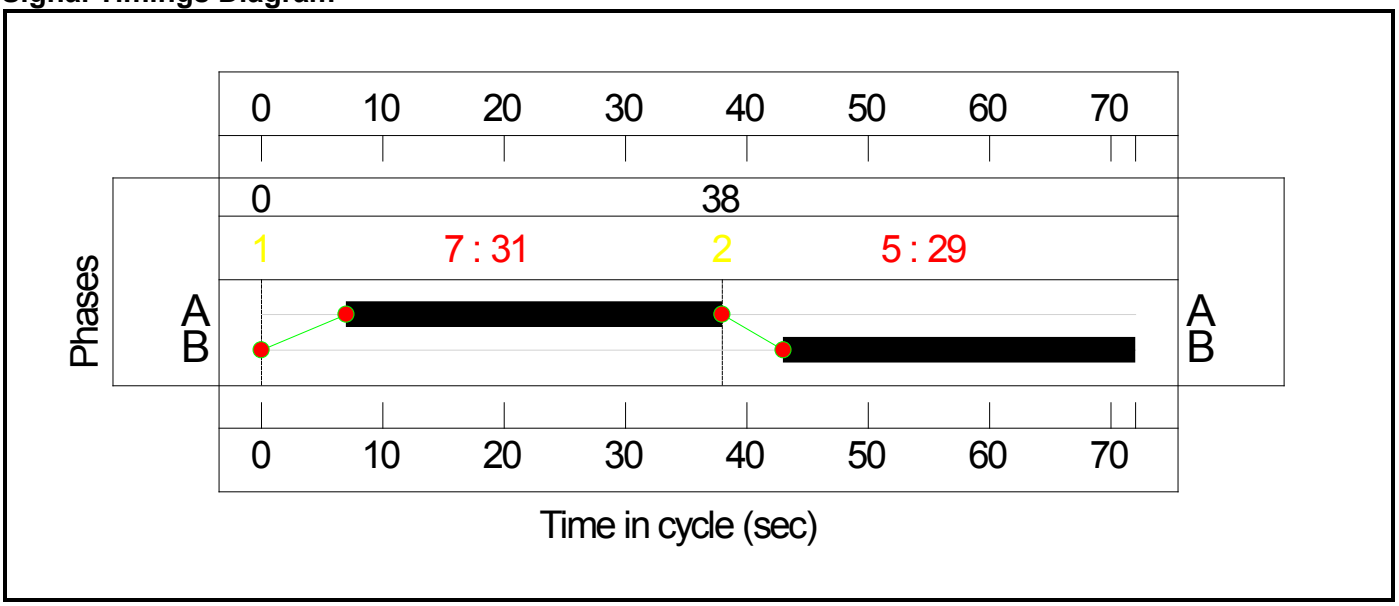
Stage Timings

Stage	1	2
Duration	31	29
Change Point	0	38

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	31	7	38
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	29	43	0

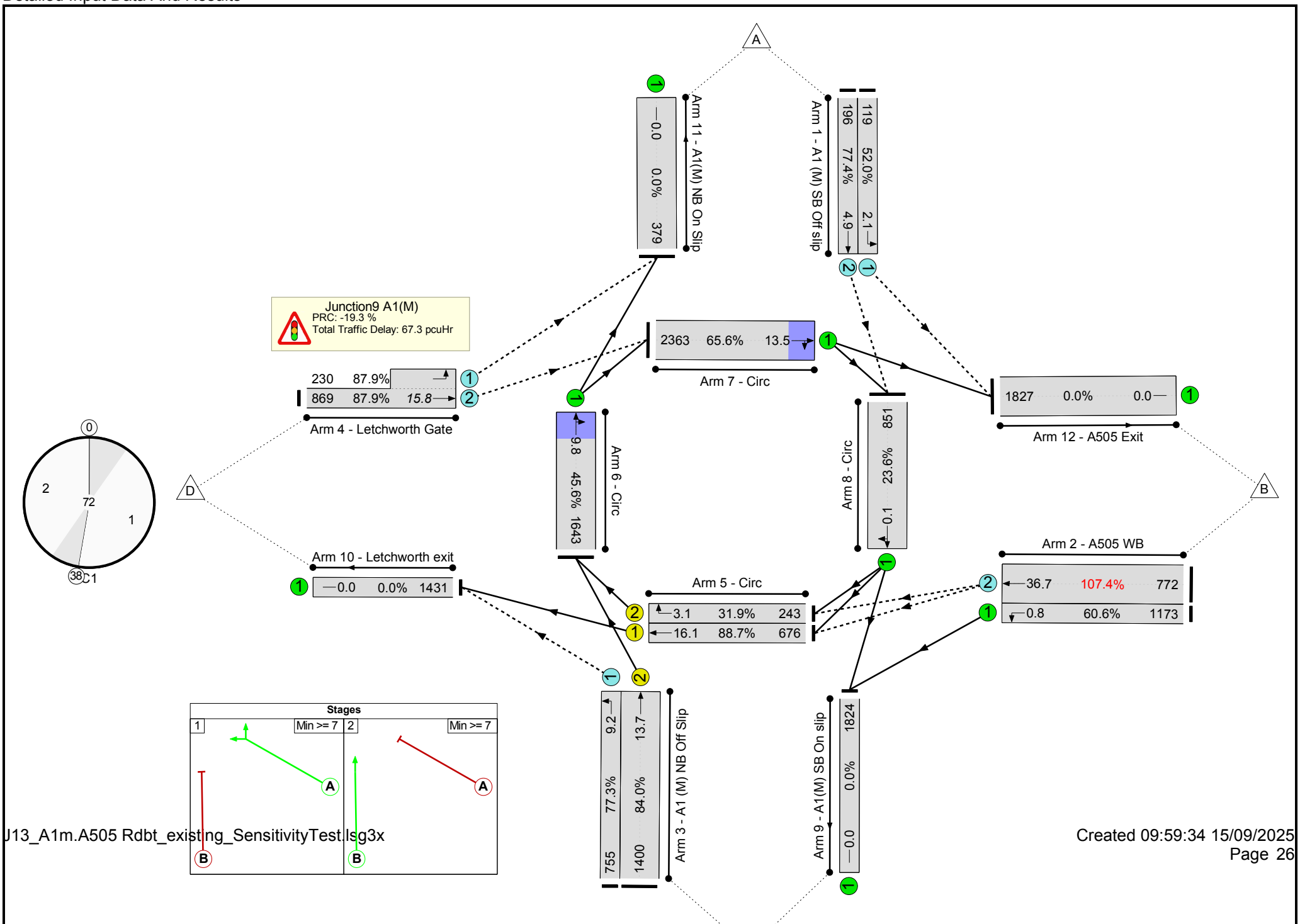
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	43	0
5/1	Circ Ahead	U	A	7	38
5/2	Circ Right	U	A	7	38

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -19.3 %
Total Traffic Delay: 67.3 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 379
Arm 1 - A1 (M) SB Off slip
196 77.4% 4.9
119 52.0% 2.1
2363 65.6% 13.5
Arm 7 - Circ
230 87.9%
869 87.9% 15.8
Arm 4 - Letchworth Gate
1827 0.0% 0.0
Arm 12 - A505 Exit
9.8 45.6% 1643
Arm 6 - Circ
Arm 8 - Circ
851 23.6% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1431
Arm 5 - Circ
3.1 31.9% 243
16.1 88.7% 676
Arm 2 - A505 WB
36.7 107.4% 772
0.8 60.6% 1173
Arm 3 - A1 (M) NB Off Slip
9.2 77.3% 755
13.7 84.0% 1400
Arm 9 - A1(M) SB On slip
1824 0.0% 0.0
Stages
1
Min >= 7
2
Min >= 7
A
B
0
2
72
1
38
C1

Network Results

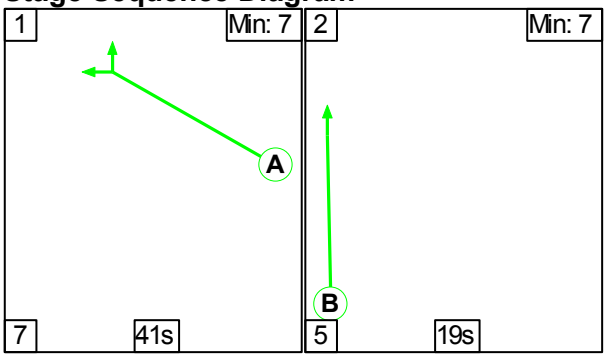
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**107.4%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**107.4%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	119	1961	229	52.0%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	196	2080	253	77.4%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1173	1936	1936	60.6%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	772	4178	719	107.4%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	977	77.3%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	29	-	-	1400	4000	1667	84.0%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	1099	1894:1834	989+262	87.9 : 87.9%
5/1	Circ Ahead	U	N/A	N/A	A		1	31	-	-	711	1714	762	88.7%
5/2	Circ Right	U	N/A	N/A	A		1	31	-	-	261	1714	762	31.9%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1661	3600	3600	45.6%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2370	3600	3600	65.6%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	851	3600	3600	23.6%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1824	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1466	Inf	Inf	0.0%
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	390	Inf	Inf	0.0%

12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1834	Inf	Inf	0.0%
Item	**Arriving (pcu)**	**Leaving (pcu)**	**Turners In Gaps (pcu)**	**Turners When Unopposed (pcu)**	**Turners In Intergreen (pcu)**	**Uniform Delay (pcuHr)**	**Rand + Oversat Delay (pcuHr)**	**Storage Area Uniform Delay (pcuHr)**	**Total Delay (pcuHr)**	**Av. Delay Per PCU (s/pcu)**	**Max. Back of Uniform Queue (pcu)**	**Rand + Oversat Queue (pcu)**	**Mean Max Queue (pcu)**	
Network: A1(m) Junction 10	**-**	**-**	**3542**	**445**	**0**	**18.8**	**48.5**	**0.0**	**67.3**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3542**	**445**	**0**	**18.8**	**48.5**	**0.0**	**67.3**	**-**	**-**	**-**	**-**	
1/1	119	119	119	0	0	0.4	0.5	-	0.9	27.4	1.6	0.5	2.1	
1/2	196	196	196	0	0	0.9	1.6	-	2.5	45.6	3.3	1.6	4.9	
2/1	1173	1173	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8	
2/2	772	719	719	0	0	3.0	32.5	-	35.4	165.3	20.5	16.2	36.7	
3/1	755	755	310	445	0	0.2	1.7	-	1.9	9.1	7.5	1.7	9.2	
3/2	1400	1400	-	-	-	7.3	2.6	-	9.9	25.5	12.4	1.3	13.7	
4/2+4/1	1099	1099	2198	0	0	1.4	3.5	-	4.9	15.9	12.3	3.5	15.8	
5/1	676	676	-	-	-	4.0	3.6	-	7.6	40.5	12.4	3.6	16.1	
5/2	243	243	-	-	-	0.7	0.2	-	1.0	14.3	2.9	0.2	3.1	
6/1	1643	1643	-	-	-	0.3	0.4	-	0.7	1.5	9.6	0.2	9.8	
7/1	2363	2363	-	-	-	0.7	1.0	-	1.6	2.5	13.0	0.5	13.5	
8/1	851	851	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1824	1824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1431	1431	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1827	1827	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 1.4 Total Delay for Signalled Lanes (pcuHr): 18.47 Cycle Time (s): 72
PRC Over All Lanes (%): -19.3 Total Delay Over All Lanes(pcuHr): 67.29

Scenario 3: '2040 wDev w School AM' (FG3: '2040 w Dev with School AM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



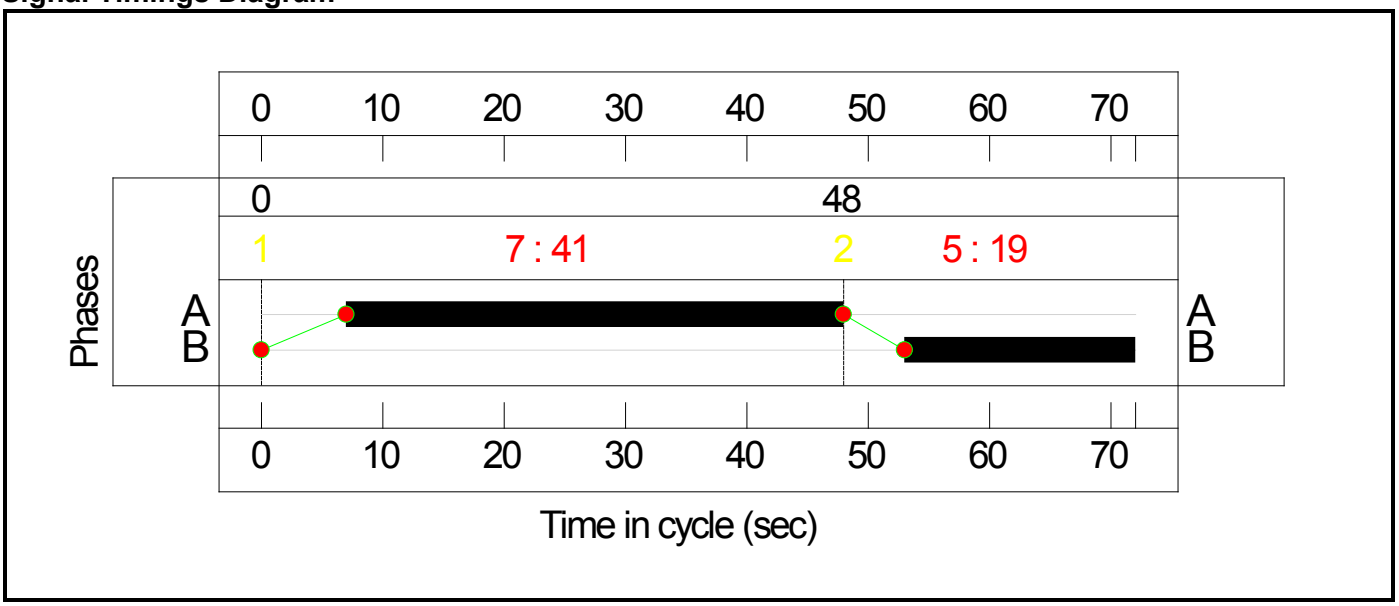
Stage Timings

Stage	1	2
Duration	41	19
Change Point	0	48

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	41	7	48
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	19	53	0

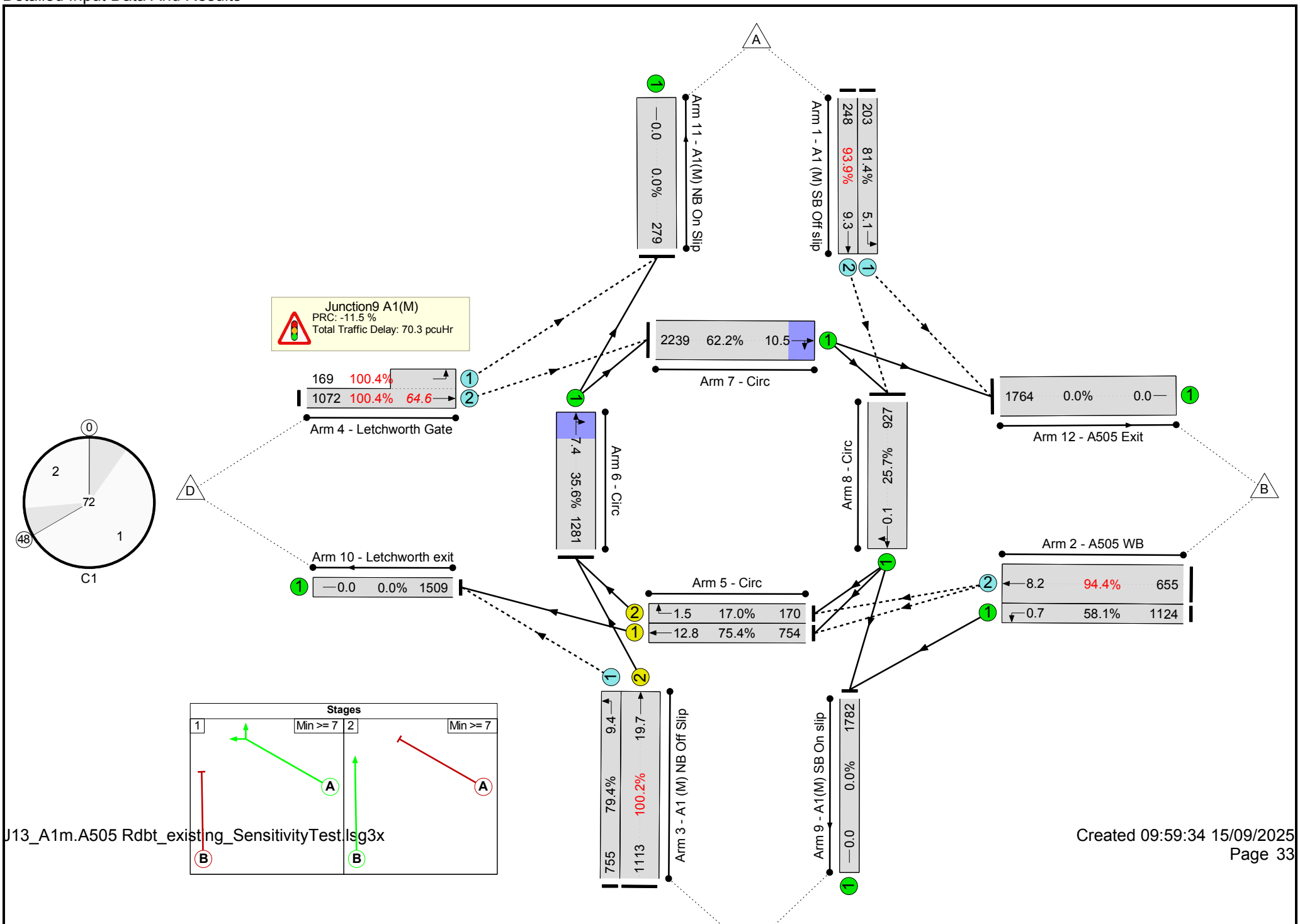
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	53	0
5/1	Circ Ahead	U	A	7	48
5/2	Circ Right	U	A	7	48

Network Layout Diagram


A
B
D
Junction9 A1(M)
PRC: -11.5 %
Total Traffic Delay: 70.3 pcuHr
Arm 11 - A1(M) NB On Slip
0.0 0.0% 279
Arm 1 - A1 (M) SB Off slip
248 93.9% 9.3
203 81.4% 5.1
2239 62.2% 10.5
Arm 7 - Circ
169 100.4%
1072 100.4% 64.6
Arm 4 - Letchworth Gate
1764 0.0% 0.0
Arm 12 - A505 Exit
7.4 35.6% 1281
Arm 6 - Circ
Arm 8 - Circ
927 25.7% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1509
Arm 5 - Circ
1.5 17.0% 170
12.8 75.4% 754
Arm 2 - A505 WB
8.2 94.4% 655
0.7 58.1% 1124
9.4 79.4% 755
19.7 100.2% 1113
Arm 3 - A1 (M) NB Off Slip
Arm 9 - A1(M) SB On slip
1782 0.0% 0.0
0
2
72
1
48
C1
Stages
1
Min >= 7
2
Min >= 7
A
B

Network Results

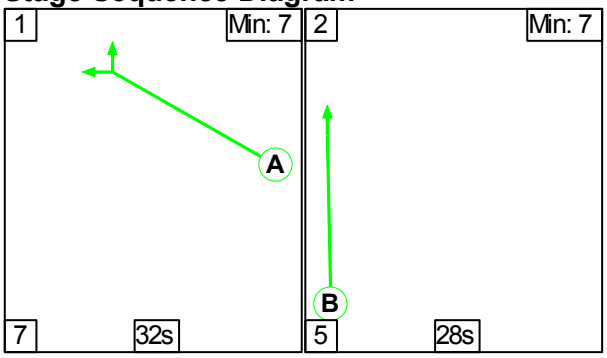
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**100.4%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**100.4%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	203	1961	249	81.4%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	248	2080	264	93.9%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1124	1936	1936	58.1%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	655	4178	694	94.4%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	951	79.4%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	19	-	-	1113	4000	1111	100.2%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	1241	1894:1834	1068+168	100.4 : 100.4%
5/1	Circ Ahead	U	N/A	N/A	A		1	41	-	-	754	1714	1000	75.4%
5/2	Circ Right	U	N/A	N/A	A		1	41	-	-	170	1714	1000	17.0%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1283	3600	3600	35.6%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2245	3600	3600	62.2%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	929	3600	3600	25.7%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1784	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1509	Inf	Inf	0.0%
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	279	Inf	Inf	0.0%

12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1767	Inf	Inf	0.0%
Item	**Arriving (pcu)**	**Leaving (pcu)**	**Turners In Gaps (pcu)**	**Turners When Unopposed (pcu)**	**Turners In Intergreen (pcu)**	**Uniform Delay (pcuHr)**	**Rand + Oversat Delay (pcuHr)**	**Storage Area Uniform Delay (pcuHr)**	**Total Delay (pcuHr)**	**Av. Delay Per PCU (s/pcu)**	**Max. Back of Uniform Queue (pcu)**	**Rand + Oversat Queue (pcu)**	**Mean Max Queue (pcu)**	
Network: A1(m) Junction 10	**-**	**-**	**4021**	**315**	**0**	**15.7**	**54.6**	**0.0**	**70.3**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**4021**	**315**	**0**	**15.7**	**54.6**	**0.0**	**70.3**	**-**	**-**	**-**	**-**	
1/1	203	203	203	0	0	0.6	2.0	-	2.6	46.2	3.1	2.0	5.1	
1/2	248	248	248	0	0	0.9	4.8	-	5.8	83.5	4.5	4.8	9.3	
2/1	1124	1124	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7	
2/2	655	655	655	0	0	0.3	6.3	-	6.6	36.5	5.0	3.2	8.2	
3/1	755	755	440	315	0	0.2	1.9	-	2.1	9.9	7.5	1.9	9.4	
3/2	1113	1111	-	-	-	8.1	17.2	-	25.3	81.8	11.1	8.6	19.7	
4/2+4/1	1241	1237	2474	0	0	1.9	18.8	-	20.7	60.0	45.9	18.8	64.6	
5/1	754	754	-	-	-	2.8	1.5	-	4.3	20.6	11.3	1.5	12.8	
5/2	170	170	-	-	-	0.3	0.1	-	0.4	8.3	1.4	0.1	1.5	
6/1	1281	1281	-	-	-	0.2	0.3	-	0.4	1.3	7.3	0.1	7.4	
7/1	2239	2239	-	-	-	0.4	0.8	-	1.2	2.0	10.1	0.4	10.5	
8/1	927	927	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1782	1782	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1509	1509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	279	279	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1764	1764	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): -11.3 Total Delay for Signalled Lanes (pcuHr): 29.98 Cycle Time (s): 72
PRC Over All Lanes (%): -11.5 Total Delay Over All Lanes(pcuHr): 70.29

Scenario 4: '2040 wDev w School PM' (FG4: '2040 wDev with School PM', Plan 1: 'Base Network Control Plan 1')

Stage Sequence Diagram



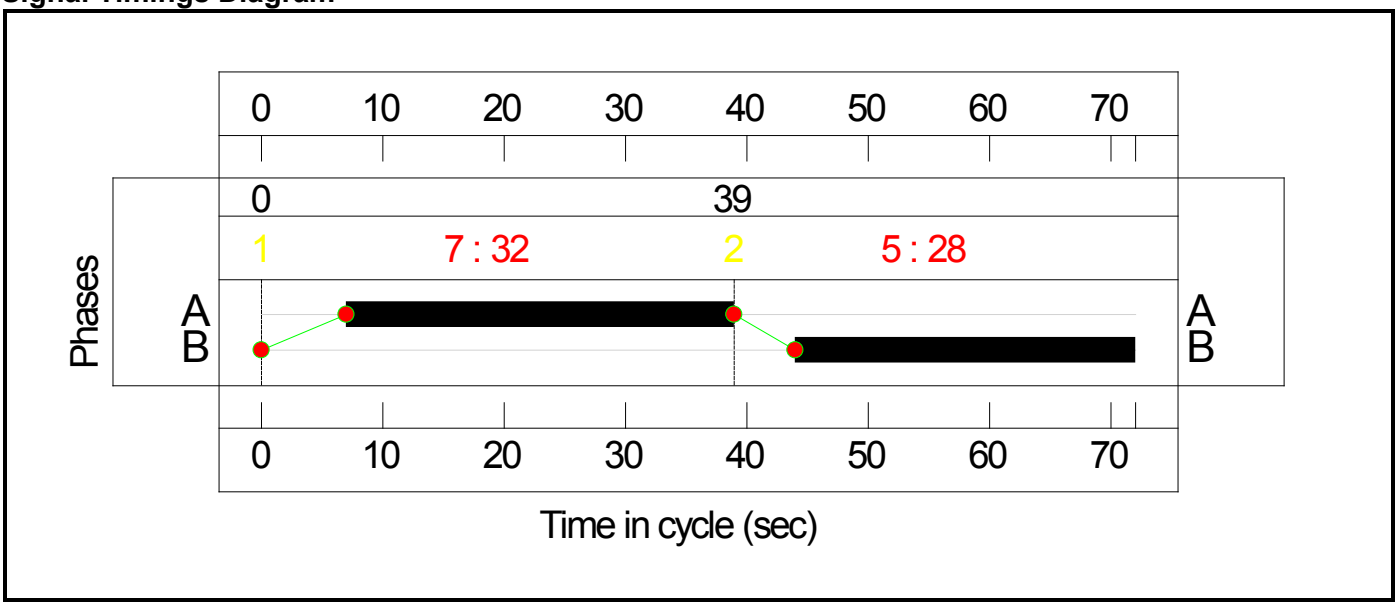
Stage Timings

Stage	1	2
Duration	32	28
Change Point	0	39

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	32	7	39
B	A1 (M) NB Off Slip Ahead A1(M) Off Slip	Traffic	28	44	0

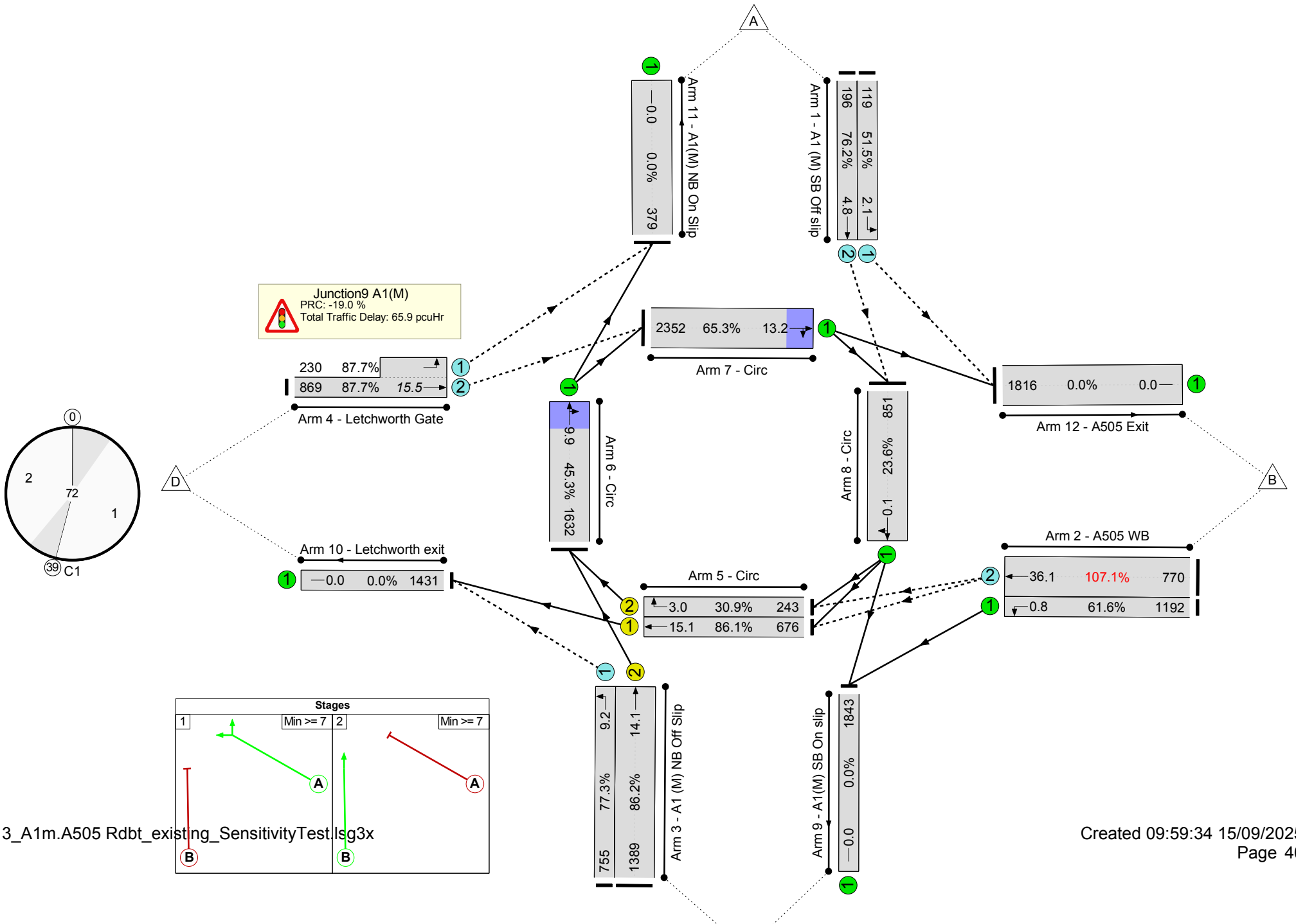
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1 (M) NB Off Slip Ahead	U	B	44	0
5/1	Circ Ahead	U	A	7	39
5/2	Circ Right	U	A	7	39

Network Layout Diagram


A
B
D
Arm 11 - A1(M) NB On Slip
0.0 0.0% 379
Arm 1 - A1 (M) SB Off slip
196 76.2% 4.8
119 51.5% 2.1
Junction9 A1(M)
PRC: -19.0 %
Total Traffic Delay: 65.9 pcuHr
2352 65.3% 13.2
Arm 7 - Circ
230 87.7%
869 87.7% 15.5
Arm 4 - Letchworth Gate
1816 0.0% 0.0
Arm 12 - A505 Exit
9.9 45.3% 1632
Arm 6 - Circ
Arm 8 - Circ
851 23.6% 0.1
Arm 10 - Letchworth exit
0.0 0.0% 1431
Arm 5 - Circ
3.0 30.9% 243
15.1 86.1% 676
Arm 2 - A505 WB
36.1 107.1% 770
0.8 61.6% 1192
Arm 3 - A1 (M) NB Off Slip
9.2 77.3% 755
14.1 86.2% 1389
Arm 9 - A1(M) SB On slip
1843 0.0% 0.0
0
2
1
72
39 C1
Stages
1
Min >= 7
2
Min >= 7
A
B

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**107.1%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**107.1%**
1/1	A1 (M) SB Off slip Left	O	N/A	N/A	-		-	-	-	-	119	1961	231	51.5%
1/2	A1 (M) SB Off slip Ahead	O	N/A	N/A	-		-	-	-	-	196	2080	257	76.2%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1192	1936	1936	61.6%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	770	4178	719	107.1%
3/1	A1 (M) NB Off Slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	977	77.3%
3/2	A1 (M) NB Off Slip Ahead	U	N/A	N/A	B		1	28	-	-	1389	4000	1611	86.2%
4/2+4/1	Letchworth Gate Ahead Left	O	N/A	N/A	-		-	-	-	-	1099	1894:1834	991+262	87.7 : 87.7%
5/1	Circ Ahead	U	N/A	N/A	A		1	32	-	-	710	1714	786	86.1%
5/2	Circ Right	U	N/A	N/A	A		1	32	-	-	260	1714	786	30.9%
6/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1649	3600	3600	45.3%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2359	3600	3600	65.3%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	851	3600	3600	23.6%
9/1	A1(M) SB On slip	U	N/A	N/A	-		-	-	-	-	1843	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1465	Inf	Inf	0.0%
11/1	A1(M) NB On Slip	U	N/A	N/A	-		-	-	-	-	389	Inf	Inf	0.0%

12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1823	Inf	Inf	0.0%
Item	**Arriving (pcu)**	**Leaving (pcu)**	**Turners In Gaps (pcu)**	**Turners When Unopposed (pcu)**	**Turners In Intergreen (pcu)**	**Uniform Delay (pcuHr)**	**Rand + Oversat Delay (pcuHr)**	**Storage Area Uniform Delay (pcuHr)**	**Total Delay (pcuHr)**	**Av. Delay Per PCU (s/pcu)**	**Max. Back of Uniform Queue (pcu)**	**Rand + Oversat Queue (pcu)**	**Mean Max Queue (pcu)**	
Network: A1(m) Junction 10	**-**	**-**	**3559**	**428**	**0**	**18.6**	**47.3**	**0.0**	**65.9**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**3559**	**428**	**0**	**18.6**	**47.3**	**0.0**	**65.9**	**-**	**-**	**-**	**-**	
1/1	119	119	119	0	0	0.4	0.5	-	0.9	26.9	1.6	0.5	2.1	
1/2	196	196	196	0	0	0.8	1.5	-	2.4	43.5	3.3	1.5	4.8	
2/1	1192	1192	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8	
2/2	770	719	719	0	0	2.9	31.6	-	34.5	161.3	20.3	15.8	36.1	
3/1	755	755	327	428	0	0.2	1.7	-	1.9	9.1	7.5	1.7	9.2	
3/2	1389	1389	-	-	-	7.6	3.0	-	10.6	27.6	12.5	1.5	14.1	
4/2+4/1	1099	1099	2198	0	0	1.3	3.4	-	4.8	15.6	12.1	3.4	15.5	
5/1	676	676	-	-	-	3.8	2.9	-	6.7	35.8	12.1	2.9	15.1	
5/2	243	243	-	-	-	0.7	0.2	-	0.9	13.6	2.7	0.2	3.0	
6/1	1632	1632	-	-	-	0.3	0.4	-	0.7	1.5	9.7	0.2	9.9	
7/1	2352	2352	-	-	-	0.7	0.9	-	1.6	2.5	12.8	0.5	13.2	
8/1	851	851	-	-	-	0.0	0.2	-	0.2	0.7	0.0	0.1	0.1	
9/1	1843	1843	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1431	1431	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1816	1816	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

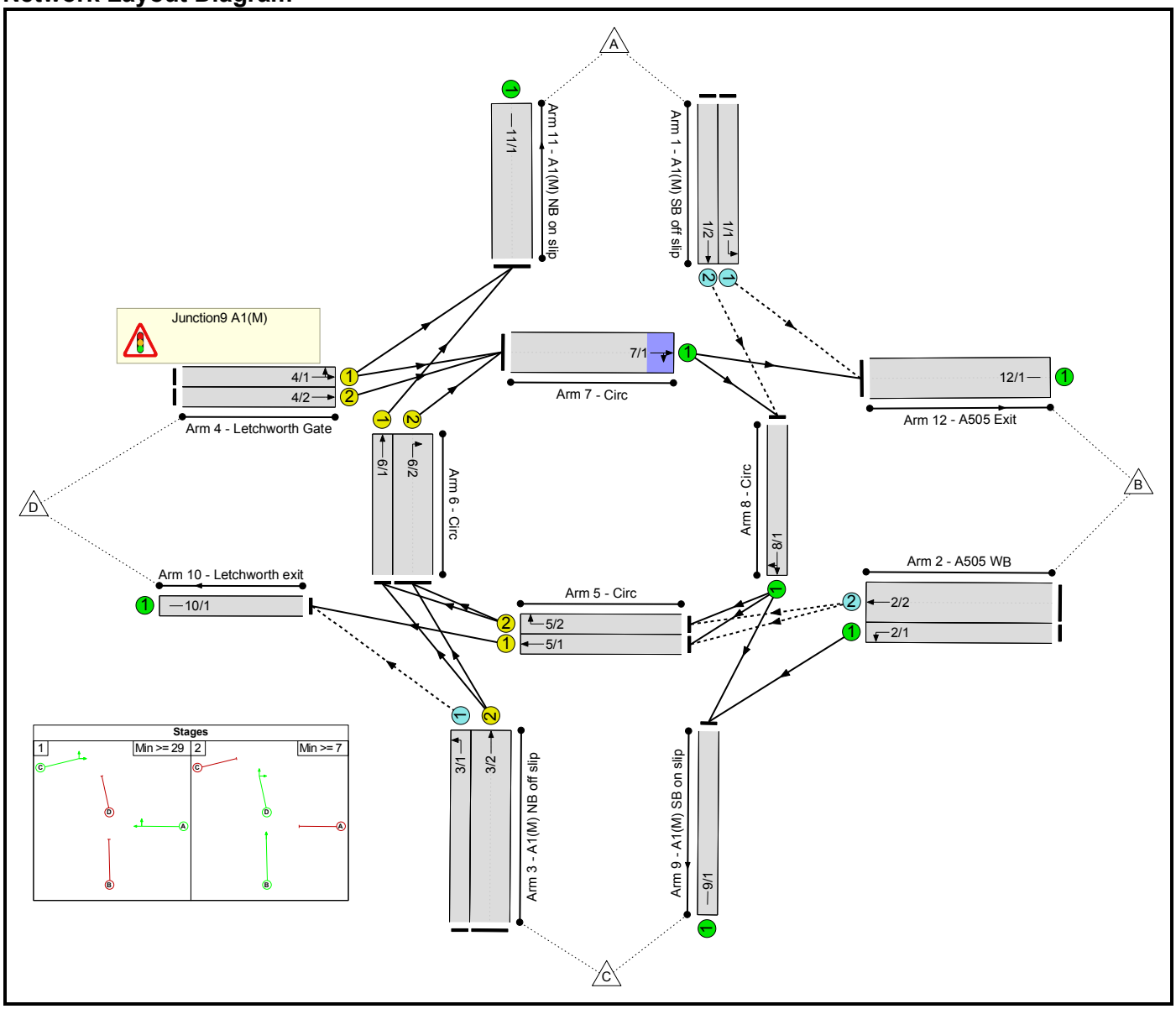
C1 PRC for Signalled Lanes (%): 4.4 Total Delay for Signalled Lanes (pcuHr): 18.27 Cycle Time (s): 72
PRC Over All Lanes (%): -19.0 Total Delay Over All Lanes(pcuHr): 65.93

Detailed Input Data And Results

User and Project Details

Project:	**Growing Baldock**
Title:	**A1(m) Junction 10 - PROPOSED**
Location:	Baldock, SG6 2EA
Client:	Urban & Civic
Site Ref(s):	J13
Design Layout Ref:	-
Date Started:	05.08.2025
Date Completed:	-
Checked By:	NL/ZT
Additional detail:	
File name:	J13_A1m.A505 Rdbt_proposed_SensitivityTest.lsg3x
Author:	Jay James
Company:	ITP by Haskoning
Address:	
Linsig Version:	3, 3, 0, 6

Network Layout Diagram



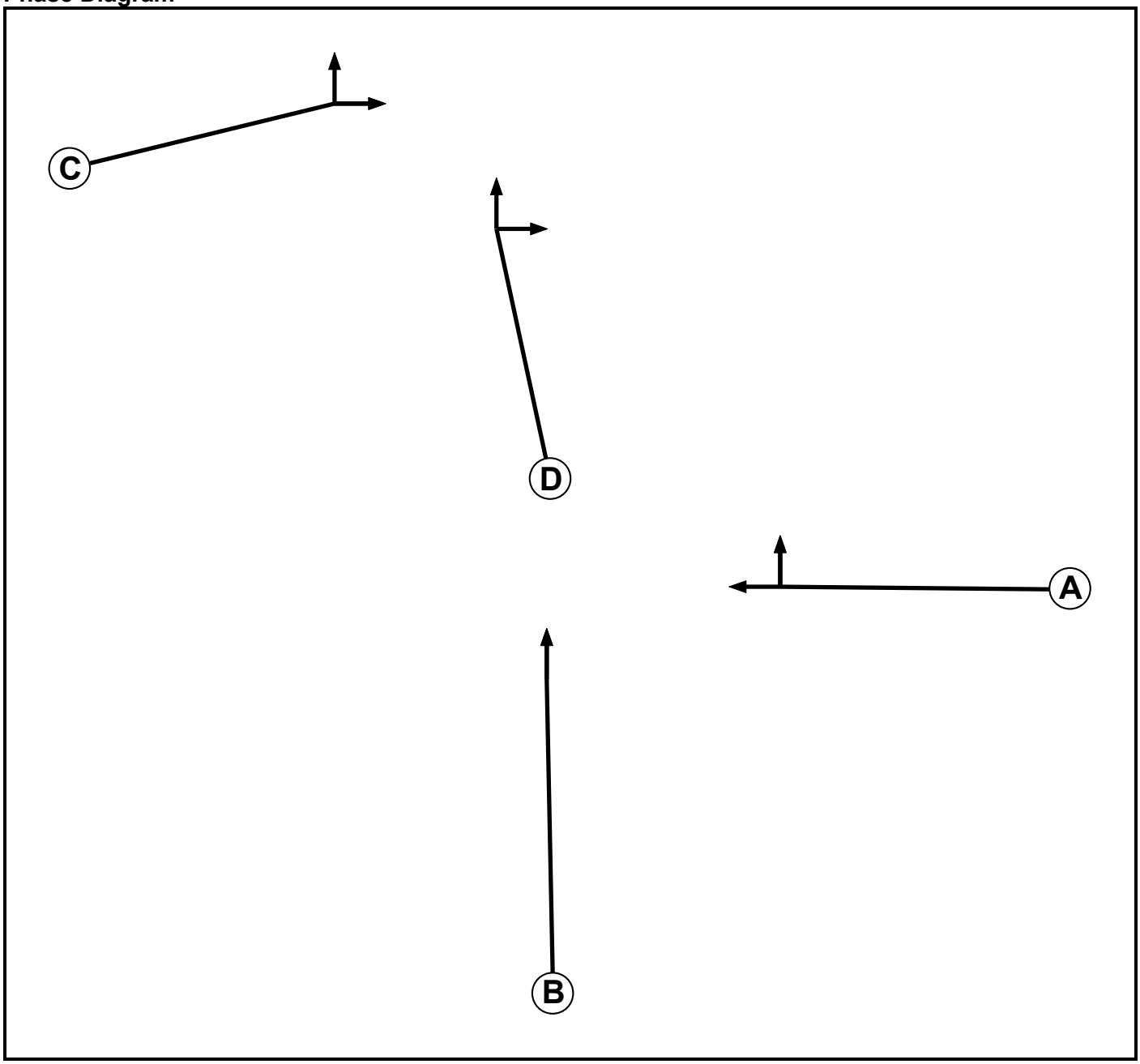
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2040 wDev no School AM	2040 w Dev no School AM	Network Control Plan 1	08:00 - 09:00	80	-7.7	60.78
2	2040 wDev no School PM	2040 wDev no School PM	Network Control Plan 1	17:00 - 18:00	80	-19.3	101.73
3	2040 wDev w School AM	2040 w Dev with School AM	Network Control Plan 1	08:00 - 09:00	80	-8.5	60.63
4	2040 wDev w School PM	2040 wDev with School PM	Network Control Plan 1	17:00 - 18:00	80	-19.0	98.77

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1	Gen		Stage Stream 1	4	2	Junction9 A1(M)	

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		-9999	29
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Traffic		-9999	7

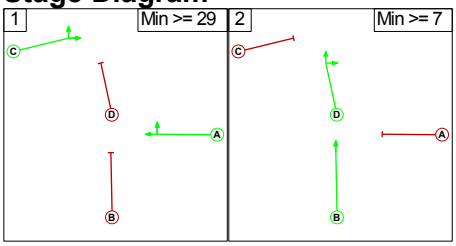
Phase Intergreens Matrix

Terminating Phase	Starting Phase A	B	C	D
A		7	-	-
B	5		-	-
C	-	-		5
D	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	B D

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	C	Losing	7	7
2	1	B	Losing	5	5

Prohibited Stage Change

From Stage	To Stage 1	2
1		12
2	10	

Lane Input Data

Junction: Junction9 A1(M)

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A1(M) SB off slip)	O		2	3	60.0	Geom	-	3.46	0.00	Y	Arm 12 Left	Inf
1/2 (A1(M) SB off slip)	O		2	3	60.0	Geom	-	3.25	0.00	N	Arm 8 Ahead	Inf
2/1 (A505 WB)	U		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 9 Left	100.00
2/2 (A505 WB)	O		2	3	60.0	User	4178	-	-	-	-	-
3/1 (A1(M) NB off slip)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 10 Left	100.00
3/2 (A1(M) NB off slip)	U	B	2	3	60.0	User	4000	-	-	-	-	-
4/1 (Letchworth Gate)	U	C	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 7 Ahead	Inf
											Arm 11 Left	26.00
4/2 (Letchworth Gate)	U	C	2	3	60.0	Geom	-	3.50	0.00	N	Arm 7 Ahead	40.00
5/1 (Circ)	U	A	2	3	20.5	User	1714	-	-	-	-	-
5/2 (Circ)	U	A	2	3	20.5	User	1714	-	-	-	-	-
6/1 (Circ)	U	D	2	3	14.0	Geom	-	3.50	0.00	Y	Arm 11 Ahead	133.00
6/2 (Circ)	U	D	2	3	14.0	User	4178	-	-	-	-	-
7/1 (Circ)	U		2	3	16.7	User	3600	-	-	-	-	-
8/1 (Circ)	U		2	3	14.3	Geom	-	3.80	0.00	Y	Arm 5 Right	62.00
											Arm 9 Ahead	62.00
9/1 (A1(M) SB on slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1 (Letchworth exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (A1(M) NB on slip)	U		2	3	60.0	Inf	-	-	-	-	-	-

12/1 (A505 Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: Junction9 A1(M)

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (A1(M) SB off slip)	12/1 (Left)	715	0	7/1	0.22	All	-	-	-	-	-
1/2 (A1(M) SB off slip)	8/1 (Ahead)	1000	0	7/1	0.40	All	-	-	-	-	-
2/2 (A505 WB)	5/1 (Ahead)	1000	0	8/1	0.33	All	-	-	-	-	-
	5/2 (Ahead)	1000	0	8/1	0.33	All					
3/1 (A1(M) NB off slip)	10/1 (Left)	1200	0	5/1	0.33	All	-	-	-	-	-

Lane Connector Input Data

Junction: Junction9 A1(M)				
Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	12/1	Internal	5	35
1/2	8/1	Internal	5	35
2/1	9/1	Internal	26	35
2/2	5/1	Internal	9	35
2/2	5/2	Internal	9	35
3/1	10/1	Internal	26	35
3/2	6/1	Internal	6	35
3/2	6/2	Internal	6	35
4/1	7/1	Internal	7	35
4/1	11/1	Internal	26	35
4/2	7/1	Internal	7	35
5/1	10/1	Internal	26	35
5/2	6/1	Internal	6	35
5/2	6/2	Internal	6	35
6/1	11/1	Internal	26	35
6/2	7/1	Internal	7	35
7/1	8/1	Internal	6	35
7/1	12/1	Internal	26	35
8/1	5/1	Internal	9	35
8/1	5/2	Internal	9	35
8/1	9/1	Internal	19	35

Scenario 1: '2040 wDev no School AM' (FG1: '2040 w Dev no School AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1(M) SB off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1(M) SB off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1(M) NB off slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1(M) NB off slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.20	0.00	Y	Arm 7 Ahead	Inf	71.5 %	1904	1904
				Arm 11 Left	26.00	28.5 %		
4/2 (Letchworth Gate)	3.50	0.00	N	Arm 7 Ahead	40.00	100.0 %	2029	2029
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ)	3.50	0.00	Y	Arm 11 Ahead	133.00	100.0 %	1943	1943
6/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ)	3.80	0.00	Y	Arm 5 Right	62.00	29.0 %	1948	1948
				Arm 9 Ahead	62.00	71.0 %		
9/1 (A1(M) SB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2040 wDev no School PM' (FG2: '2040 wDev no School PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1(M) SB off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1(M) SB off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1(M) NB off slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1(M) NB off slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.20	0.00	Y	Arm 7 Ahead	Inf	55.9 %	1887	1887
				Arm 11 Left	26.00	44.1 %		
4/2 (Letchworth Gate)	3.50	0.00	N	Arm 7 Ahead	40.00	100.0 %	2029	2029
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ)	3.50	0.00	Y	Arm 11 Ahead	133.00	100.0 %	1943	1943
6/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ)	3.80	0.00	Y	Arm 5 Right	62.00	23.5 %	1948	1948
				Arm 9 Ahead	62.00	76.5 %		
9/1 (A1(M) SB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2040 wDev w School AM' (FG3: '2040 w Dev with School AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1(M) SB off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1(M) SB off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1(M) NB off slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1(M) NB off slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.20	0.00	Y	Arm 7 Ahead	Inf	71.5 %	1904	1904
				Arm 11 Left	26.00	28.5 %		
4/2 (Letchworth Gate)	3.50	0.00	N	Arm 7 Ahead	40.00	100.0 %	2029	2029
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ)	3.50	0.00	Y	Arm 11 Ahead	133.00	100.0 %	1943	1943
6/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ)	3.80	0.00	Y	Arm 5 Right	62.00	29.0 %	1948	1948
				Arm 9 Ahead	62.00	71.0 %		
9/1 (A1(M) SB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2040 wDev w School PM' (FG4: '2040 wDev with School PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Junction9 A1(M)								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A1(M) SB off slip)	3.46	0.00	Y	Arm 12 Left	Inf	100.0 %	1961	1961
1/2 (A1(M) SB off slip)	3.25	0.00	N	Arm 8 Ahead	Inf	100.0 %	2080	2080
2/1 (A505 WB)	3.50	0.00	Y	Arm 9 Left	100.00	100.0 %	1936	1936
2/2 (A505 WB Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
3/1 (A1(M) NB off slip)	3.50	0.00	Y	Arm 10 Left	100.00	100.0 %	1936	1936
3/2 (A1(M) NB off slip Lane 2)	This lane uses a directly entered Saturation Flow						4000	4000
4/1 (Letchworth Gate)	3.20	0.00	Y	Arm 7 Ahead	Inf	55.9 %	1887	1887
				Arm 11 Left	26.00	44.1 %		
4/2 (Letchworth Gate)	3.50	0.00	N	Arm 7 Ahead	40.00	100.0 %	2029	2029
5/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						1714	1714
5/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						1714	1714
6/1 (Circ)	3.50	0.00	Y	Arm 11 Ahead	133.00	100.0 %	1943	1943
6/2 (Circ Lane 2)	This lane uses a directly entered Saturation Flow						4178	4178
7/1 (Circ Lane 1)	This lane uses a directly entered Saturation Flow						3600	3600
8/1 (Circ)	3.80	0.00	Y	Arm 5 Right	62.00	23.5 %	1948	1948
				Arm 9 Ahead	62.00	76.5 %		
9/1 (A1(M) SB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1 (Letchworth exit Lane 1)	Infinite Saturation Flow						Inf	Inf
11/1 (A1(M) NB on slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (A505 Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2040 w Dev no School AM'	08:00	09:00	01:00	
2: '2040 wDev no School PM'	17:00	18:00	01:00	
3: '2040 w Dev with School AM'	08:00	09:00	01:00	
4: '2040 wDev with School PM'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2040 w Dev no School AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	205	2	244	453
	B	108	61	1142	492	1803
	C	1	1102	1	755	1859
	D	169	396	657	23	1245
	Tot.	280	1764	1802	1514	5360

FG2: '2040 wDev no School PM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	196	315
	B	158	103	1173	511	1945
	C	2	1398	0	755	2155
	D	230	214	651	4	1099
	Tot.	390	1834	1824	1466	5514

FG3: '2040 w Dev with School AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	203	2	244	451
	B	107	61	1124	487	1779
	C	1	1111	1	755	1868
	D	169	392	657	23	1241
	Tot.	279	1767	1784	1509	5339

FG4: '2040 wDev with School PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	196	315
	B	157	103	1192	510	1962
	C	2	1387	0	755	2144
	D	230	214	651	4	1099
	Tot.	389	1823	1843	1465	5520

Scenario 1: '2040 wDev no School AM' (FG1: '2040 w Dev no School AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	205	2	244	453
	B	108	61	1142	492	1803
	C	1	1102	1	755	1859
	D	169	396	657	23	1245
	Tot.	280	1764	1802	1514	5360

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 2: '2040 wDev no School PM' (FG2: '2040 wDev no School PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	196	315
	B	158	103	1173	511	1945
	C	2	1398	0	755	2155
	D	230	214	651	4	1099
	Tot.	390	1834	1824	1466	5514

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 3: '2040 wDev w School AM' (FG3: '2040 w Dev with School AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	2	203	2	244	451
	B	107	61	1124	487	1779
	C	1	1111	1	755	1868
	D	169	392	657	23	1241
	Tot.	279	1767	1784	1509	5339

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 4: '2040 wDev w School PM' (FG4: '2040 wDev with School PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	119	0	196	315
	B	157	103	1192	510	1962
	C	2	1387	0	755	2144
	D	230	214	651	4	1099
	Tot.	389	1823	1843	1465	5520

Traffic Flows, Difference

Difference :

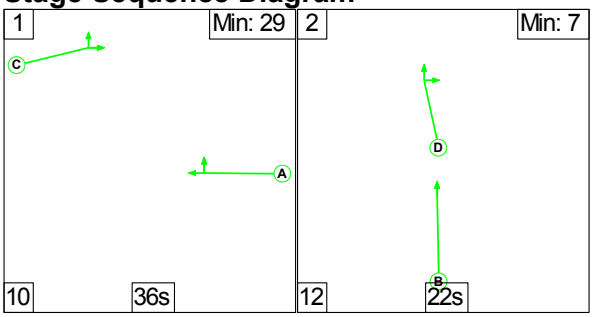
		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Traffic Lane Flows

Lane	Scenario 1: 2040 wDev no School AM	Scenario 2: 2040 wDev no School PM	Scenario 3: 2040 wDev w School AM	Scenario 4: 2040 wDev w School PM
Junction: Junction9 A1(M)				
1/1	205	119	203	119
1/2	248	196	248	196
2/1	1142	1173	1124	1192
2/2	661	772	655	770
3/1	755	755	755	755
3/2	1104	1400	1113	1389
4/1	594	522	593	522
4/2	651	577	648	577
5/1	759	711	754	710
5/2	171	261	170	260
6/1	111	160	110	159
6/2	1164	1501	1173	1490
7/1	2240	2370	2245	2359
8/1	929	851	929	851
9/1	1802	1824	1784	1843
10/1	1514	1466	1509	1465
11/1	280	390	279	389
12/1	1764	1834	1767	1823

Scenario 1: '2040 wDev no School AM' (FG1: '2040 w Dev no School AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



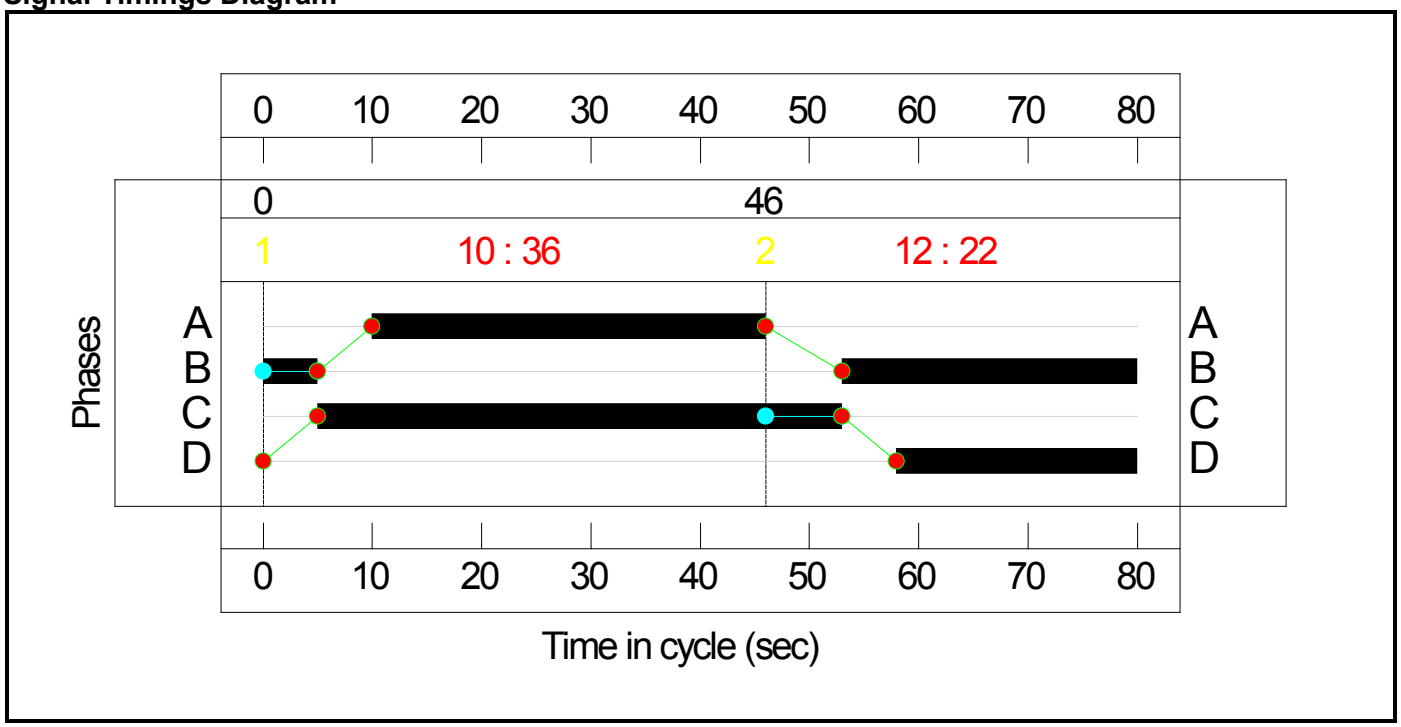
Stage Timings

Stage	1	2
Duration	36	22
Change Point	0	46

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	36	10	46
B	A1(M) NB off slip Ahead A1(m) NB	Traffic	32	53	5
C	Letchworth Gate Ahead Left Letchworth Gate	Traffic	48	5	53
D	Circ Right Ahead Circulatory	Traffic	22	58	0

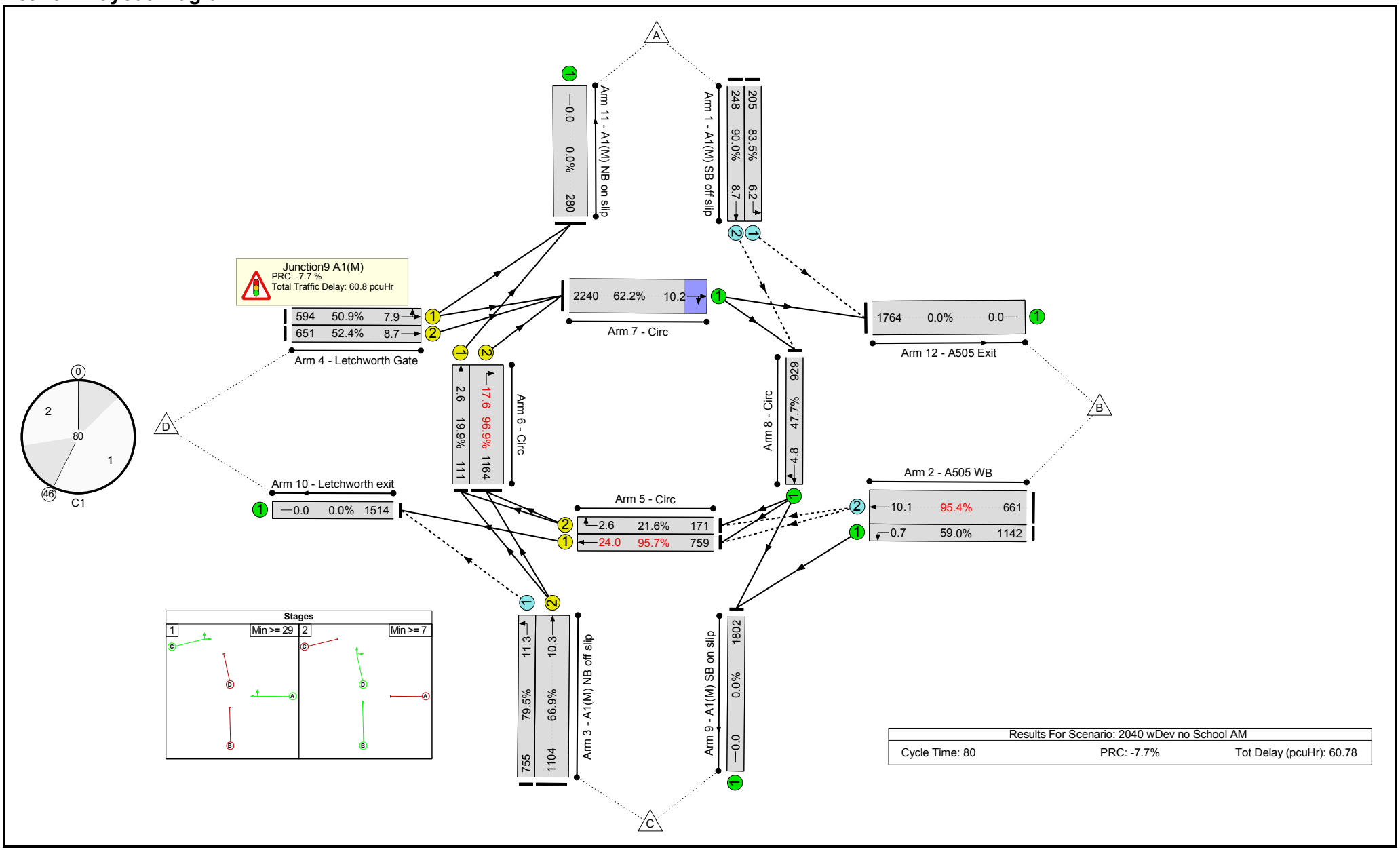
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1(M) NB off slip Ahead	U	B	53	5
4/1	Letchworth Gate Ahead Left	U	C	5	53
4/2	Letchworth Gate Ahead	U	C	5	53
5/1	Circ Ahead	U	A	10	46
5/2	Circ Right	U	A	10	46
6/1	Circ Ahead	U	D	58	0
6/2	Circ Right	U	D	58	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10 - PROPOSED	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**96.9%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**96.9%**
1/1	A1(M) SB off slip Left	O	N/A	N/A	-		-	-	-	-	205	1961	245	83.5%
1/2	A1(M) SB off slip Ahead	O	N/A	N/A	-		-	-	-	-	248	2080	276	90.0%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1142	1936	1936	59.0%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	661	4178	693	95.4%
3/1	A1(M) NB off slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	949	79.5%
3/2	A1(M) NB off slip Ahead	U	N/A	N/A	B		1	32	-	-	1104	4000	1650	66.9%
4/1	Letchworth Gate Ahead Left	U	N/A	N/A	C		1	48	-	-	594	1904	1166	50.9%
4/2	Letchworth Gate Ahead	U	N/A	N/A	C		1	48	-	-	651	2029	1243	52.4%
5/1	Circ Ahead	U	N/A	N/A	A		1	36	-	-	759	1714	793	95.7%
5/2	Circ Right	U	N/A	N/A	A		1	36	-	-	171	1714	793	21.6%
6/1	Circ Ahead	U	N/A	N/A	D		1	22	-	-	111	1943	559	19.9%
6/2	Circ Right	U	N/A	N/A	D		1	22	-	-	1164	4178	1201	96.9%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2240	3600	3600	62.2%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	929	1948	1948	47.7%
9/1	A1(M) SB on slip	U	N/A	N/A	-		-	-	-	-	1802	Inf	Inf	0.0%

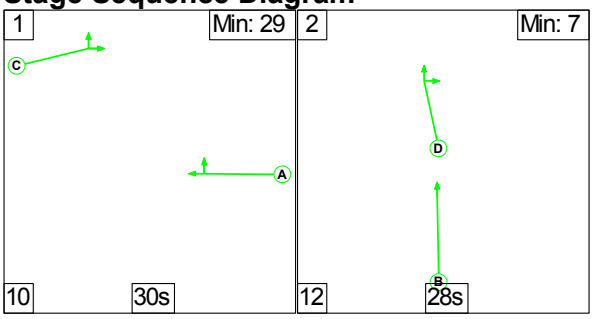
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1514	Inf	Inf	0.0%
11/1	A1(M) NB on slip	U	N/A	N/A	-		-	-	-	-	280	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1764	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10 - PROPOSED	**-**	**-**	**1418**	**451**	**0**	**23.7**	**37.1**	**0.0**	**60.8**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**1418**	**451**	**0**	**23.7**	**37.1**	**0.0**	**60.8**	**-**	**-**	**-**	**-**	
1/1	205	205	205	0	0	0.9	2.3	-	3.2	55.9	3.9	2.3	6.2	
1/2	248	248	248	0	0	1.3	3.6	-	4.9	71.4	5.2	3.6	8.7	
2/1	1142	1142	-	-	-	0.0	0.7	-	0.7	2.3	0.0	0.7	0.7	
2/2	661	661	661	0	0	1.0	7.1	-	8.1	44.2	6.5	3.6	10.1	
3/1	755	755	304	451	0	0.3	1.9	-	2.2	10.7	9.4	1.9	11.3	
3/2	1104	1104	-	-	-	5.8	1.0	-	6.9	22.4	9.8	0.5	10.3	
4/1	594	594	-	-	-	1.4	0.5	-	2.0	11.9	7.4	0.5	7.9	
4/2	651	651	-	-	-	1.6	0.5	-	2.1	11.9	8.1	0.5	8.7	
5/1	759	759	-	-	-	5.6	7.7	-	13.3	63.2	16.3	7.7	24.0	
5/2	171	171	-	-	-	0.6	0.1	-	0.7	14.9	2.4	0.1	2.6	
6/1	111	111	-	-	-	1.1	0.1	-	1.2	39.2	2.4	0.1	2.6	
6/2	1164	1164	-	-	-	3.7	10.1	-	13.8	42.7	12.5	5.1	17.6	
7/1	2240	2240	-	-	-	0.3	0.8	-	1.1	1.8	9.8	0.4	10.2	
8/1	929	929	-	-	-	0.0	0.5	-	0.5	1.8	4.4	0.5	4.8	
9/1	1802	1802	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1514	1514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	280	280	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1764	1764	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1	PRC for Signalled Lanes (%):	-7.7	Total Delay for Signalled Lanes (pcuHr):	40.01	Cycle Time (s):	80
	PRC Over All Lanes (%):	-7.7	Total Delay Over All Lanes(pcuHr):	60.78		

Scenario 2: '2040 wDev no School PM' (FG2: '2040 wDev no School PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



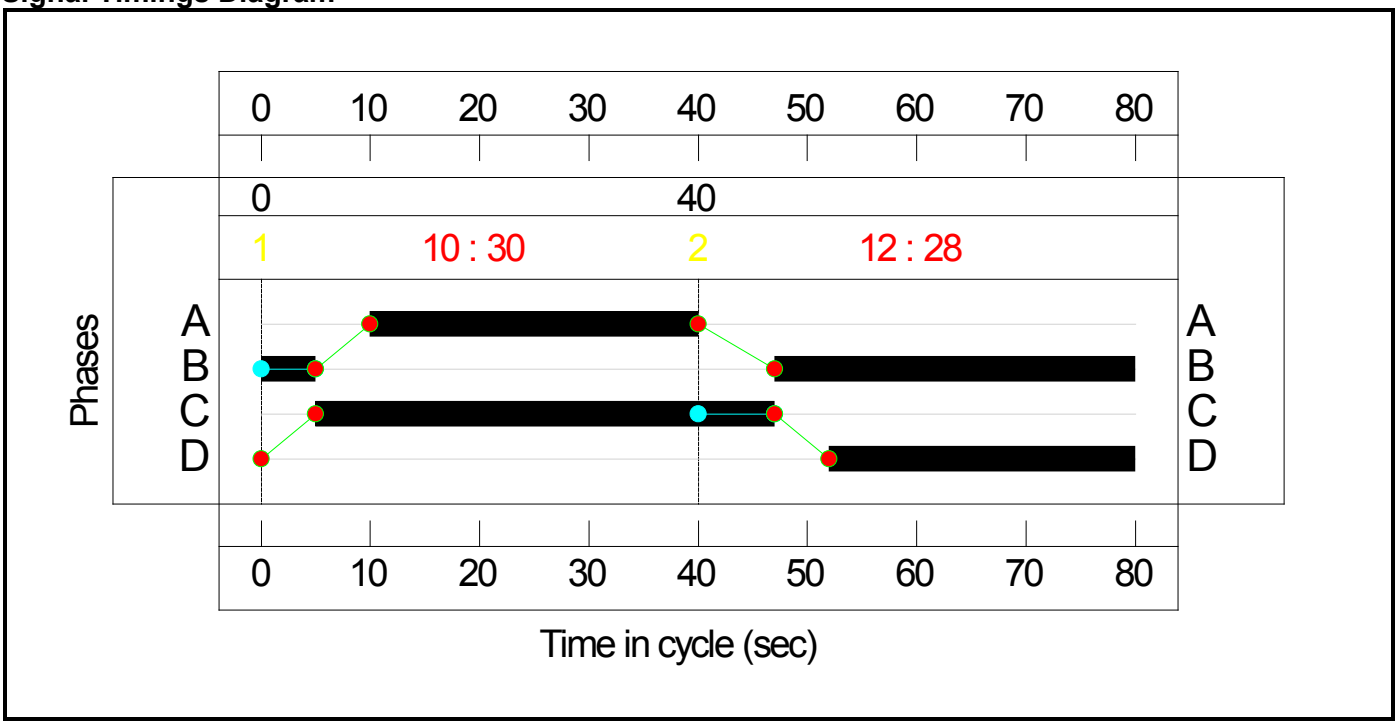
Stage Timings

Stage	1	2
Duration	30	28
Change Point	0	40

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	30	10	40
B	A1(M) NB off slip Ahead A1(m) NB	Traffic	38	47	5
C	Letchworth Gate Ahead Left Letchworth Gate	Traffic	42	5	47
D	Circ Right Ahead Circulatory	Traffic	28	52	0

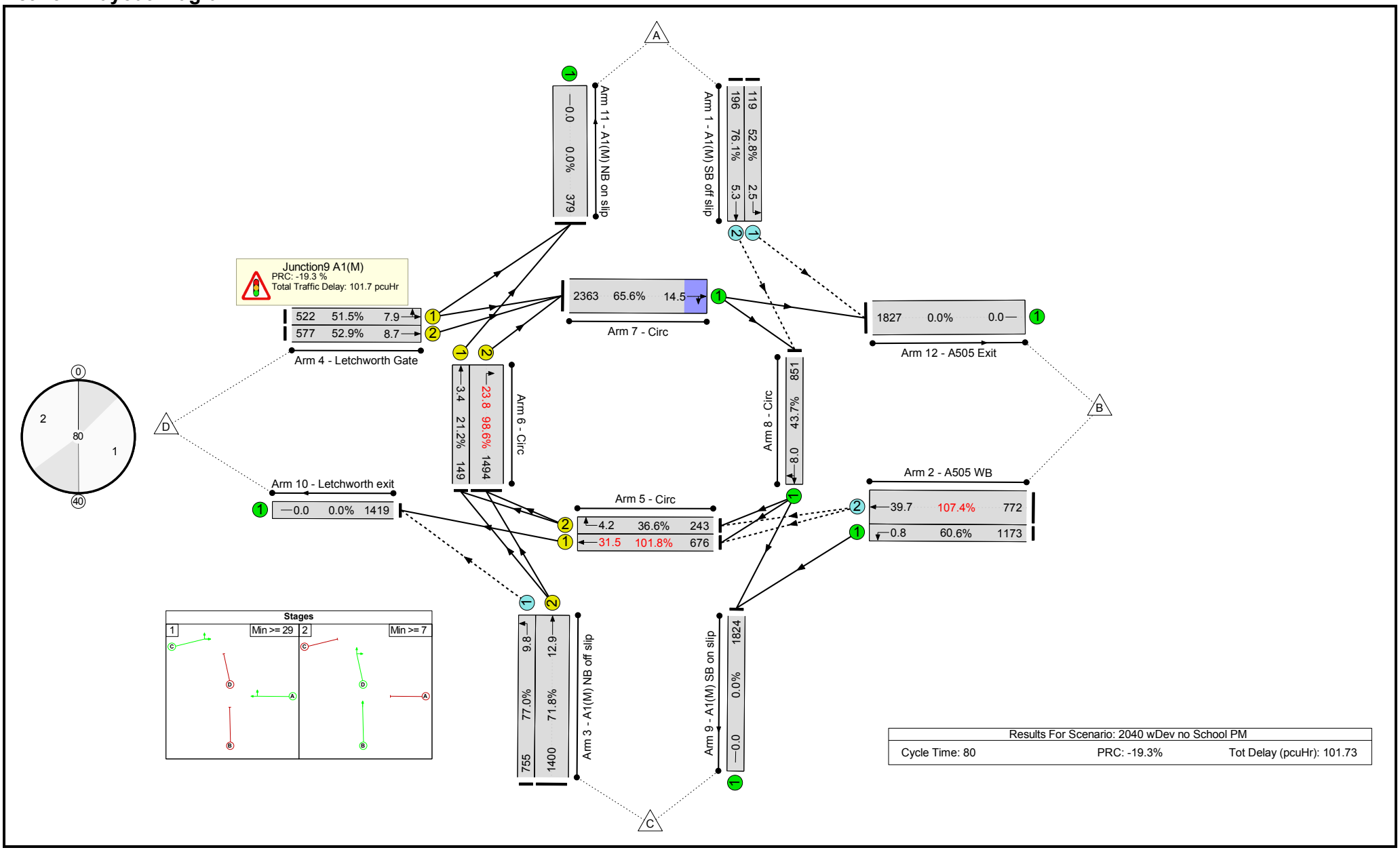
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1(M) NB off slip Ahead	U	B	47	5
4/1	Letchworth Gate Ahead Left	U	C	5	47
4/2	Letchworth Gate Ahead	U	C	5	47
5/1	Circ Ahead	U	A	10	40
5/2	Circ Right	U	A	10	40
6/1	Circ Ahead	U	D	52	0
6/2	Circ Right	U	D	52	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10 - PROPOSED	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**107.4%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**107.4%**
1/1	A1(M) SB off slip Left	O	N/A	N/A	-		-	-	-	-	119	1961	225	52.8%
1/2	A1(M) SB off slip Ahead	O	N/A	N/A	-		-	-	-	-	196	2080	257	76.1%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1173	1936	1936	60.6%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	772	4178	719	107.4%
3/1	A1(M) NB off slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	981	77.0%
3/2	A1(M) NB off slip Ahead	U	N/A	N/A	B		1	38	-	-	1400	4000	1950	71.8%
4/1	Letchworth Gate Ahead Left	U	N/A	N/A	C		1	42	-	-	522	1887	1014	51.5%
4/2	Letchworth Gate Ahead	U	N/A	N/A	C		1	42	-	-	577	2029	1091	52.9%
5/1	Circ Ahead	U	N/A	N/A	A		1	30	-	-	711	1714	664	101.8%
5/2	Circ Right	U	N/A	N/A	A		1	30	-	-	261	1714	664	36.6%
6/1	Circ Ahead	U	N/A	N/A	D		1	28	-	-	160	1943	704	21.2%
6/2	Circ Right	U	N/A	N/A	D		1	28	-	-	1501	4178	1515	98.6%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2370	3600	3600	65.6%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	851	1948	1948	43.7%
9/1	A1(M) SB on slip	U	N/A	N/A	-		-	-	-	-	1824	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1466	Inf	Inf	0.0%

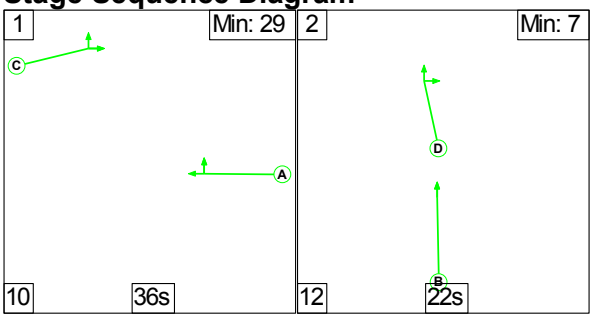
11/1	A1(M) NB on slip	U	N/A	N/A	-		-	-	-	-	390	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1834	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10 - PROPOSED	**-**	**-**	**1280**	**509**	**0**	**29.5**	**72.2**	**0.0**	**101.7**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**1280**	**509**	**0**	**29.5**	**72.2**	**0.0**	**101.7**	**-**	**-**	**-**	**-**	
1/1	119	119	119	0	0	0.5	0.6	-	1.1	32.2	1.9	0.6	2.5	
1/2	196	196	196	0	0	1.2	1.5	-	2.7	49.3	3.8	1.5	5.3	
2/1	1173	1173	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8	
2/2	772	719	719	0	0	4.1	32.5	-	36.6	170.8	23.5	16.2	39.7	
3/1	755	755	246	509	0	0.3	1.6	-	1.9	9.1	8.2	1.6	9.8	
3/2	1400	1400	-	-	-	6.3	1.3	-	7.6	19.4	12.3	0.6	12.9	
4/1	522	522	-	-	-	1.7	0.5	-	2.2	15.5	7.4	0.5	7.9	
4/2	577	577	-	-	-	1.9	0.6	-	2.5	15.5	8.2	0.6	8.7	
5/1	676	664	-	-	-	6.0	16.2	-	22.2	118.2	15.3	16.2	31.5	
5/2	243	243	-	-	-	1.0	0.3	-	1.2	18.4	3.9	0.3	4.2	
6/1	149	149	-	-	-	1.3	0.1	-	1.4	33.5	3.3	0.1	3.4	
6/2	1494	1494	-	-	-	4.7	14.8	-	19.6	47.2	16.4	7.4	23.8	
7/1	2363	2363	-	-	-	0.6	1.0	-	1.6	2.4	14.0	0.5	14.5	
8/1	851	851	-	-	-	0.1	0.4	-	0.4	1.9	7.6	0.4	8.0	
9/1	1824	1824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1419	1419	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1827	1827	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): -13.1 PRC Over All Lanes (%): -19.3 Total Delay for Signalled Lanes (pcuHr): 56.67 Total Delay Over All Lanes(pcuHr): 101.73 Cycle Time (s): 80

Scenario 3: '2040 wDev w School AM' (FG3: '2040 w Dev with School AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



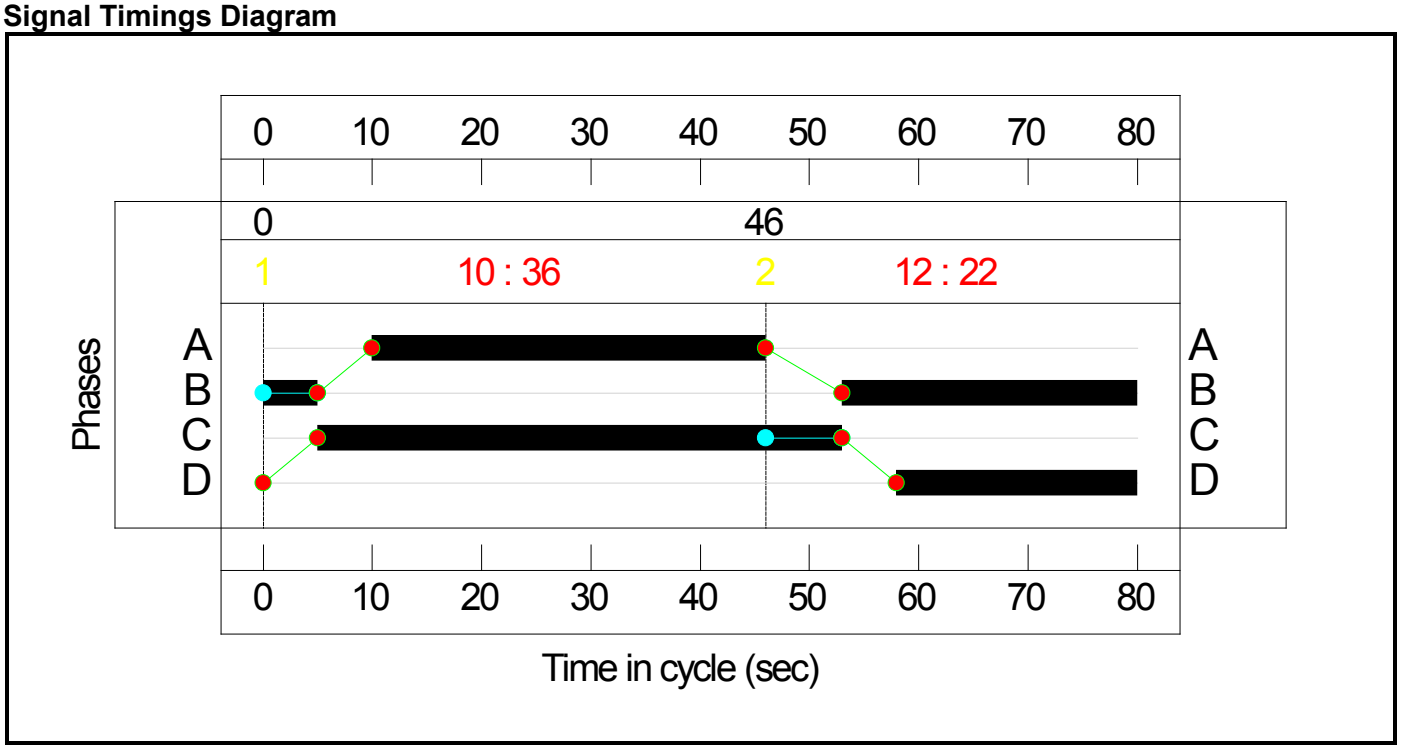
Stage Timings

Stage	1	2
Duration	36	22
Change Point	0	46

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	36	10	46
B	A1(M) NB off slip Ahead A1(m) NB	Traffic	32	53	5
C	Letchworth Gate Ahead Left Letchworth Gate	Traffic	48	5	53
D	Circ Right Ahead Circulatory	Traffic	22	58	0

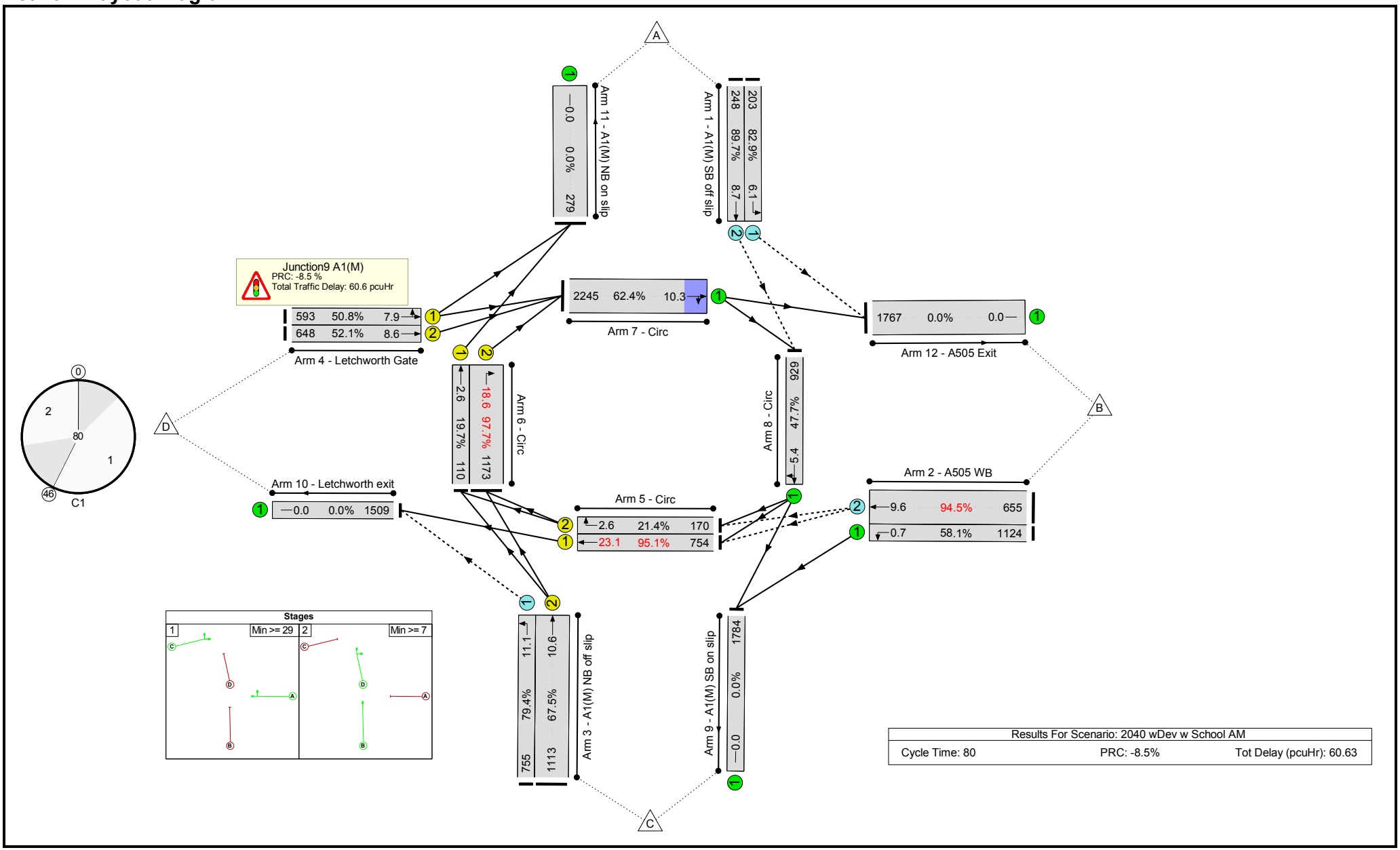
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1(M) NB off slip Ahead	U	B	53	5
4/1	Letchworth Gate Ahead Left	U	C	5	53
4/2	Letchworth Gate Ahead	U	C	5	53
5/1	Circ Ahead	U	A	10	46
5/2	Circ Right	U	A	10	46
6/1	Circ Ahead	U	D	58	0
6/2	Circ Right	U	D	58	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10 - PROPOSED	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**97.7%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**97.7%**
1/1	A1(M) SB off slip Left	O	N/A	N/A	-		-	-	-	-	203	1961	245	82.9%
1/2	A1(M) SB off slip Ahead	O	N/A	N/A	-		-	-	-	-	248	2080	277	89.7%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1124	1936	1936	58.1%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	655	4178	693	94.5%
3/1	A1(M) NB off slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	951	79.4%
3/2	A1(M) NB off slip Ahead	U	N/A	N/A	B		1	32	-	-	1113	4000	1650	67.5%
4/1	Letchworth Gate Ahead Left	U	N/A	N/A	C		1	48	-	-	593	1904	1166	50.8%
4/2	Letchworth Gate Ahead	U	N/A	N/A	C		1	48	-	-	648	2029	1243	52.1%
5/1	Circ Ahead	U	N/A	N/A	A		1	36	-	-	754	1714	793	95.1%
5/2	Circ Right	U	N/A	N/A	A		1	36	-	-	170	1714	793	21.4%
6/1	Circ Ahead	U	N/A	N/A	D		1	22	-	-	110	1943	559	19.7%
6/2	Circ Right	U	N/A	N/A	D		1	22	-	-	1173	4178	1201	97.7%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2245	3600	3600	62.4%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	929	1948	1948	47.7%
9/1	A1(M) SB on slip	U	N/A	N/A	-		-	-	-	-	1784	Inf	Inf	0.0%

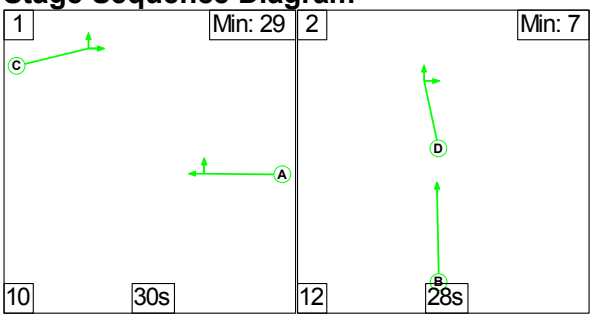
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1509	Inf	Inf	0.0%
11/1	A1(M) NB on slip	U	N/A	N/A	-		-	-	-	-	279	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1767	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10 - PROPOSED	**-**	**-**	**1412**	**449**	**0**	**23.7**	**36.9**	**0.0**	**60.6**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**1412**	**449**	**0**	**23.7**	**36.9**	**0.0**	**60.6**	**-**	**-**	**-**	**-**	
1/1	203	203	203	0	0	0.9	2.2	-	3.1	54.9	3.9	2.2	6.1	
1/2	248	248	248	0	0	1.3	3.5	-	4.8	70.1	5.2	3.5	8.7	
2/1	1124	1124	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7	
2/2	655	655	655	0	0	0.9	6.4	-	7.4	40.5	6.4	3.2	9.6	
3/1	755	755	306	449	0	0.3	1.9	-	2.2	10.6	9.2	1.9	11.1	
3/2	1113	1113	-	-	-	5.9	1.0	-	6.9	22.5	10.0	0.5	10.6	
4/1	593	593	-	-	-	1.4	0.5	-	2.0	11.9	7.4	0.5	7.9	
4/2	648	648	-	-	-	1.6	0.5	-	2.1	11.8	8.1	0.5	8.6	
5/1	754	754	-	-	-	5.6	7.1	-	12.7	60.6	16.0	7.1	23.1	
5/2	170	170	-	-	-	0.6	0.1	-	0.7	15.1	2.4	0.1	2.6	
6/1	110	110	-	-	-	1.1	0.1	-	1.2	39.2	2.4	0.1	2.6	
6/2	1173	1173	-	-	-	3.7	11.5	-	15.2	46.6	12.8	5.7	18.6	
7/1	2245	2245	-	-	-	0.3	0.8	-	1.2	1.9	9.9	0.4	10.3	
8/1	929	929	-	-	-	0.0	0.5	-	0.5	1.8	4.9	0.5	5.4	
9/1	1784	1784	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1509	1509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	279	279	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1767	1767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1	PRC for Signalled Lanes (%):	-8.5	Total Delay for Signalled Lanes (pcuHr):	40.82	Cycle Time (s):	80
	PRC Over All Lanes (%):	-8.5	Total Delay Over All Lanes(pcuHr):	60.63		

Scenario 4: '2040 wDev w School PM' (FG4: '2040 wDev with School PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



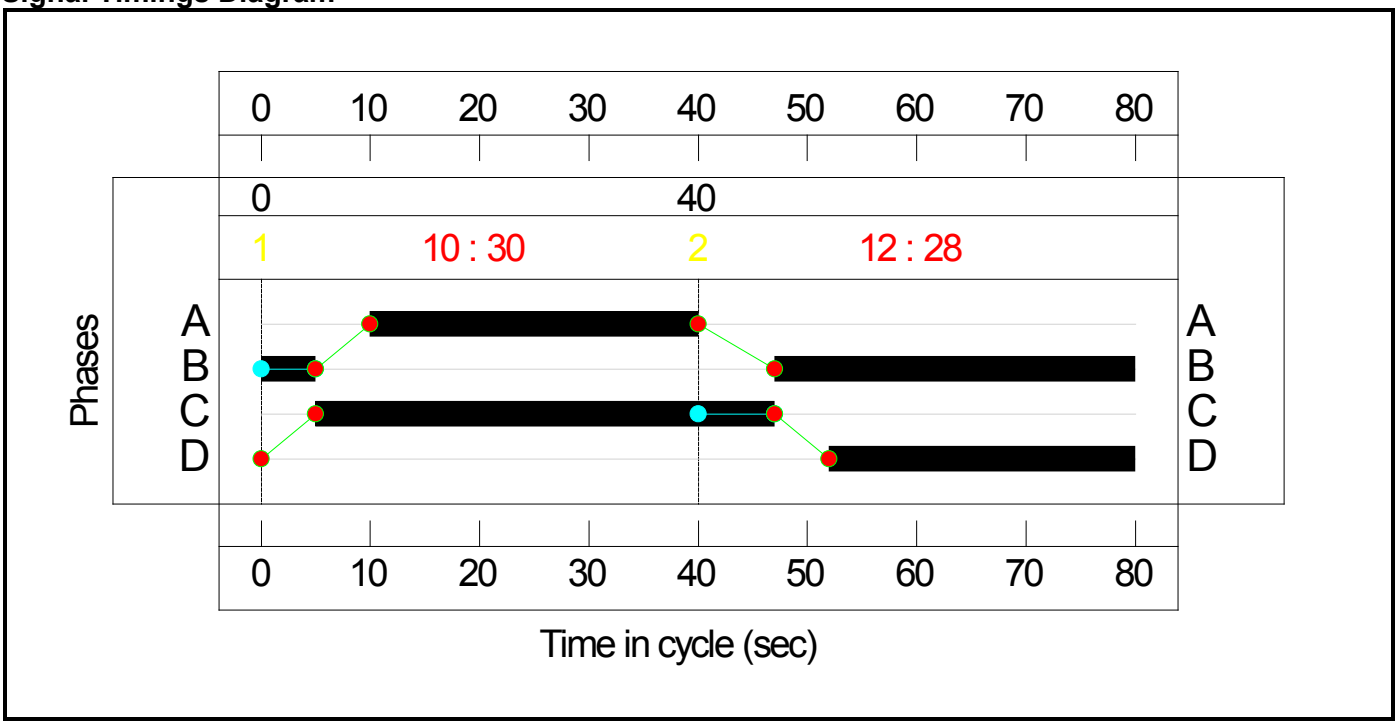
Stage Timings

Stage	1	2
Duration	30	28
Change Point	0	40

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Circ Right Ahead Circulatory	Traffic	30	10	40
B	A1(M) NB off slip Ahead A1(m) NB	Traffic	38	47	5
C	Letchworth Gate Ahead Left Letchworth Gate	Traffic	42	5	47
D	Circ Right Ahead Circulatory	Traffic	28	52	0

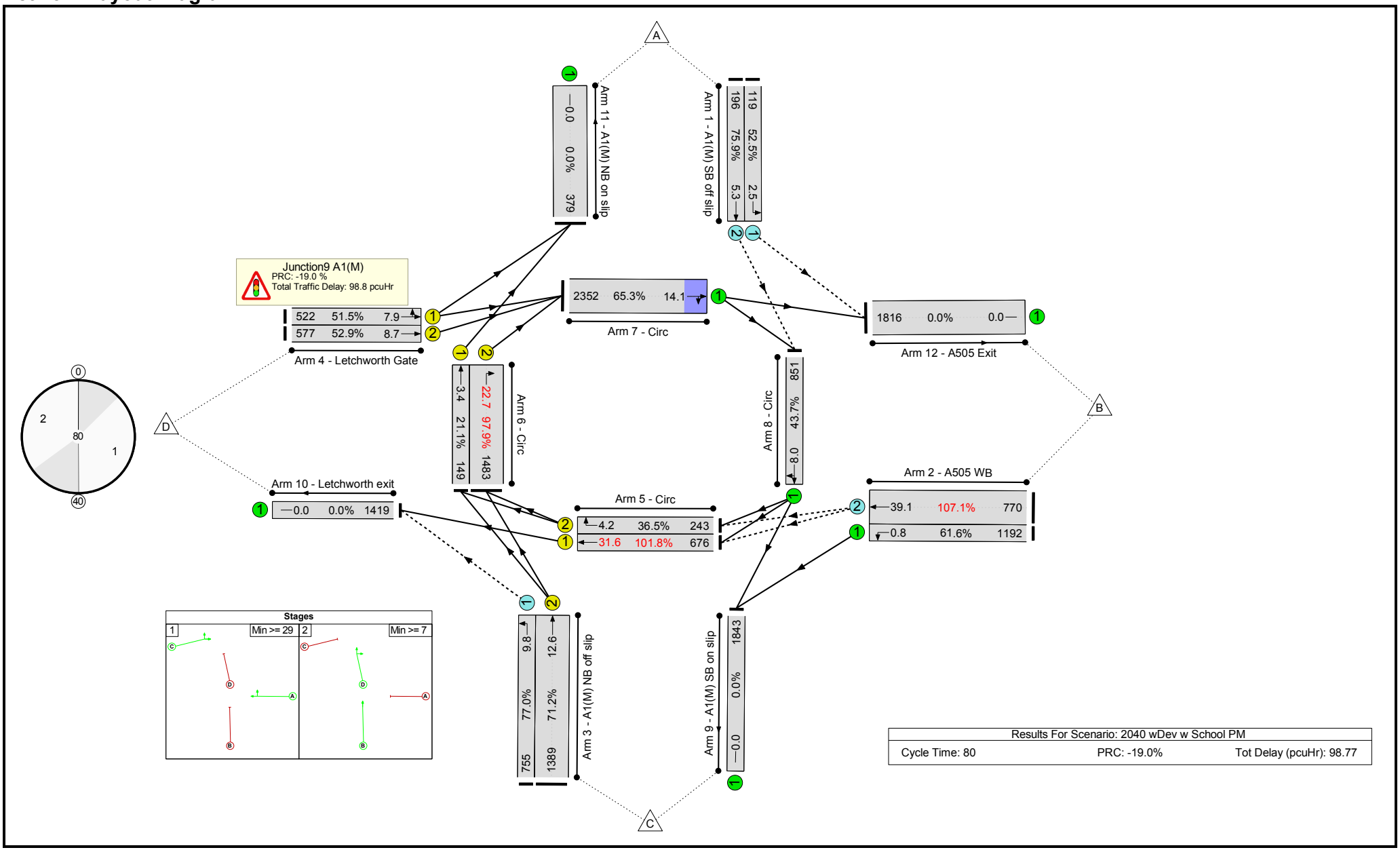
Signal Timings Diagram



Lane Green Times

Junction: Junction9 A1(M)					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
3/2	A1(M) NB off slip Ahead	U	B	47	5
4/1	Letchworth Gate Ahead Left	U	C	5	47
4/2	Letchworth Gate Ahead	U	C	5	47
5/1	Circ Ahead	U	A	10	40
5/2	Circ Right	U	A	10	40
6/1	Circ Ahead	U	D	52	0
6/2	Circ Right	U	D	52	0

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A1(m) Junction 10 - PROPOSED	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**107.1%**
Junction9 A1(M)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**107.1%**
1/1	A1(M) SB off slip Left	O	N/A	N/A	-		-	-	-	-	119	1961	227	52.5%
1/2	A1(M) SB off slip Ahead	O	N/A	N/A	-		-	-	-	-	196	2080	258	75.9%
2/1	A505 WB Left	U	N/A	N/A	-		-	-	-	-	1192	1936	1936	61.6%
2/2	A505 WB Ahead	O	N/A	N/A	-		-	-	-	-	770	4178	719	107.1%
3/1	A1(M) NB off slip Left	O	N/A	N/A	-		-	-	-	-	755	1936	981	77.0%
3/2	A1(M) NB off slip Ahead	U	N/A	N/A	B		1	38	-	-	1389	4000	1950	71.2%
4/1	Letchworth Gate Ahead Left	U	N/A	N/A	C		1	42	-	-	522	1887	1014	51.5%
4/2	Letchworth Gate Ahead	U	N/A	N/A	C		1	42	-	-	577	2029	1091	52.9%
5/1	Circ Ahead	U	N/A	N/A	A		1	30	-	-	710	1714	664	101.8%
5/2	Circ Right	U	N/A	N/A	A		1	30	-	-	260	1714	664	36.5%
6/1	Circ Ahead	U	N/A	N/A	D		1	28	-	-	159	1943	704	21.1%
6/2	Circ Right	U	N/A	N/A	D		1	28	-	-	1490	4178	1515	97.9%
7/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	2359	3600	3600	65.3%
8/1	Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	851	1948	1948	43.7%
9/1	A1(M) SB on slip	U	N/A	N/A	-		-	-	-	-	1843	Inf	Inf	0.0%
10/1	Letchworth exit	U	N/A	N/A	-		-	-	-	-	1465	Inf	Inf	0.0%

11/1	A1(M) NB on slip	U	N/A	N/A	-		-	-	-	-	389	Inf	Inf	0.0%
12/1	A505 Exit	U	N/A	N/A	-		-	-	-	-	1823	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A1(m) Junction 10 - PROPOSED	**-**	**-**	**1280**	**509**	**0**	**29.3**	**69.5**	**0.0**	**98.8**	**-**	**-**	**-**	**-**	
Junction9 A1(M)	**-**	**-**	**1280**	**509**	**0**	**29.3**	**69.5**	**0.0**	**98.8**	**-**	**-**	**-**	**-**	
1/1	119	119	119	0	0	0.5	0.5	-	1.0	31.7	1.9	0.5	2.5	
1/2	196	196	196	0	0	1.2	1.5	-	2.7	48.9	3.8	1.5	5.3	
2/1	1192	1192	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8	
2/2	770	719	719	0	0	4.0	31.6	-	35.7	166.7	23.3	15.8	39.1	
3/1	755	755	246	509	0	0.3	1.6	-	1.9	9.1	8.2	1.6	9.8	
3/2	1389	1389	-	-	-	6.2	1.2	-	7.4	19.3	12.0	0.6	12.6	
4/1	522	522	-	-	-	1.7	0.5	-	2.2	15.5	7.4	0.5	7.9	
4/2	577	577	-	-	-	1.9	0.6	-	2.5	15.5	8.2	0.6	8.7	
5/1	676	664	-	-	-	6.0	16.3	-	22.3	118.7	15.3	16.3	31.6	
5/2	243	243	-	-	-	1.0	0.3	-	1.2	18.4	3.9	0.3	4.2	
6/1	149	149	-	-	-	1.2	0.1	-	1.4	33.5	3.3	0.1	3.4	
6/2	1483	1483	-	-	-	4.7	13.0	-	17.6	42.8	16.3	6.5	22.7	
7/1	2352	2352	-	-	-	0.6	0.9	-	1.6	2.4	13.6	0.5	14.1	
8/1	851	851	-	-	-	0.1	0.4	-	0.4	1.9	7.6	0.4	8.0	
9/1	1843	1843	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	1419	1419	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	1816	1816	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): -13.1 PRC Over All Lanes (%): -19.0 Total Delay for Signalled Lanes (pcuHr): 54.71 Total Delay Over All Lanes(pcuHr): 98.77 Cycle Time (s): 80

A1 (M) Junction 10

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: Import of J1_A1(M)_J10.j9
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»2022, PM
»2028, AM
»2028, PM
»2033, AM
»2033, PM
»2033 + Dev, AM
»2033 + Dev, PM
»2040, AM
»2040, PM
»2040 + Dev, AM
»2040 + Dev, PM
»2040 + Dev + School, AM
»2040 + Dev + School, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
2022														
1 - A507 E	D1	0.7	2.9	4.15	0.41	A	39 % [3 - A507 W]	D2	1.0	1.5	4.14	0.51	A	29 % [2 - A1(M) S]
2 - A1(M) S		0.4	1.5	3.70	0.29	A			1.6	1.9	6.89	0.62	A	
3 - A507 W		1.9	3.5	5.28	0.66	A			1.7	2.7	5.10	0.63	A	
4 - A1(M) N		1.0	1.9	5.34	0.51	A			0.7	2.8	3.89	0.40	A	
2028														
1 - A507 E	D3	0.8	2.8	4.49	0.44	A	32 % [3 - A507 W]	D4	1.2	1.5	4.47	0.54	A	23 % [2 - A1(M) S]
2 - A1(M) S		0.5	1.9	3.89	0.32	A			2.0	2.6	7.94	0.66	A	
3 - A507 W		2.3	4.5	5.99	0.70	A			2.0	3.5	5.69	0.67	A	
4 - A1(M) N		1.2	1.5	5.96	0.55	A			0.7	2.8	4.11	0.42	A	
2033														
1 - A507 E	D5	0.8	2.7	4.66	0.46	A	29 % [3 - A507 W]	D6	1.3	1.5	4.65	0.56	A	20 % [2 - A1(M) S]
2 - A1(M) S		0.5	2.0	3.99	0.33	A			2.2	4.1	8.60	0.69	A	
3 - A507 W		2.5	4.9	6.39	0.72	A			2.2	3.9	6.02	0.69	A	
4 - A1(M) N		1.3	1.5	6.31	0.57	A			0.8	2.7	4.23	0.43	A	
2033 + Dev														
1 - A507 E	D7	0.8	2.9	4.43	0.43	A	32 % [3 - A507 W]	D8	1.1	1.5	4.33	0.53	A	24 % [2 - A1(M) S]
2 - A1(M) S		0.4	1.8	3.86	0.31	A			1.9	2.4	7.66	0.65	A	
3 - A507 W		2.3	4.4	5.96	0.70	A			1.9	3.2	5.54	0.66	A	
4 - A1(M) N		1.5	1.6	6.40	0.59	A			0.9	2.2	4.34	0.46	A	
2040														
1 - A507 E	D9	0.8	2.8	4.39	0.44	A	34 % [3 - A507 W]	D10	1.1	1.5	4.34	0.53	A	25 % [2 - A1(M) S]
2 - A1(M) S		0.4	1.8	3.84	0.31	A			1.8	2.3	7.49	0.65	A	
3 - A507 W		2.2	4.1	5.76	0.69	A			1.9	3.1	5.44	0.65	A	
4 - A1(M) N		1.2	1.6	5.80	0.54	A			0.7	2.8	4.02	0.41	A	
2040 + Dev														
1 - A507 E	D11	1.6	1.9	6.43	0.62	A	17 % [4 - A1(M) N]	D12	1.7	2.5	5.49	0.63	A	18 % [2 - A1(M) S]
2 - A1(M) S		0.5	2.4	4.50	0.34	A			2.2	4.9	9.19	0.69	A	
3 - A507 W		2.9	7.2	7.77	0.75	A			2.2	3.8	6.39	0.69	A	
4 - A1(M) N		2.8	9.5	10.14	0.74	B			1.4	1.6	5.67	0.59	A	
2040 + Dev + School														
1 - A507 E	D13	1.5	1.7	6.02	0.60	A	15 % [4 - A1(M) N]	D14	1.8	2.8	5.77	0.65	A	17 % [2 - A1(M) S]
2 - A1(M) S		0.5	2.3	4.40	0.34	A			2.3	5.8	9.58	0.70	A	
3 - A507 W		2.8	6.0	7.42	0.74	A			2.3	3.9	6.59	0.70	A	
4 - A1(M) N		3.1	11.8	10.85	0.76	B			1.3	1.5	5.44	0.57	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. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

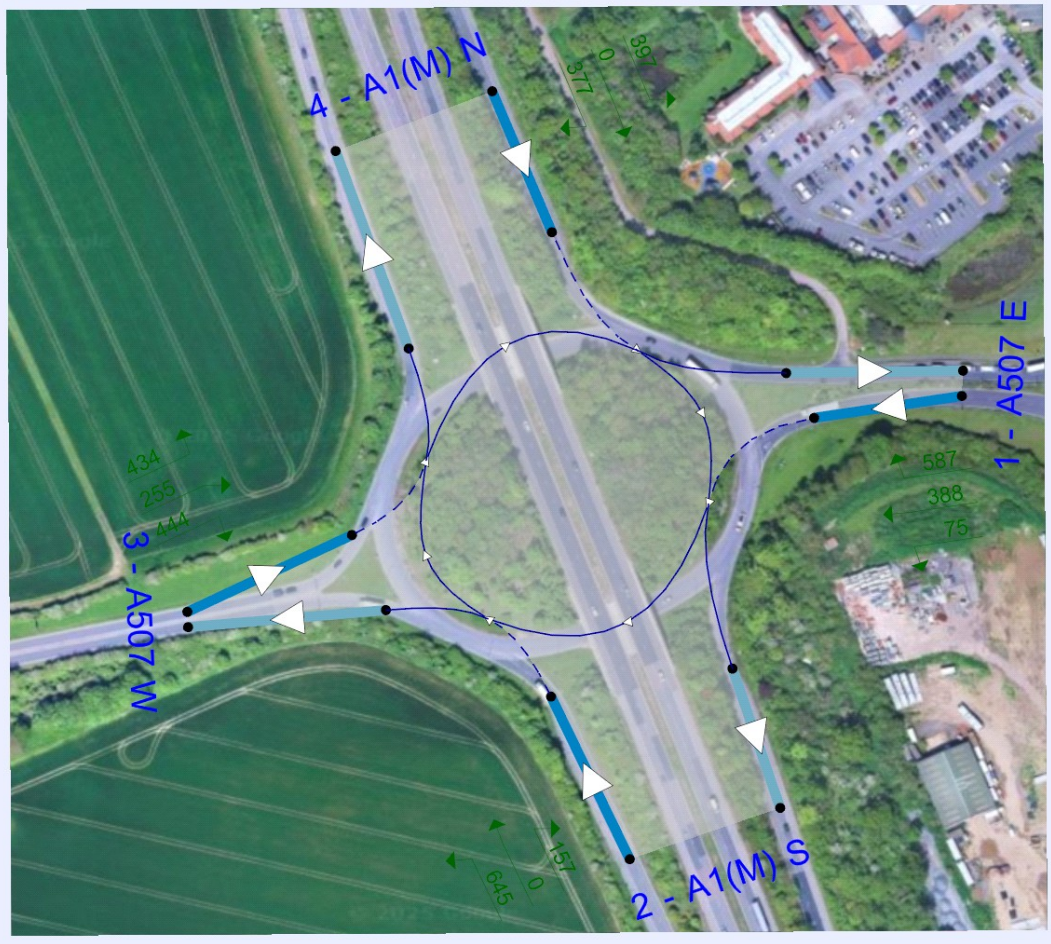
File summary

File Description

Title	A1(m) Junction10
Location	Baldock, SG7 5TR
Site number	J1
Date	23/07/2025
Version	1
Status	Draft
Identifier	
Client	Urban & Civic
Jobnumber	PC7029
Enumerator	CORPORATEROOT\926654
Description	Junction 1 - Existing A1(m) Junction10 layout

Units

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



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓		✓	Delay	0.85	36.00	50.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028	PM	ONE HOUR	16:45	18:15	15	✓
D5	2033	AM	ONE HOUR	07:45	09:15	15	✓
D6	2033	PM	ONE HOUR	16:45	18:15	15	✓
D7	2033 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2033 + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	2040	AM	ONE HOUR	07:45	09:15	15	✓
D10	2040	PM	ONE HOUR	16:45	18:15	15	✓
D11	2040 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D12	2040 + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D13	2040 + Dev + School	AM	ONE HOUR	07:45	09:15	15	✓
D14	2040 + Dev + School	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	4.84	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	39	3 - A507 W

Arms

Arms

Arm	Name	Description
1	A507 E	
2	A1(M) S	
3	A507 W	
4	A1(M) N	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - A507 E	0	99999		0.00
2 - A1(M) S	0	99999		0.00
3 - A507 W	0	99999		0.00
4 - A1(M) N	0	99999		10.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A507 E	7.28	9.11	3.8	24.9	128.0	47.0	
2 - A1(M) S	6.25	8.15	1.2	34.4	128.0	24.0	
3 - A507 W	5.08	7.28	34.7	25.6	127.0	4.0	
4 - A1(M) N	6.05	7.33	2.7	41.6	128.0	28.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - A507 E	None		
2 - A1(M) S	None		
3 - A507 W	None		
4 - A1(M) N	Percentage		100.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A507 E	0.519	2303
2 - A1(M) S	0.506	2067
3 - A507 W	0.551	2305
4 - A1(M) N	0.502	2052

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	556	100.000
2 - A1(M) S		ONE HOUR	✓	369	100.000
3 - A507 W		ONE HOUR	✓	1208	100.000
4 - A1(M) N		ONE HOUR	✓	642	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	102	223	231
	2 - A1(M) S	95	0	274	0
	3 - A507 W	207	696	5	300
	4 - A1(M) N	192	0	450	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	22	4	11
	2 - A1(M) S	21	0	8	0
	3 - A507 W	7	2	0	4
	4 - A1(M) N	15	0	3	22

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.41	4.15	0.7	2.9	A	510	765
2 - A1(M) S	0.29	3.70	0.4	1.5	A	339	508
3 - A507 W	0.66	5.28	1.9	3.5	A	1108	1663
4 - A1(M) N	0.51	5.34	1.0	1.9	A	589	884

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	419	105	890	1661	0.252	417	382	0.0	0.3	2.893	A
2 - A1(M) S	278	69	708	1518	0.183	277	599	0.0	0.2	2.898	A
3 - A507 W	909	227	245	2082	0.437	906	741	0.0	0.8	3.056	A
4 - A1(M) N	483	121	753	1554	0.311	519	398	9.4	0.5	3.601	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	500	125	1033	1591	0.314	499	444	0.3	0.5	3.294	A
2 - A1(M) S	332	83	816	1467	0.226	331	717	0.2	0.3	3.171	A
3 - A507 W	1086	271	293	2052	0.529	1085	855	0.8	1.1	3.715	A
4 - A1(M) N	577	144	901	1481	0.390	576	477	0.5	0.6	3.975	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	612	153	1264	1480	0.414	611	543	0.5	0.7	4.139	A
2 - A1(M) S	406	102	999	1379	0.295	406	877	0.3	0.4	3.696	A
3 - A507 W	1330	333	358	2012	0.661	1327	1046	1.1	1.9	5.234	A
4 - A1(M) N	707	177	1102	1382	0.512	705	583	0.6	1.0	5.307	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	612	153	1267	1479	0.414	612	544	0.7	0.7	4.154	A
2 - A1(M) S	406	102	1001	1378	0.295	406	879	0.4	0.4	3.702	A
3 - A507 W	1330	333	359	2012	0.661	1330	1048	1.9	1.9	5.277	A
4 - A1(M) N	707	177	1104	1381	0.512	707	585	1.0	1.0	5.342	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	500	125	1038	1589	0.315	501	445	0.7	0.5	3.312	A
2 - A1(M) S	332	83	819	1465	0.226	332	719	0.4	0.3	3.178	A
3 - A507 W	1086	271	294	2052	0.529	1089	858	1.9	1.1	3.753	A
4 - A1(M) N	577	144	904	1479	0.390	579	479	1.0	0.6	4.005	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	419	105	868	1671	0.250	419	372	0.5	0.3	2.877	A
2 - A1(M) S	278	69	685	1529	0.182	278	602	0.3	0.2	2.877	A
3 - A507 W	909	227	246	2081	0.437	911	718	1.1	0.8	3.082	A
4 - A1(M) N	483	121	756	1552	0.311	484	400	0.6	0.5	3.374	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2 - A1(M) S	0.22	0.00	0.00	0.22	0.22			N/A	N/A
3 - A507 W	0.77	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.45	0.00	0.00	0.45	0.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - A1(M) S	0.29	0.00	0.00	0.29	0.29			N/A	N/A
3 - A507 W	1.11	0.06	0.67	2.44	3.50			N/A	N/A
4 - A1(M) N	0.63	0.09	0.79	1.36	1.43			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.70	0.03	0.25	0.70	0.70			N/A	N/A
2 - A1(M) S	0.42	0.03	0.25	0.45	0.48			N/A	N/A
3 - A507 W	1.92	0.03	0.26	1.92	1.92			N/A	N/A
4 - A1(M) N	1.03	0.03	0.26	1.03	1.03			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.70	0.03	0.28	1.02	2.90			N/A	N/A
2 - A1(M) S	0.42	0.03	0.32	1.34	1.54			N/A	N/A
3 - A507 W	1.93	0.03	0.26	1.93	1.93			N/A	N/A
4 - A1(M) N	1.04	0.03	0.27	1.04	1.86			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - A1(M) S	0.29	0.00	0.00	0.29	0.29			N/A	N/A
3 - A507 W	1.13	0.17	1.08	1.70	1.95			N/A	N/A
4 - A1(M) N	0.64	0.23	0.94	1.39	1.44			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2 - A1(M) S	0.22	0.00	0.00	0.22	0.22			N/A	N/A
3 - A507 W	0.78	0.06	0.72	1.16	1.67			N/A	N/A
4 - A1(M) N	0.45	0.04	0.37	1.19	1.34			N/A	N/A

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	2 - A1(M) S

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	832	100.000
2 - A1(M) S		ONE HOUR	✓	780	100.000
3 - A507 W		ONE HOUR	✓	1106	100.000
4 - A1(M) N		ONE HOUR	✓	553	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	73	377	382
	2 - A1(M) S	153	0	627	0
	3 - A507 W	248	431	5	422
	4 - A1(M) N	172	0	366	15

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	7	1	3
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	6	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.51	4.14	1.0	1.5	A	763	1145
2 - A1(M) S	0.62	6.89	1.6	1.9	A	716	1074
3 - A507 W	0.63	5.10	1.7	2.7	A	1015	1522
4 - A1(M) N	0.40	3.89	0.7	2.8	A	507	761

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	626	157	640	1919	0.326	624	442	0.0	0.5	2.777	A
2 - A1(M) S	587	147	886	1569	0.374	585	378	0.0	0.6	3.650	A
3 - A507 W	833	208	414	2033	0.410	830	1057	0.0	0.7	2.986	A
4 - A1(M) N	416	104	628	1684	0.247	454	616	9.8	0.3	3.017	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	748	187	734	1871	0.400	747	514	0.5	0.7	3.202	A
2 - A1(M) S	701	175	1028	1497	0.468	700	453	0.6	0.9	4.508	A
3 - A507 W	994	249	494	1987	0.500	993	1235	0.7	1.0	3.615	A
4 - A1(M) N	497	124	751	1621	0.307	497	735	0.3	0.4	3.199	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	916	229	898	1786	0.513	915	629	0.7	1.0	4.123	A
2 - A1(M) S	859	215	1259	1382	0.621	856	554	0.9	1.6	6.800	A
3 - A507 W	1218	304	604	1925	0.633	1215	1510	1.0	1.7	5.052	A
4 - A1(M) N	609	152	919	1536	0.396	608	900	0.4	0.7	3.874	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	916	229	900	1785	0.513	916	631	1.0	1.0	4.140	A
2 - A1(M) S	859	215	1261	1381	0.622	859	555	1.6	1.6	6.886	A
3 - A507 W	1218	304	606	1924	0.633	1218	1514	1.7	1.7	5.097	A
4 - A1(M) N	609	152	922	1535	0.397	609	902	0.7	0.7	3.885	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	748	187	736	1870	0.400	749	517	1.0	0.7	3.220	A
2 - A1(M) S	701	175	1031	1496	0.469	704	454	1.6	0.9	4.564	A
3 - A507 W	994	249	496	1986	0.501	997	1240	1.7	1.0	3.651	A
4 - A1(M) N	497	124	755	1620	0.307	498	738	0.7	0.4	3.211	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	626	157	616	1931	0.324	627	432	0.7	0.5	2.763	A
2 - A1(M) S	587	147	863	1580	0.372	588	380	0.9	0.6	3.636	A
3 - A507 W	833	208	415	2032	0.410	834	1037	1.0	0.7	3.008	A
4 - A1(M) N	416	104	631	1682	0.247	417	617	0.4	0.3	2.845	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.48	0.00	0.00	0.48	0.48			N/A	N/A
2 - A1(M) S	0.59	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.69	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.66	0.08	0.78	1.37	1.44			N/A	N/A
2 - A1(M) S	0.87	0.07	0.78	1.48	1.88			N/A	N/A
3 - A507 W	0.99	0.06	0.73	1.90	2.70			N/A	N/A
4 - A1(M) N	0.44	0.00	0.00	0.44	0.44			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.04	0.03	0.26	1.04	1.04			N/A	N/A
2 - A1(M) S	1.61	0.03	0.27	1.61	1.61			N/A	N/A
3 - A507 W	1.70	0.03	0.26	1.70	1.70			N/A	N/A
4 - A1(M) N	0.65	0.03	0.25	0.65	0.65			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.05	0.03	0.27	1.05	1.14			N/A	N/A
2 - A1(M) S	1.63	0.03	0.27	1.63	1.63			N/A	N/A
3 - A507 W	1.71	0.03	0.26	1.71	1.71			N/A	N/A
4 - A1(M) N	0.65	0.03	0.29	1.13	2.83			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.67	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.89	0.13	0.93	1.50	1.52			N/A	N/A
3 - A507 W	1.01	0.22	1.02	1.32	1.68			N/A	N/A
4 - A1(M) N	0.45	0.00	0.00	0.45	0.45			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.48	0.04	0.42	1.25	1.37			N/A	N/A
2 - A1(M) S	0.60	0.05	0.50	1.37	1.48			N/A	N/A
3 - A507 W	0.70	0.07	0.71	1.05	1.05			N/A	N/A
4 - A1(M) N	0.33	0.00	0.00	0.33	0.33			N/A	N/A

2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.38	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	32	3 - A507 W

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	583	100.000
2 - A1(M) S		ONE HOUR	✓	387	100.000
3 - A507 W		ONE HOUR	✓	1267	100.000
4 - A1(M) N		ONE HOUR	✓	682	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	107	234	242
	2 - A1(M) S	100	0	287	0
	3 - A507 W	217	730	5	315
	4 - A1(M) N	201	0	472	9

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	22	4	11
	2 - A1(M) S	21	0	8	0
	3 - A507 W	7	2	0	4
	4 - A1(M) N	15	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.44	4.49	0.8	2.8	A	535	802
2 - A1(M) S	0.32	3.89	0.5	1.9	A	355	533
3 - A507 W	0.70	5.99	2.3	4.5	A	1163	1744
4 - A1(M) N	0.55	5.96	1.2	1.5	A	626	939

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	439	110	939	1637	0.268	437	400	0.0	0.4	2.996	A
2 - A1(M) S	291	73	748	1499	0.194	290	628	0.0	0.2	2.974	A
3 - A507 W	954	238	264	2070	0.461	950	775	0.0	0.8	3.205	A
4 - A1(M) N	513	128	789	1537	0.334	549	425	9.4	0.5	3.773	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	524	131	1092	1563	0.335	524	465	0.4	0.5	3.460	A
2 - A1(M) S	348	87	864	1444	0.241	348	751	0.2	0.3	3.283	A
3 - A507 W	1139	285	315	2039	0.559	1137	896	0.8	1.3	3.984	A
4 - A1(M) N	613	153	944	1461	0.420	612	508	0.5	0.7	4.238	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	642	160	1335	1446	0.444	641	569	0.5	0.8	4.464	A
2 - A1(M) S	426	107	1057	1352	0.315	426	919	0.3	0.5	3.884	A
3 - A507 W	1395	349	386	1997	0.699	1391	1097	1.3	2.3	5.904	A
4 - A1(M) N	751	188	1155	1357	0.553	749	622	0.7	1.2	5.901	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	642	160	1339	1444	0.444	642	570	0.8	0.8	4.486	A
2 - A1(M) S	426	107	1059	1351	0.315	426	921	0.5	0.5	3.893	A
3 - A507 W	1395	349	386	1996	0.699	1395	1099	2.3	2.3	5.985	A
4 - A1(M) N	751	188	1158	1355	0.554	751	623	1.2	1.2	5.956	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	524	131	1097	1561	0.336	525	467	0.8	0.5	3.479	A
2 - A1(M) S	348	87	867	1442	0.241	348	755	0.5	0.3	3.294	A
3 - A507 W	1139	285	316	2039	0.559	1143	899	2.3	1.3	4.037	A
4 - A1(M) N	613	153	949	1459	0.420	615	510	1.2	0.7	4.278	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	439	110	917	1648	0.266	439	391	0.5	0.4	2.980	A
2 - A1(M) S	291	73	725	1510	0.193	292	631	0.3	0.2	2.957	A
3 - A507 W	954	238	265	2070	0.461	956	752	1.3	0.9	3.237	A
4 - A1(M) N	513	128	793	1535	0.334	514	427	0.7	0.5	3.530	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A1(M) S	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A507 W	0.85	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.50	0.50	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.50	0.50	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - A507 W	1.25	0.05	0.54	2.94	4.47			N/A	N/A
4 - A1(M) N	0.72	0.08	0.80	1.40	1.47			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.79	0.03	0.25	0.79	0.79			N/A	N/A
2 - A1(M) S	0.46	0.03	0.25	0.46	0.48			N/A	N/A
3 - A507 W	2.27	0.03	0.27	2.27	2.27			N/A	N/A
4 - A1(M) N	1.22	0.03	0.26	1.22	1.22			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.80	0.03	0.28	0.80	2.78			N/A	N/A
2 - A1(M) S	0.46	0.03	0.32	1.40	1.88			N/A	N/A
3 - A507 W	2.30	0.03	0.26	2.30	2.30			N/A	N/A
4 - A1(M) N	1.23	0.03	0.27	1.23	1.53			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.51	0.51	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - A507 W	1.28	0.11	1.11	2.15	2.81			N/A	N/A
4 - A1(M) N	0.73	0.19	0.93	1.39	1.44			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A1(M) S	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A507 W	0.86	0.05	0.62	1.66	2.24			N/A	N/A
4 - A1(M) N	0.51	0.05	0.46	1.28	1.39			N/A	N/A

2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.65	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	23	2 - A1(M) S

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	871	100.000
2 - A1(M) S		ONE HOUR	✓	816	100.000
3 - A507 W		ONE HOUR	✓	1158	100.000
4 - A1(M) N		ONE HOUR	✓	579	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	76	395	400
	2 - A1(M) S	160	0	656	0
	3 - A507 W	260	451	5	442
	4 - A1(M) N	180	0	383	16

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	7	1	3
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	6	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.54	4.47	1.2	1.5	A	799	1199
2 - A1(M) S	0.66	7.94	2.0	2.6	A	749	1123
3 - A507 W	0.67	5.69	2.0	3.5	A	1063	1594
4 - A1(M) N	0.42	4.11	0.7	2.8	A	531	797

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	656	164	668	1904	0.344	654	462	0.0	0.5	2.873	A
2 - A1(M) S	614	154	927	1548	0.397	612	395	0.0	0.7	3.832	A
3 - A507 W	872	218	433	2022	0.431	869	1105	0.0	0.8	3.114	A
4 - A1(M) N	436	109	657	1669	0.261	473	645	9.8	0.4	3.108	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	783	196	768	1853	0.422	782	539	0.5	0.7	3.360	A
2 - A1(M) S	734	183	1077	1473	0.498	732	473	0.7	1.0	4.849	A
3 - A507 W	1041	260	517	1974	0.527	1040	1292	0.8	1.1	3.847	A
4 - A1(M) N	521	130	786	1604	0.325	520	770	0.4	0.5	3.320	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	959	240	939	1765	0.543	957	659	0.7	1.2	4.446	A
2 - A1(M) S	898	225	1318	1353	0.664	895	579	1.0	1.9	7.791	A
3 - A507 W	1275	319	633	1909	0.668	1271	1580	1.1	2.0	5.621	A
4 - A1(M) N	637	159	962	1515	0.421	637	942	0.5	0.7	4.094	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	959	240	941	1764	0.544	959	661	1.2	1.2	4.471	A
2 - A1(M) S	898	225	1320	1352	0.665	898	580	1.9	2.0	7.937	A
3 - A507 W	1275	319	634	1908	0.668	1275	1584	2.0	2.0	5.687	A
4 - A1(M) N	637	159	964	1514	0.421	637	945	0.7	0.7	4.108	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	783	196	771	1852	0.423	785	541	1.2	0.7	3.378	A
2 - A1(M) S	734	183	1080	1472	0.499	737	475	2.0	1.0	4.929	A
3 - A507 W	1041	260	519	1973	0.528	1044	1298	2.0	1.1	3.893	A
4 - A1(M) N	521	130	790	1602	0.325	521	774	0.7	0.5	3.335	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	656	164	645	1917	0.342	657	452	0.7	0.5	2.858	A
2 - A1(M) S	614	154	904	1560	0.394	616	397	1.0	0.7	3.818	A
3 - A507 W	872	218	434	2021	0.431	873	1085	1.1	0.8	3.141	A
4 - A1(M) N	436	109	661	1667	0.261	436	647	0.5	0.4	2.927	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.52	0.52	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.65	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.75	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.36	0.00	0.00	0.36	0.36			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.73	0.08	0.78	1.41	1.49			N/A	N/A
2 - A1(M) S	0.98	0.06	0.75	1.86	2.61			N/A	N/A
3 - A507 W	1.11	0.05	0.65	2.42	3.48			N/A	N/A
4 - A1(M) N	0.48	0.00	0.00	0.48	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.18	0.03	0.26	1.18	1.18			N/A	N/A
2 - A1(M) S	1.93	0.03	0.27	1.93	2.44			N/A	N/A
3 - A507 W	1.98	0.03	0.27	1.98	1.98			N/A	N/A
4 - A1(M) N	0.72	0.03	0.25	0.72	0.72			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.18	0.03	0.27	1.18	1.32			N/A	N/A
2 - A1(M) S	1.96	0.03	0.27	1.96	1.96			N/A	N/A
3 - A507 W	2.00	0.03	0.26	2.00	2.00			N/A	N/A
4 - A1(M) N	0.72	0.03	0.28	0.85	2.80			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.74	0.51	0.98	1.40	1.45			N/A	N/A
2 - A1(M) S	1.00	0.09	0.94	1.64	1.95			N/A	N/A
3 - A507 W	1.13	0.14	1.06	1.73	1.99			N/A	N/A
4 - A1(M) N	0.48	0.00	0.00	0.48	0.48			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.52	0.05	0.55	1.31	1.41			N/A	N/A
2 - A1(M) S	0.65	0.05	0.47	1.01	1.64			N/A	N/A
3 - A507 W	0.76	0.06	0.66	1.21	1.72			N/A	N/A
4 - A1(M) N	0.36	0.00	0.00	0.36	0.36			N/A	N/A

2033, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.68	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	3 - A507 W

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2033	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	596	100.000
2 - A1(M) S		ONE HOUR	✓	396	100.000
3 - A507 W		ONE HOUR	✓	1295	100.000
4 - A1(M) N		ONE HOUR	✓	698	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	109	239	248
	2 - A1(M) S	102	0	294	0
	3 - A507 W	222	746	5	322
	4 - A1(M) N	206	0	482	10

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	22	4	11
	2 - A1(M) S	21	0	8	0
	3 - A507 W	7	2	0	4
	4 - A1(M) N	15	0	3	22

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.46	4.66	0.8	2.7	A	547	820
2 - A1(M) S	0.33	3.99	0.5	2.0	A	363	545
3 - A507 W	0.72	6.39	2.5	4.9	A	1188	1782
4 - A1(M) N	0.57	6.31	1.3	1.5	A	640	961

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	449	112	959	1627	0.276	447	409	0.0	0.4	3.048	A
2 - A1(M) S	298	75	764	1491	0.200	297	641	0.0	0.2	3.012	A
3 - A507 W	975	244	271	2065	0.472	971	791	0.0	0.9	3.280	A
4 - A1(M) N	525	131	806	1524	0.345	561	436	9.4	0.5	3.874	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	536	134	1116	1551	0.345	535	476	0.4	0.5	3.542	A
2 - A1(M) S	356	89	883	1434	0.248	356	768	0.2	0.3	3.339	A
3 - A507 W	1164	291	323	2033	0.573	1162	916	0.9	1.3	4.125	A
4 - A1(M) N	627	157	965	1446	0.434	627	521	0.5	0.8	4.387	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	656	164	1364	1431	0.459	655	582	0.5	0.8	4.632	A
2 - A1(M) S	436	109	1081	1339	0.326	435	939	0.3	0.5	3.980	A
3 - A507 W	1426	356	396	1989	0.717	1421	1121	1.3	2.5	6.285	A
4 - A1(M) N	769	192	1180	1340	0.573	766	637	0.8	1.3	6.244	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	656	164	1368	1429	0.459	656	584	0.8	0.8	4.659	A
2 - A1(M) S	436	109	1083	1338	0.326	436	941	0.5	0.5	3.990	A
3 - A507 W	1426	356	396	1989	0.717	1426	1123	2.5	2.5	6.387	A
4 - A1(M) N	769	192	1184	1339	0.574	768	639	1.3	1.3	6.312	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	536	134	1122	1548	0.346	537	478	0.8	0.5	3.567	A
2 - A1(M) S	356	89	887	1432	0.249	357	771	0.5	0.3	3.348	A
3 - A507 W	1164	291	324	2033	0.573	1169	919	2.5	1.4	4.190	A
4 - A1(M) N	627	157	970	1444	0.435	630	523	1.3	0.8	4.435	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	449	112	938	1637	0.274	449	400	0.5	0.4	3.034	A
2 - A1(M) S	298	75	742	1501	0.199	298	645	0.3	0.2	2.995	A
3 - A507 W	975	244	271	2065	0.472	977	769	1.4	0.9	3.312	A
4 - A1(M) N	525	131	811	1522	0.345	526	437	0.8	0.5	3.620	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.89	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.53	0.53	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.52	0.06	0.63	1.33	1.41			N/A	N/A
2 - A1(M) S	0.33	0.00	0.00	0.33	0.33			N/A	N/A
3 - A507 W	1.33	0.05	0.49	3.24	4.93			N/A	N/A
4 - A1(M) N	0.76	0.08	0.80	1.25	1.25			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.84	0.03	0.25	0.84	0.84			N/A	N/A
2 - A1(M) S	0.48	0.03	0.25	0.48	0.48			N/A	N/A
3 - A507 W	2.47	0.03	0.27	2.47	3.12			N/A	N/A
4 - A1(M) N	1.32	0.03	0.26	1.32	1.32			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.84	0.03	0.28	0.84	2.67			N/A	N/A
2 - A1(M) S	0.48	0.03	0.31	1.42	2.01			N/A	N/A
3 - A507 W	2.50	0.03	0.26	2.50	2.50			N/A	N/A
4 - A1(M) N	1.34	0.03	0.27	1.34	1.45			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.53	0.53	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.33	0.00	0.00	0.33	0.33			N/A	N/A
3 - A507 W	1.35	0.10	1.11	2.53	3.28			N/A	N/A
4 - A1(M) N	0.78	0.17	0.92	1.40	1.46			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.90	0.05	0.54	1.83	2.66			N/A	N/A
4 - A1(M) N	0.53	0.05	0.49	1.30	1.40			N/A	N/A

2033, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.99	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	20	2 - A1(M) S

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2033	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	890	100.000
2 - A1(M) S		ONE HOUR	✓	835	100.000
3 - A507 W		ONE HOUR	✓	1182	100.000
4 - A1(M) N		ONE HOUR	✓	592	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	78	403	409
	2 - A1(M) S	164	0	671	0
	3 - A507 W	265	461	5	451
	4 - A1(M) N	184	0	392	16

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	7	1	3
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	6	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.56	4.65	1.3	1.5	A	817	1225
2 - A1(M) S	0.69	8.60	2.2	4.1	A	766	1149
3 - A507 W	0.69	6.02	2.2	3.9	A	1085	1627
4 - A1(M) N	0.43	4.23	0.8	2.7	A	543	815

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	670	168	683	1897	0.353	668	472	0.0	0.5	2.924	A
2 - A1(M) S	629	157	946	1539	0.409	626	404	0.0	0.7	3.932	A
3 - A507 W	890	222	443	2016	0.441	887	1129	0.0	0.8	3.177	A
4 - A1(M) N	446	111	671	1662	0.268	483	658	9.8	0.4	3.154	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	800	200	785	1845	0.434	799	550	0.5	0.8	3.440	A
2 - A1(M) S	751	188	1100	1462	0.514	749	484	0.7	1.0	5.043	A
3 - A507 W	1063	266	529	1967	0.540	1061	1320	0.8	1.2	3.965	A
4 - A1(M) N	532	133	803	1595	0.334	532	787	0.4	0.5	3.383	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	980	245	960	1754	0.559	978	673	0.8	1.3	4.626	A
2 - A1(M) S	919	230	1346	1338	0.687	915	592	1.0	2.1	8.416	A
3 - A507 W	1301	325	647	1900	0.685	1298	1615	1.2	2.1	5.933	A
4 - A1(M) N	652	163	982	1505	0.433	651	962	0.5	0.8	4.211	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	980	245	962	1753	0.559	980	675	1.3	1.3	4.655	A
2 - A1(M) S	919	230	1349	1337	0.688	919	593	2.1	2.2	8.604	A
3 - A507 W	1301	325	648	1899	0.685	1301	1619	2.1	2.2	6.016	A
4 - A1(M) N	652	163	985	1503	0.434	652	964	0.8	0.8	4.229	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	800	200	788	1843	0.434	802	553	1.3	0.8	3.467	A
2 - A1(M) S	751	188	1104	1460	0.514	755	486	2.2	1.1	5.141	A
3 - A507 W	1063	266	531	1966	0.540	1066	1327	2.2	1.2	4.018	A
4 - A1(M) N	532	133	808	1593	0.334	533	790	0.8	0.5	3.400	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	670	168	659	1909	0.351	671	462	0.8	0.5	2.908	A
2 - A1(M) S	629	157	923	1550	0.406	630	406	1.1	0.7	3.920	A
3 - A507 W	890	222	444	2016	0.441	891	1109	1.2	0.8	3.208	A
4 - A1(M) N	446	111	675	1660	0.268	446	661	0.5	0.4	2.969	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.54	0.54	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.69	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.78	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.37	0.00	0.00	0.37	0.37			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.76	0.08	0.78	1.34	1.34			N/A	N/A
2 - A1(M) S	1.04	0.06	0.71	2.08	2.95			N/A	N/A
3 - A507 W	1.16	0.05	0.60	2.65	3.85			N/A	N/A
4 - A1(M) N	0.50	0.00	0.00	0.50	0.50			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.25	0.03	0.26	1.25	1.25			N/A	N/A
2 - A1(M) S	2.13	0.03	0.27	2.13	4.07			N/A	N/A
3 - A507 W	2.13	0.03	0.27	2.13	2.13			N/A	N/A
4 - A1(M) N	0.76	0.03	0.25	0.76	0.76			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.26	0.03	0.27	1.26	1.26			N/A	N/A
2 - A1(M) S	2.17	0.03	0.27	2.17	2.28			N/A	N/A
3 - A507 W	2.15	0.03	0.26	2.15	2.15			N/A	N/A
4 - A1(M) N	0.76	0.03	0.28	0.76	2.72			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.77	0.45	0.97	1.40	1.45			N/A	N/A
2 - A1(M) S	1.07	0.08	0.93	1.85	2.47			N/A	N/A
3 - A507 W	1.19	0.12	1.08	1.89	2.47			N/A	N/A
4 - A1(M) N	0.50	0.50	1.00	1.40	1.45			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.54	0.06	0.61	1.32	1.41			N/A	N/A
2 - A1(M) S	0.69	0.04	0.45	1.33	1.90			N/A	N/A
3 - A507 W	0.80	0.06	0.62	1.44	1.90			N/A	N/A
4 - A1(M) N	0.37	0.00	0.00	0.37	0.37			N/A	N/A

2033 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.49	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	32	3 - A507 W

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	563	100.000
2 - A1(M) S		ONE HOUR	✓	377	100.000
3 - A507 W		ONE HOUR	✓	1254	100.000
4 - A1(M) N		ONE HOUR	✓	749	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	89	194	280
	2 - A1(M) S	83	0	294	0
	3 - A507 W	181	746	5	322
	4 - A1(M) N	257	0	482	10

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	24	5	9
	2 - A1(M) S	22	0	8	0
	3 - A507 W	8	2	0	4
	4 - A1(M) N	10	0	3	22

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.43	4.43	0.8	2.9	A	517	775
2 - A1(M) S	0.31	3.86	0.4	1.8	A	346	519
3 - A507 W	0.70	5.96	2.3	4.4	A	1151	1726
4 - A1(M) N	0.59	6.40	1.5	1.6	A	687	1031

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	424	106	957	1631	0.260	422	404	0.0	0.3	2.978	A
2 - A1(M) S	284	71	753	1500	0.189	283	626	0.0	0.2	2.956	A
3 - A507 W	944	236	280	2062	0.458	941	756	0.0	0.8	3.202	A
4 - A1(M) N	564	141	761	1564	0.361	599	460	9.5	0.6	3.871	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	506	127	1116	1554	0.326	506	468	0.3	0.5	3.432	A
2 - A1(M) S	339	85	872	1443	0.235	339	750	0.2	0.3	3.259	A
3 - A507 W	1127	282	335	2029	0.556	1126	875	0.8	1.2	3.977	A
4 - A1(M) N	673	168	911	1489	0.452	672	549	0.6	0.8	4.400	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	620	155	1365	1433	0.432	619	572	0.5	0.8	4.414	A
2 - A1(M) S	415	104	1067	1350	0.307	415	917	0.3	0.4	3.847	A
3 - A507 W	1381	345	410	1984	0.696	1377	1071	1.2	2.2	5.886	A
4 - A1(M) N	825	206	1114	1388	0.594	822	672	0.8	1.4	6.329	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	620	155	1368	1432	0.433	620	574	0.8	0.8	4.434	A
2 - A1(M) S	415	104	1069	1349	0.308	415	919	0.4	0.4	3.855	A
3 - A507 W	1381	345	411	1984	0.696	1381	1073	2.2	2.3	5.965	A
4 - A1(M) N	825	206	1117	1387	0.595	825	674	1.4	1.5	6.401	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	506	127	1121	1551	0.326	507	470	0.8	0.5	3.454	A
2 - A1(M) S	339	85	875	1441	0.235	339	753	0.4	0.3	3.270	A
3 - A507 W	1127	282	336	2029	0.556	1131	879	2.3	1.3	4.029	A
4 - A1(M) N	673	168	916	1487	0.453	676	552	1.5	0.8	4.450	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	424	106	937	1640	0.258	424	393	0.5	0.4	2.964	A
2 - A1(M) S	284	71	732	1510	0.188	284	630	0.3	0.2	2.936	A
3 - A507 W	944	236	281	2061	0.458	946	735	1.3	0.9	3.230	A
4 - A1(M) N	564	141	765	1562	0.361	565	461	0.8	0.6	3.616	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - A1(M) S	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3 - A507 W	0.84	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.57	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.48	0.00	0.00	0.48	0.48			N/A	N/A
2 - A1(M) S	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A507 W	1.24	0.05	0.56	2.90	4.36			N/A	N/A
4 - A1(M) N	0.82	0.07	0.80	1.15	1.64			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.76	0.03	0.25	0.76	0.76			N/A	N/A
2 - A1(M) S	0.44	0.03	0.25	0.45	0.48			N/A	N/A
3 - A507 W	2.24	0.03	0.27	2.24	2.24			N/A	N/A
4 - A1(M) N	1.44	0.03	0.26	1.44	1.44			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.76	0.03	0.28	0.84	2.88			N/A	N/A
2 - A1(M) S	0.44	0.03	0.32	1.38	1.75			N/A	N/A
3 - A507 W	2.26	0.03	0.26	2.26	2.26			N/A	N/A
4 - A1(M) N	1.45	0.03	0.27	1.45	1.45			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - A1(M) S	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A507 W	1.26	0.12	1.11	2.06	2.76			N/A	N/A
4 - A1(M) N	0.83	0.16	0.93	1.43	1.49			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - A1(M) S	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3 - A507 W	0.85	0.06	0.63	1.62	2.14			N/A	N/A
4 - A1(M) N	0.57	0.05	0.53	1.33	1.43			N/A	N/A

2033 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.52	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	24	2 - A1(M) S

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2033 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	845	100.000
2 - A1(M) S		ONE HOUR	✓	808	100.000
3 - A507 W		ONE HOUR	✓	1139	100.000
4 - A1(M) N		ONE HOUR	✓	653	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	67	344	434
	2 - A1(M) S	137	0	671	0
	3 - A507 W	222	461	5	451
	4 - A1(M) N	245	0	392	16

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	7	1	2
	2 - A1(M) S	11	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	4	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.53	4.33	1.1	1.5	A	775	1163
2 - A1(M) S	0.65	7.66	1.9	2.4	A	741	1112
3 - A507 W	0.66	5.54	1.9	3.2	A	1045	1568
4 - A1(M) N	0.46	4.34	0.9	2.2	A	599	899

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	636	159	680	1907	0.334	634	468	0.0	0.5	2.829	A
2 - A1(M) S	608	152	918	1555	0.391	606	396	0.0	0.6	3.783	A
3 - A507 W	858	214	441	2019	0.425	855	1083	0.0	0.7	3.082	A
4 - A1(M) N	492	123	619	1695	0.290	529	677	9.8	0.4	3.186	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	760	190	785	1853	0.410	759	542	0.5	0.7	3.290	A
2 - A1(M) S	726	182	1070	1479	0.491	725	474	0.6	1.0	4.765	A
3 - A507 W	1024	256	527	1971	0.519	1023	1268	0.7	1.1	3.790	A
4 - A1(M) N	587	147	741	1633	0.359	586	809	0.4	0.6	3.436	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	930	233	960	1762	0.528	929	663	0.7	1.1	4.311	A
2 - A1(M) S	890	222	1309	1360	0.654	886	580	1.0	1.8	7.538	A
3 - A507 W	1254	314	645	1905	0.658	1251	1550	1.1	1.9	5.478	A
4 - A1(M) N	719	180	906	1550	0.464	718	990	0.6	0.9	4.322	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	930	233	962	1761	0.528	930	665	1.1	1.1	4.333	A
2 - A1(M) S	890	222	1311	1359	0.655	890	581	1.8	1.9	7.663	A
3 - A507 W	1254	314	646	1904	0.659	1254	1555	1.9	1.9	5.537	A
4 - A1(M) N	719	180	908	1548	0.464	719	992	0.9	0.9	4.340	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	760	190	788	1851	0.410	761	545	1.1	0.7	3.309	A
2 - A1(M) S	726	182	1073	1478	0.492	730	476	1.9	1.0	4.838	A
3 - A507 W	1024	256	529	1970	0.520	1027	1274	1.9	1.1	3.834	A
4 - A1(M) N	587	147	744	1632	0.360	588	812	0.9	0.6	3.453	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	636	159	659	1918	0.332	637	455	0.7	0.5	2.814	A
2 - A1(M) S	608	152	898	1565	0.389	610	398	1.0	0.6	3.771	A
3 - A507 W	858	214	443	2019	0.425	859	1065	1.1	0.7	3.109	A
4 - A1(M) N	492	123	622	1694	0.290	492	679	0.6	0.4	2.999	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.50	0.00	0.00	0.50	0.50			N/A	N/A
2 - A1(M) S	0.64	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.73	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.41	0.00	0.00	0.41	0.41			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.69	0.08	0.78	1.38	1.46			N/A	N/A
2 - A1(M) S	0.95	0.06	0.76	1.78	2.43			N/A	N/A
3 - A507 W	1.07	0.06	0.68	2.26	3.21			N/A	N/A
4 - A1(M) N	0.56	0.07	0.74	1.35	1.42			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.11	0.03	0.26	1.11	1.11			N/A	N/A
2 - A1(M) S	1.85	0.03	0.27	1.85	1.85			N/A	N/A
3 - A507 W	1.89	0.03	0.26	1.89	1.89			N/A	N/A
4 - A1(M) N	0.86	0.03	0.25	0.86	0.86			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.11	0.03	0.27	1.11	1.47			N/A	N/A
2 - A1(M) S	1.87	0.03	0.27	1.87	1.87			N/A	N/A
3 - A507 W	1.91	0.03	0.26	1.91	1.91			N/A	N/A
4 - A1(M) N	0.86	0.03	0.27	0.86	2.24			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.70	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.98	0.10	0.94	1.53	1.86			N/A	N/A
3 - A507 W	1.09	0.16	1.05	1.64	1.91			N/A	N/A
4 - A1(M) N	0.57	0.55	1.00	1.40	1.45			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.50	0.05	0.47	1.29	1.39			N/A	N/A
2 - A1(M) S	0.64	0.05	0.48	1.47	1.51			N/A	N/A
3 - A507 W	0.74	0.06	0.67	1.02	1.59			N/A	N/A
4 - A1(M) N	0.41	0.00	0.00	0.41	0.41			N/A	N/A

2040, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.22	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	34	3 - A507 W

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2040	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	574	100.000
2 - A1(M) S		ONE HOUR	✓	381	100.000
3 - A507 W		ONE HOUR	✓	1248	100.000
4 - A1(M) N		ONE HOUR	✓	672	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	105	230	239
	2 - A1(M) S	98	0	283	0
	3 - A507 W	214	719	5	310
	4 - A1(M) N	198	0	465	9

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	22	4	11
	2 - A1(M) S	21	0	8	0
	3 - A507 W	7	2	0	4
	4 - A1(M) N	15	0	3	22

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.44	4.39	0.8	2.8	A	527	790
2 - A1(M) S	0.31	3.84	0.4	1.8	A	350	524
3 - A507 W	0.69	5.76	2.2	4.1	A	1145	1718
4 - A1(M) N	0.54	5.80	1.2	1.6	A	617	925

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	432	108	925	1643	0.263	431	394	0.0	0.4	2.967	A
2 - A1(M) S	287	72	738	1504	0.191	286	618	0.0	0.2	2.954	A
3 - A507 W	940	235	260	2072	0.454	936	763	0.0	0.8	3.161	A
4 - A1(M) N	506	126	777	1539	0.329	541	419	9.4	0.5	3.737	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	516	129	1076	1570	0.329	515	458	0.4	0.5	3.410	A
2 - A1(M) S	343	86	851	1449	0.236	342	740	0.2	0.3	3.252	A
3 - A507 W	1122	280	311	2041	0.550	1120	883	0.8	1.2	3.904	A
4 - A1(M) N	604	151	930	1464	0.413	603	501	0.5	0.7	4.180	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	632	158	1315	1454	0.435	631	560	0.5	0.8	4.366	A
2 - A1(M) S	419	105	1042	1358	0.309	419	905	0.3	0.4	3.831	A
3 - A507 W	1374	344	380	1999	0.687	1370	1080	1.2	2.2	5.695	A
4 - A1(M) N	740	185	1138	1362	0.543	738	613	0.7	1.2	5.755	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	632	158	1319	1453	0.435	632	561	0.8	0.8	4.385	A
2 - A1(M) S	419	105	1044	1357	0.309	419	907	0.4	0.4	3.838	A
3 - A507 W	1374	344	381	1998	0.688	1374	1082	2.2	2.2	5.764	A
4 - A1(M) N	740	185	1141	1360	0.544	740	614	1.2	1.2	5.802	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	516	129	1081	1568	0.329	517	460	0.8	0.5	3.428	A
2 - A1(M) S	343	86	854	1448	0.237	343	743	0.4	0.3	3.262	A
3 - A507 W	1122	280	312	2040	0.550	1126	886	2.2	1.2	3.951	A
4 - A1(M) N	604	151	934	1462	0.413	606	503	1.2	0.7	4.217	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	432	108	903	1653	0.261	433	385	0.5	0.4	2.949	A
2 - A1(M) S	287	72	715	1515	0.189	287	621	0.3	0.2	2.935	A
3 - A507 W	940	235	261	2071	0.454	941	741	1.2	0.8	3.188	A
4 - A1(M) N	506	126	781	1537	0.329	507	421	0.7	0.5	3.496	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A1(M) S	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3 - A507 W	0.82	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.49	0.00	0.00	0.49	0.49			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - A1(M) S	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A507 W	1.21	0.05	0.58	2.80	4.12			N/A	N/A
4 - A1(M) N	0.70	0.08	0.80	1.38	1.46			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.76	0.03	0.25	0.76	0.76			N/A	N/A
2 - A1(M) S	0.44	0.03	0.25	0.45	0.48			N/A	N/A
3 - A507 W	2.16	0.03	0.27	2.16	2.16			N/A	N/A
4 - A1(M) N	1.17	0.03	0.26	1.17	1.17			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.77	0.03	0.28	0.78	2.84			N/A	N/A
2 - A1(M) S	0.45	0.03	0.32	1.38	1.77			N/A	N/A
3 - A507 W	2.18	0.03	0.26	2.18	2.18			N/A	N/A
4 - A1(M) N	1.18	0.03	0.27	1.18	1.59			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - A1(M) S	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A507 W	1.23	0.13	1.10	1.95	2.59			N/A	N/A
4 - A1(M) N	0.71	0.21	0.93	1.39	1.44			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A1(M) S	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3 - A507 W	0.84	0.06	0.66	1.53	1.96			N/A	N/A
4 - A1(M) N	0.49	0.04	0.45	1.27	1.39			N/A	N/A

2040, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.41	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	25	2 - A1(M) S

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2040	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	856	100.000
2 - A1(M) S		ONE HOUR	✓	802	100.000
3 - A507 W		ONE HOUR	✓	1138	100.000
4 - A1(M) N		ONE HOUR	✓	569	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	75	388	393
	2 - A1(M) S	157	0	645	0
	3 - A507 W	255	444	5	434
	4 - A1(M) N	177	0	377	15

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	7	1	3
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	6	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.53	4.34	1.1	1.5	A	785	1178
2 - A1(M) S	0.65	7.49	1.8	2.3	A	736	1104
3 - A507 W	0.65	5.44	1.9	3.1	A	1044	1566
4 - A1(M) N	0.41	4.02	0.7	2.8	A	522	783

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	644	161	658	1910	0.337	642	454	0.0	0.5	2.835	A
2 - A1(M) S	604	151	911	1556	0.388	601	389	0.0	0.6	3.760	A
3 - A507 W	857	214	425	2027	0.423	854	1087	0.0	0.7	3.062	A
4 - A1(M) N	428	107	646	1675	0.256	466	633	9.8	0.3	3.074	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	770	192	755	1860	0.414	769	529	0.5	0.7	3.298	A
2 - A1(M) S	721	180	1058	1483	0.486	720	466	0.6	0.9	4.710	A
3 - A507 W	1023	256	507	1980	0.517	1022	1270	0.7	1.1	3.753	A
4 - A1(M) N	512	128	773	1610	0.318	511	756	0.3	0.5	3.272	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	942	236	924	1773	0.532	941	647	0.7	1.1	4.318	A
2 - A1(M) S	883	221	1295	1364	0.647	880	570	0.9	1.8	7.381	A
3 - A507 W	1253	313	621	1915	0.654	1250	1554	1.1	1.9	5.383	A
4 - A1(M) N	626	157	945	1523	0.411	626	925	0.5	0.7	4.006	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	942	236	926	1772	0.532	942	648	1.1	1.1	4.340	A
2 - A1(M) S	883	221	1297	1363	0.648	883	571	1.8	1.8	7.493	A
3 - A507 W	1253	313	622	1914	0.654	1253	1558	1.9	1.9	5.439	A
4 - A1(M) N	626	157	948	1522	0.412	626	927	0.7	0.7	4.020	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	770	192	758	1858	0.414	771	531	1.1	0.7	3.315	A
2 - A1(M) S	721	180	1061	1481	0.487	724	468	1.8	1.0	4.778	A
3 - A507 W	1023	256	509	1979	0.517	1026	1276	1.9	1.1	3.794	A
4 - A1(M) N	512	128	777	1609	0.318	512	759	0.7	0.5	3.286	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	644	161	634	1922	0.335	645	444	0.7	0.5	2.820	A
2 - A1(M) S	604	151	888	1568	0.385	605	391	1.0	0.6	3.746	A
3 - A507 W	857	214	426	2026	0.423	858	1067	1.1	0.7	3.085	A
4 - A1(M) N	428	107	649	1673	0.256	429	635	0.5	0.3	2.896	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.51	0.51	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.63	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.73	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.35	0.00	0.00	0.35	0.35			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.70	0.08	0.78	1.39	1.47			N/A	N/A
2 - A1(M) S	0.94	0.06	0.77	1.72	2.29			N/A	N/A
3 - A507 W	1.06	0.06	0.69	2.20	3.10			N/A	N/A
4 - A1(M) N	0.46	0.00	0.00	0.46	0.46			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.12	0.03	0.26	1.12	1.12			N/A	N/A
2 - A1(M) S	1.79	0.03	0.27	1.79	1.79			N/A	N/A
3 - A507 W	1.86	0.03	0.26	1.86	1.86			N/A	N/A
4 - A1(M) N	0.69	0.03	0.25	0.69	0.69			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.13	0.03	0.27	1.13	1.41			N/A	N/A
2 - A1(M) S	1.82	0.03	0.27	1.82	1.82			N/A	N/A
3 - A507 W	1.88	0.03	0.26	1.88	1.88			N/A	N/A
4 - A1(M) N	0.70	0.03	0.28	0.97	2.83			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.71	0.51	0.98	1.40	1.45			N/A	N/A
2 - A1(M) S	0.96	0.11	0.94	1.45	1.80			N/A	N/A
3 - A507 W	1.08	0.17	1.05	1.60	1.87			N/A	N/A
4 - A1(M) N	0.47	0.00	0.00	0.47	0.47			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.51	0.05	0.49	1.30	1.40			N/A	N/A
2 - A1(M) S	0.63	0.05	0.48	1.40	1.40			N/A	N/A
3 - A507 W	0.74	0.06	0.69	1.49	1.53			N/A	N/A
4 - A1(M) N	0.35	0.00	0.00	0.35	0.35			N/A	N/A

2040 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	7.69	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	17	4 - A1(M) N

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2040 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	845	100.000
2 - A1(M) S		ONE HOUR	✓	381	100.000
3 - A507 W		ONE HOUR	✓	1248	100.000
4 - A1(M) N		ONE HOUR	✓	933	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	105	230	510
	2 - A1(M) S	98	0	283	0
	3 - A507 W	214	719	5	310
	4 - A1(M) N	459	0	465	9

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	22	4	6
	2 - A1(M) S	21	0	8	0
	3 - A507 W	7	2	0	4
	4 - A1(M) N	7	0	3	22

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.62	6.43	1.6	1.9	A	775	1163
2 - A1(M) S	0.34	4.50	0.5	2.4	A	350	524
3 - A507 W	0.75	7.77	2.9	7.2	A	1145	1718
4 - A1(M) N	0.74	10.14	2.8	9.5	B	856	1284

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	636	159	917	1689	0.377	634	597	0.0	0.6	3.405	A
2 - A1(M) S	287	72	933	1414	0.203	286	618	0.0	0.3	3.188	A
3 - A507 W	940	235	463	1962	0.479	936	756	0.0	0.9	3.495	A
4 - A1(M) N	702	176	777	1563	0.449	737	622	9.5	0.8	4.544	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	760	190	1075	1611	0.472	759	692	0.6	0.9	4.218	A
2 - A1(M) S	343	86	1094	1337	0.256	342	739	0.3	0.3	3.617	A
3 - A507 W	1122	280	554	1909	0.588	1120	882	0.9	1.4	4.550	A
4 - A1(M) N	839	210	930	1487	0.564	837	744	0.8	1.3	5.524	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	930	233	1313	1493	0.623	927	845	0.9	1.6	6.329	A
2 - A1(M) S	419	105	1337	1222	0.343	419	904	0.3	0.5	4.477	A
3 - A507 W	1374	344	677	1838	0.748	1368	1078	1.4	2.9	7.572	A
4 - A1(M) N	1027	257	1136	1384	0.742	1021	909	1.3	2.8	9.777	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	930	233	1319	1490	0.624	930	849	1.6	1.6	6.426	A
2 - A1(M) S	419	105	1342	1220	0.344	419	907	0.5	0.5	4.499	A
3 - A507 W	1374	344	679	1837	0.748	1374	1082	2.9	2.9	7.768	A
4 - A1(M) N	1027	257	1140	1381	0.744	1027	913	2.8	2.8	10.135	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	760	190	1083	1607	0.473	763	697	1.6	0.9	4.278	A
2 - A1(M) S	343	86	1102	1334	0.257	343	745	0.5	0.3	3.636	A
3 - A507 W	1122	280	557	1908	0.588	1128	888	2.9	1.4	4.649	A
4 - A1(M) N	839	210	936	1484	0.565	845	749	2.8	1.3	5.688	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	636	159	904	1696	0.375	637	582	0.9	0.6	3.407	A
2 - A1(M) S	287	72	920	1420	0.202	287	622	0.3	0.3	3.180	A
3 - A507 W	940	235	465	1961	0.479	942	742	1.4	0.9	3.541	A
4 - A1(M) N	702	176	782	1561	0.450	704	625	1.3	0.8	4.214	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.60	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.91	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.82	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.88	0.07	0.77	1.55	1.94			N/A	N/A
2 - A1(M) S	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3 - A507 W	1.41	0.05	0.48	3.56	5.54			N/A	N/A
4 - A1(M) N	1.28	0.05	0.59	2.97	4.49			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.62	0.03	0.26	1.62	1.62			N/A	N/A
2 - A1(M) S	0.52	0.03	0.25	0.52	0.52			N/A	N/A
3 - A507 W	2.87	0.03	0.28	2.87	7.16			N/A	N/A
4 - A1(M) N	2.77	0.03	0.29	2.77	9.52			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.64	0.03	0.27	1.64	1.64			N/A	N/A
2 - A1(M) S	0.52	0.03	0.31	1.45	2.38			N/A	N/A
3 - A507 W	2.92	0.03	0.27	2.92	2.92			N/A	N/A
4 - A1(M) N	2.84	0.03	0.27	2.84	4.12			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.90	0.14	0.95	1.50	1.51			N/A	N/A
2 - A1(M) S	0.35	0.00	0.00	0.35	0.35			N/A	N/A
3 - A507 W	1.45	0.08	1.02	2.98	4.15			N/A	N/A
4 - A1(M) N	1.32	0.07	0.88	2.83	3.95			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.60	0.05	0.54	1.37	1.47			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.93	0.04	0.44	2.09	3.29			N/A	N/A
4 - A1(M) N	0.83	0.04	0.40	1.89	3.01			N/A	N/A

2040 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	6.59	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	18	2 - A1(M) S

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2040 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	1021	100.000
2 - A1(M) S		ONE HOUR	✓	802	100.000
3 - A507 W		ONE HOUR	✓	1138	100.000
4 - A1(M) N		ONE HOUR	✓	813	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	75	388	558
	2 - A1(M) S	157	0	645	0
	3 - A507 W	255	444	5	434
	4 - A1(M) N	421	0	377	15

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	7	1	2
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.63	5.49	1.7	2.5	A	937	1405
2 - A1(M) S	0.69	9.19	2.2	4.9	A	736	1104
3 - A507 W	0.69	6.39	2.2	3.8	A	1044	1566
4 - A1(M) N	0.59	5.67	1.4	1.6	A	746	1119

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	769	192	650	1923	0.400	766	645	0.0	0.7	3.106	A
2 - A1(M) S	604	151	1026	1500	0.403	601	389	0.0	0.7	3.994	A
3 - A507 W	857	214	548	1960	0.437	854	1079	0.0	0.8	3.244	A
4 - A1(M) N	612	153	646	1683	0.364	649	756	9.8	0.6	3.608	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	918	229	755	1868	0.491	917	748	0.7	1.0	3.778	A
2 - A1(M) S	721	180	1206	1410	0.511	720	466	0.7	1.0	5.201	A
3 - A507 W	1023	256	655	1900	0.539	1022	1270	0.8	1.2	4.091	A
4 - A1(M) N	731	183	773	1619	0.452	730	904	0.6	0.8	4.047	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	1124	281	923	1781	0.631	1121	914	1.0	1.7	5.431	A
2 - A1(M) S	883	221	1475	1276	0.692	878	570	1.0	2.2	8.948	A
3 - A507 W	1253	313	801	1818	0.689	1249	1552	1.2	2.2	6.283	A
4 - A1(M) N	895	224	945	1531	0.585	893	1106	0.8	1.4	5.618	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	1124	281	926	1780	0.632	1124	917	1.7	1.7	5.489	A
2 - A1(M) S	883	221	1479	1274	0.693	883	571	2.2	2.2	9.190	A
3 - A507 W	1253	313	804	1816	0.690	1253	1558	2.2	2.2	6.386	A
4 - A1(M) N	895	224	948	1530	0.585	895	1109	1.4	1.4	5.673	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	918	229	759	1866	0.492	921	752	1.7	1.0	3.821	A
2 - A1(M) S	721	180	1211	1408	0.512	726	468	2.2	1.1	5.315	A
3 - A507 W	1023	256	659	1898	0.539	1027	1278	2.2	1.2	4.153	A
4 - A1(M) N	731	183	777	1616	0.452	733	908	1.4	0.8	4.086	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	769	192	634	1931	0.398	770	628	1.0	0.7	3.104	A
2 - A1(M) S	604	151	1013	1507	0.401	605	391	1.1	0.7	4.001	A
3 - A507 W	857	214	551	1959	0.437	858	1067	1.2	0.8	3.275	A
4 - A1(M) N	612	153	649	1681	0.364	613	759	0.8	0.6	3.372	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.66	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.67	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.77	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.57	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.96	0.06	0.74	1.81	2.50			N/A	N/A
2 - A1(M) S	1.03	0.06	0.71	2.05	2.93			N/A	N/A
3 - A507 W	1.16	0.05	0.60	2.63	3.82			N/A	N/A
4 - A1(M) N	0.82	0.07	0.80	1.14	1.63			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.68	0.03	0.26	1.68	1.68			N/A	N/A
2 - A1(M) S	2.18	0.03	0.28	2.18	4.89			N/A	N/A
3 - A507 W	2.17	0.03	0.27	2.17	2.17			N/A	N/A
4 - A1(M) N	1.39	0.03	0.26	1.39	1.39			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.70	0.03	0.26	1.70	1.70			N/A	N/A
2 - A1(M) S	2.22	0.03	0.27	2.22	2.87			N/A	N/A
3 - A507 W	2.20	0.03	0.26	2.20	2.20			N/A	N/A
4 - A1(M) N	1.40	0.03	0.27	1.40	1.40			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.98	0.19	1.00	1.23	1.64			N/A	N/A
2 - A1(M) S	1.06	0.08	0.91	1.87	2.54			N/A	N/A
3 - A507 W	1.18	0.11	1.06	1.91	2.54			N/A	N/A
4 - A1(M) N	0.83	0.22	0.95	1.41	1.47			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.67	0.06	0.65	1.40	1.50			N/A	N/A
2 - A1(M) S	0.67	0.04	0.43	1.33	1.92			N/A	N/A
3 - A507 W	0.78	0.05	0.56	1.46	1.93			N/A	N/A
4 - A1(M) N	0.58	0.06	0.60	1.33	1.42			N/A	N/A

2040 + Dev + School, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	7.68	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	15	4 - A1(M) N

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2040 + Dev + School	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	810	100.000
2 - A1(M) S		ONE HOUR	✓	381	100.000
3 - A507 W		ONE HOUR	✓	1248	100.000
4 - A1(M) N		ONE HOUR	✓	954	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	105	230	475
	2 - A1(M) S	98	0	283	0
	3 - A507 W	214	719	5	310
	4 - A1(M) N	480	0	465	9

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	22	4	6
	2 - A1(M) S	21	0	8	0
	3 - A507 W	7	2	0	4
	4 - A1(M) N	7	0	3	22

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.60	6.02	1.5	1.7	A	743	1115
2 - A1(M) S	0.34	4.40	0.5	2.3	A	350	524
3 - A507 W	0.74	7.42	2.8	6.0	A	1145	1718
4 - A1(M) N	0.76	10.85	3.1	11.8	B	875	1313

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	610	152	917	1688	0.361	608	613	0.0	0.6	3.324	A
2 - A1(M) S	287	72	907	1427	0.201	286	618	0.0	0.3	3.153	A
3 - A507 W	940	235	437	1977	0.475	936	756	0.0	0.9	3.448	A
4 - A1(M) N	718	180	777	1563	0.460	753	596	9.5	0.9	4.638	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	728	182	1075	1610	0.452	727	711	0.6	0.8	4.071	A
2 - A1(M) S	343	86	1063	1352	0.253	342	740	0.3	0.3	3.563	A
3 - A507 W	1122	280	522	1927	0.582	1120	882	0.9	1.4	4.449	A
4 - A1(M) N	858	214	930	1486	0.577	856	713	0.9	1.3	5.693	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	892	223	1313	1492	0.598	889	868	0.8	1.5	5.943	A
2 - A1(M) S	419	105	1298	1241	0.338	419	904	0.3	0.5	4.376	A
3 - A507 W	1374	344	639	1859	0.739	1369	1078	1.4	2.7	7.253	A
4 - A1(M) N	1050	263	1136	1383	0.760	1044	871	1.3	3.0	10.411	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	892	223	1319	1489	0.599	892	872	1.5	1.5	6.021	A
2 - A1(M) S	419	105	1303	1238	0.339	419	907	0.5	0.5	4.397	A
3 - A507 W	1374	344	641	1859	0.739	1374	1082	2.7	2.8	7.421	A
4 - A1(M) N	1050	263	1141	1381	0.761	1050	874	3.0	3.1	10.852	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	728	182	1084	1606	0.453	731	717	1.5	0.8	4.127	A
2 - A1(M) S	343	86	1070	1349	0.254	343	744	0.5	0.3	3.581	A
3 - A507 W	1122	280	525	1926	0.583	1127	888	2.8	1.4	4.542	A
4 - A1(M) N	858	214	936	1483	0.578	864	717	3.1	1.4	5.881	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	610	152	904	1695	0.360	611	598	0.8	0.6	3.324	A
2 - A1(M) S	287	72	893	1433	0.200	287	622	0.3	0.3	3.145	A
3 - A507 W	940	235	439	1976	0.476	942	742	1.4	0.9	3.487	A
4 - A1(M) N	718	180	782	1560	0.460	720	599	1.4	0.9	4.298	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.56	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.90	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.86	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.82	0.07	0.78	1.23	1.70			N/A	N/A
2 - A1(M) S	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3 - A507 W	1.38	0.05	0.48	3.46	5.34			N/A	N/A
4 - A1(M) N	1.34	0.05	0.54	3.26	4.91			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.46	0.03	0.26	1.46	1.46			N/A	N/A
2 - A1(M) S	0.51	0.03	0.25	0.51	0.51			N/A	N/A
3 - A507 W	2.75	0.03	0.28	2.75	5.96			N/A	N/A
4 - A1(M) N	3.02	0.03	0.29	3.02	11.80			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.48	0.03	0.27	1.48	1.48			N/A	N/A
2 - A1(M) S	0.51	0.03	0.31	1.45	2.29			N/A	N/A
3 - A507 W	2.79	0.03	0.27	2.79	2.79			N/A	N/A
4 - A1(M) N	3.10	0.03	0.28	3.10	5.43			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.84	0.18	0.94	1.42	1.49			N/A	N/A
2 - A1(M) S	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3 - A507 W	1.41	0.08	1.04	2.86	3.88			N/A	N/A
4 - A1(M) N	1.39	0.06	0.82	3.13	4.54			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.57	0.05	0.53	1.32	1.42			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.91	0.05	0.46	1.99	3.04			N/A	N/A
4 - A1(M) N	0.86	0.04	0.39	2.00	3.46			N/A	N/A

2040 + Dev + School, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	6.76	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	17	2 - A1(M) S

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2040 + Dev + School	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A507 E		ONE HOUR	✓	1050	100.000
2 - A1(M) S		ONE HOUR	✓	802	100.000
3 - A507 W		ONE HOUR	✓	1138	100.000
4 - A1(M) N		ONE HOUR	✓	789	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	75	388	587
	2 - A1(M) S	157	0	645	0
	3 - A507 W	255	444	5	434
	4 - A1(M) N	397	0	377	15

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	7	1	2
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.65	5.77	1.8	2.8	A	963	1445
2 - A1(M) S	0.70	9.58	2.3	5.8	A	736	1104
3 - A507 W	0.70	6.59	2.3	3.9	A	1044	1566
4 - A1(M) N	0.57	5.44	1.3	1.5	A	724	1086

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	790	198	650	1922	0.411	788	626	0.0	0.7	3.165	A
2 - A1(M) S	604	151	1049	1489	0.406	601	389	0.0	0.7	4.044	A
3 - A507 W	857	214	570	1948	0.440	854	1080	0.0	0.8	3.280	A
4 - A1(M) N	594	149	646	1684	0.353	631	778	9.8	0.5	3.543	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	944	236	755	1868	0.505	943	726	0.7	1.0	3.884	A
2 - A1(M) S	721	180	1232	1397	0.516	719	466	0.7	1.1	5.300	A
3 - A507 W	1023	256	681	1885	0.543	1021	1270	0.8	1.2	4.159	A
4 - A1(M) N	709	177	773	1619	0.438	708	930	0.5	0.8	3.948	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	1156	289	923	1781	0.649	1153	888	1.0	1.8	5.699	A
2 - A1(M) S	883	221	1507	1260	0.701	878	570	1.1	2.3	9.308	A
3 - A507 W	1253	313	833	1800	0.696	1249	1552	1.2	2.2	6.476	A
4 - A1(M) N	869	217	944	1532	0.567	867	1137	0.8	1.3	5.378	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	1156	289	926	1780	0.650	1156	891	1.8	1.8	5.768	A
2 - A1(M) S	883	221	1511	1258	0.702	883	571	2.3	2.3	9.578	A
3 - A507 W	1253	313	836	1799	0.697	1253	1558	2.2	2.3	6.590	A
4 - A1(M) N	869	217	948	1530	0.568	869	1141	1.3	1.3	5.443	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	944	236	759	1866	0.506	947	730	1.8	1.0	3.931	A
2 - A1(M) S	721	180	1237	1394	0.517	726	468	2.3	1.1	5.423	A
3 - A507 W	1023	256	685	1883	0.543	1027	1278	2.3	1.2	4.227	A
4 - A1(M) N	709	177	778	1617	0.439	711	935	1.3	0.8	3.985	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A507 E	790	198	634	1931	0.409	792	610	1.0	0.7	3.166	A
2 - A1(M) S	604	151	1035	1496	0.404	605	391	1.1	0.7	4.052	A
3 - A507 W	857	214	572	1947	0.440	858	1068	1.2	0.8	3.312	A
4 - A1(M) N	594	149	650	1682	0.353	595	781	0.8	0.5	3.314	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.69	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.68	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.78	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.55	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.01	0.06	0.71	1.97	2.83			N/A	N/A
2 - A1(M) S	1.05	0.06	0.69	2.16	3.05			N/A	N/A
3 - A507 W	1.17	0.05	0.58	2.70	3.94			N/A	N/A
4 - A1(M) N	0.77	0.08	0.80	1.37	1.37			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.82	0.03	0.26	1.82	1.82			N/A	N/A
2 - A1(M) S	2.26	0.03	0.28	2.26	5.79			N/A	N/A
3 - A507 W	2.24	0.03	0.27	2.24	2.43			N/A	N/A
4 - A1(M) N	1.29	0.03	0.26	1.29	1.29			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.84	0.03	0.26	1.84	1.84			N/A	N/A
2 - A1(M) S	2.31	0.03	0.27	2.31	3.29			N/A	N/A
3 - A507 W	2.27	0.03	0.27	2.27	2.27			N/A	N/A
4 - A1(M) N	1.30	0.03	0.27	1.30	1.42			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	1.03	0.16	1.02	1.51	1.82			N/A	N/A
2 - A1(M) S	1.08	0.07	0.89	1.94	2.70			N/A	N/A
3 - A507 W	1.20	0.10	1.05	1.97	2.67			N/A	N/A
4 - A1(M) N	0.79	0.26	0.95	1.40	1.45			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A507 E	0.70	0.06	0.64	1.41	1.41			N/A	N/A
2 - A1(M) S	0.68	0.04	0.42	1.41	2.01			N/A	N/A
3 - A507 W	0.79	0.05	0.52	1.53	2.00			N/A	N/A
4 - A1(M) N	0.55	0.05	0.57	1.32	1.41			N/A	N/A