Transport Assessment

Land South of A507 and West of Buntingford

East Hertfordshire

PREPARED BY:
Jubb Consulting Engineers Ltd.

FOR:
Hallam Land Management

DATE:
June 2024

REFERENCE:
23161-TA-02

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1 Project Information

1.1 Project Information

Client	Hallam Land Management

1.2 Project Details

Project Name	Land South of A507 and West of Buntingford
Location	Buntingford, East Hertfordshire
Jubb Project Number	23161

1.3 Report Details

Version	2
Status	For Planning
Date	June 2024

1.4 Project Authorisation

ISSUE HISTORY:

Version	Date	Detail
1	Feb 2024	Draft
2	Jun 2024	For Planning

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2 Introduction

2.1 Brief

2.1.1 Jubb has been commissioned by Hallam Land Management to provide transport and highways advice in relation to a proposed employment led development on land to the west of Buntingford and within the District of East Hertfordshire.

2.1.2 It is understood, for a development of the scale that is envisaged at the site, that a comprehensive assessment of the potential impacts of the proposals is required. This is in line with Paragraph 117 of the National Planning Policy Framework (NPPF, 2023) which states:

> "*All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.*"

2.1.3 This Transport Assessment (TA) has been prepared to provide support to an 'Outline planning application for development of employment land (flexible use B2, B8, E(c) and E(g)), informal open space, associated works and infrastructure including a new access from A507, with all matters reserved save for access'.

2.1.4 This TA has outlined and assessed any transport issues in relation to the site and has considered the proposed development in context with regard to local and national planning policy. It has assessed the traffic generation of the development and potential impact on the surrounding transport network, with any required mitigation measures outlined, which will ensure the provision of highly sustainable credentials for the employees and visitors associated with the development.

2.1.5 A sustainability review of the site has also been undertaken with regard to access by non-car modes of transportation including walking, cycling, and public transport.

2.1.6 A framework Travel Plan (TP) has also been prepared in support of the proposed employment development and should be read in conjunction with this TA.

2.1.7 A second planning application has been proposed to the north of the A507 Baldock Road. This is proposed for residential development and, whilst capable of being delivered independently, can complement the extensive sustainable measures proposed as part of this application. It is however noted that each proposal has been designed to also be deliverable as an appropriate development both individually and in combination.

2.2 Development Proposals

2.2.1 The proposed development is for up to 27,420sqm of employment floorspace in a mix of employment uses (flexible use B2, B8, E(c) and E(g)).

2.2.2 The proposals include a main vehicular access to the site accessed off the A507 Baldock Road on the northern boundary that has been designed in accordance with relevant local and national standards.

2.2.3 The approach taken in developing the layout design for the site will serve to maximise movement via active modes of travel. The inclusion and proximity of high-quality pedestrian and cycle routes to the development will play an important role in connecting the development to the surroundings.

2.3 Scope of Report

2.3.1 The structure of this TA is as follows:

- **Section 3:** Considers the development in the context of relevant national and local planning and transport policies and guidance.
- **Section 4:** Examines the local transport conditions in the vicinity of the site and the accessibility by non-car modes of travel.
- **Section 5:** Provides a detailed description of the development proposals and access strategy.
- **Section 6:** Quantifies the trip generation and impact of the development proposals in the study area.
- **Section 7:** Sets out the Traffic Analysis undertaken to assess the capacity of the junctions within the study area to accommodate the proposed development.
- **Section 8:** Provides a summary and conclusions of the Transport Assessment.

3 Transport Planning Policy and Guidance

3.1 Introduction

3.1.1 This section of the TA provides a review of the existing and emerging planning and transport policies relevant to the proposed development at the national, regional and local level.

3.1.2 The following documents set out the relevant policy framework that guides the transport strategy for the proposed employment led development in Buntingford:

- National Planning Policy Framework (2023);
- National Planning Practice Guidance (first published in 2014);
- Hertfordshire's Local Transport Plan 2018-2031;
- East Hertfordshire District Plan (2018); and
- Buntingford Community Area Neighbourhood Plan 2014-2031.

3.1.3 The development proposals have been prepared with due consideration for this planning policy framework, appropriate to the level of the application.

National Planning Policy

3.2 National Planning Policy Framework (NPPF)

3.2.1 The National Planning Policy Framework (NPPF) sets out the central government's planning policies for England and how these are expected to be applied at a local level. It provides a framework within which locally prepared plans for housing and other development are produced. Originally published in March 2012, the NPPF has had numerous revisions, with the most recent being (at the time of writing) in December 2023.

3.2.2 In terms of transport, planning states that:

> "*Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes*".

3.2.3 In relation to 'Considering Development Proposals', paragraph 114 requires determining authorities to ensure that:

- "*...appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- *safe and suitable access to the site can be achieved for all users;*
- *the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and*
- *any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree*."

3.2.4 Paragraph 116 states that development should:

- "*...give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*

- *address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- *create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- *allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- *be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations*."

3.2.5 Paragraph 115 states that:

> "*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe*."

3.2.6 Paragraph 117 states that all development expected to generate significant amounts of movements should be required to provide a TP and the planning application should be supported by a TA or TS.

3.2.7 The proposed access arrangements will integrate with off-site provision to facilitate take-up of sustainable modes and will ensure that safe and suitable access can be achieved for all future users. The TA demonstrates that the transport impact of the scheme will not be 'severe' under the terms set out in the NPPF.

3.3 National Planning Practice Guidance (NPPG)

3.3.1 The NPPF is supplemented by the NPPG in relation to the preparation of TAs, Transport Statements (TS) and TPs. The guidance states that these are required for all developments that generate significant amounts of movements, and that the development of these is an iterative process, as each may influence the other.

3.3.2 The guidance states that producing these documents provides a means to assess, and mitigate, the negative transport impacts of development; in this way, sustainable development can be achieved. The guidance sets out that whilst TPs promote the implementation of sustainable travel into the planning process, TAs / TSs assess the potential transport implications of developments and propose mitigation measures where these are necessary to avoid unacceptable or 'severe' impacts.

3.3.3 Hence, the NPPG refers to the need to reduce adverse impacts on climate change from new developments. Climate change is one of the core land use planning principles and the NPPG states that:

> "*...the distribution and design of new development and the potential for servicing sites through sustainable transport solutions, are particularly important considerations that affect transport emissions*."

3.3.4 The NPPG states that a well-designed space promotes ease of movement, and that this will need to show the ability to move safely, conveniently and efficiently to and within a place.

County Council Policy

3.4 Hertfordshire's Local Transport Plan 2018-2031

3.4.1 The Local Transport Plan (LTP4) for Hertfordshire covers the period up to 2031 and looks to provide a transition from a car dominant transport strategy to a higher focus on sustainable modes of transport.

The Plan, however, looks ahead to 2050 and sets out how transport can help deliver a positive future vision of Hertfordshire.

3.4.2 It is considered that transport has a major input into wider policies such as economic growth, meeting housing needs, improving public health, and reducing environmental damage.

3.4.3 One of the main objectives of LTP4 is the reduction in travel demand and change in travel behaviour, the need to travel and the improvement of conditions for vulnerable road users and sustainable modes such as walking, cycling and passenger transport. In this sense, the Plan provides a transition from the previous transport strategy that was largely car based to a more balanced approach catering for all forms of transport and promoting a change from the private car to more sustainable modes of transport wherever possible.

3.4.4 Policy 1 'Transport User Hierarchy' states that:

> "*To support the creation of built environments that encourage greater and safer use of sustainable transport modes, the county council will in the design of any scheme and development of any transport strategy consider in the following order:*
>
> *a) Opportunities to reduce travel demand and the need to travel;*
>
> *b) Vulnerable road user needs (such as pedestrians and cyclists);*
>
> c) *Passenger transport user needs;*
>
> *d) Powered two wheeler (mopeds and motorbikes) user needs; and*
>
> *e) Other motor vehicle user needs*

3.4.5 Policy 5 'Development Management' states that the location and design of development proposals should encourage movement by sustainable transport modes and reduced travel demand; and that it should also ensure access arrangements are safe, suitable for all people and built to an adequate standard.

District Council Policy

3.5 East Hertfordshire District Plan (2018)

3.5.1 The East Hertfordshire District Plan was adopted by the Council in October 2018 and sets out the Council's planning framework for the district for the period 2011-2033.

3.5.2 The document identifies key issues and challenges facing the district, with the following referring to transport:

> *"The District is predominantly rural with a dispersed population which creates challenges in providing a comprehensive public transport network. Many local communities are reliant on the private car as their only transport option. This impacts on carbon dioxide emissions, air quality, noise, public safety and the quality of the environment in towns and villages. The challenge is to ensure that development is directed to sustainable locations, to reduce the need to travel and, where journeys need to be made, the distance of those trips. Sustainable modes of transport are also encouraged to both reduce reliance on the car and promote healthier lifestyles."*

3.5.3 One of the strategic objectives from the Local Plan refers to the improvement of: "access opportunities, minimise the need to travel, and encourage necessary journeys to be made by sustainable means to ease congestion and help reduce East Herts' carbon footprint".

3.5.4 There are 3 relevant policies that the District Plan refers to:

3.5.5 Policy TRA1 'Sustainable Transport' states that, in order to achieve accessibility improvements and promote sustainable transport, development proposals should:

- be located in places which enable sustainable journeys to be made to key services and facilities;
- where relevant, take account of the provisions of the Local Transport Plan;
- ensure the availability of transport options to occupants or users;
- prioritise the provision of modes of transport other than the car at the site layouts;
- for major schemes, allow for the early implementation of sustainable travel infrastructure or initiatives;
- protect existing rights of way, cycling and equestrian routes; and
- ensure provision for the long-term maintenance of any of the above measures.

3.5.6 Policy TRA2: 'Safe and Suitable Highway Access Arrangements and Mitigation' states that:

> "*Development proposals should ensure that safe and suitable access can be achieved for all users. Site layouts, access proposals and any measures designed to mitigate trip generation produced by the development should:*
>
> *(a) Be acceptable in highway safety terms;*
>
> *(b) Not result in any severe residual cumulative impact; and*
>
> *(c) Not have a significant detrimental effect on the character of the local environment*."

3.5.7 Finally, Policy TRA3 'Vehicle Parking Provision' states the following:

- I. Vehicle parking provision to be assessed on a site-specific basis taking into account the provisions of the adopted SPD document 'Vehicle Parking Provision at New Development'.
- II. Provision of sufficient secure, covered and waterproof cycle and, where appropriate, powered two-wheeler storage facilities for users of developments to be determined on a site-specific basis.
- III. Car parking to be integrated as a key element of design in development layouts to ensure good quality, safe, secure and attractive environments.
- IV. Assess whether a private car park for non-domestic use being proposed, should also be available for shared public use having particular regard to the needs of the primary user.
- V. For proposals involving major developments, provision should be made for charging points for low and zero carbon vehicles, to be assessed on a site-specific basis.

3.5.8 The proposed development will promote the use of alternative modes of transport to the private car and extensive pedestrian, cycling and public transport improvements are proposed as part of the scheme. The TA provides a robust assessment of the proposed development on the main public highway network affected by the scheme. Finally, the proposed parking for the development will accord with local standards in agreement with the LHA.

3.6 Buntingford Community Area Neighbourhood Plan 2014-2031

3.6.1 The Neighbourhood Plan for Buntingford provides a vision for the future of the BCA and sets out clear policies and objectives to realise this vision. The Neighbourhood Plan must be in general conformity with the strategic policies contained in the development plan.

3.6.2 In relation to transport, the Neighbourhood Plan states that: "There is limited employment within the BCA, therefore the majority travel outside the area, again mainly by car".

3.6.3 Some of the main aims of the Neighbourhood Plan are relevant to the proposed development and include:

- Seek to reduce traffic and parking impacts from development and encourage sustainable transport, especially bus services, cycle routes and footpaths.
- Support opportunities for increased employment both within Buntingford Town and the five other parishes and ensure adequate places for children to attend local schools.
- Make the most of the BCA's rural aspect by protecting views, providing good access, enhancing facilities and enhancing and maintaining biodiversity.
- Foster and promote a thriving healthy community with plentiful opportunities for education, training and employment for people young and old.

3.6.4 The transport objectives of the Neighbourhood Plan are mostly focused on the provision of modes of transport that provide alternatives to the use of the private car and reduce the reliance and impact of car travel.

3.6.5 Regarding the Transport Policies included within the Neighbourhood Plan:

- Policy T1: The proposed parking will be agreed with the LHA, ensuring that there is sufficient parking for residents without resulting in an overprovision that could encourage the unnecessary use of the private car.
- Policy T2: Parking will be designed appropriately and in compliance with the relevant standards.
- Policy T3: Existing rights of way will be protected and improved as part of the proposed scheme where feasible and appropriate.
- Policy T4: The proposed development will be connected to the existing pedestrian and cycle network that will facilitate access to and from Buntingford.
- Policy T5: The proposed development will not result in the loss of existing public parking provision.
- Policy T6: The proposed development comprises the potential extension of regular bus services that also serve Buntingford Town Centre. The proposals also include the provision of new bus stops.

3.7 Conclusion

3.7.1 It is clear from this review that the proposed employment led development accessed off the A507 Baldock Road is compliant with the overarching national policy framework and local transportation policies in that the site is located within a sustainable location with the potential to promote the use of more sustainable modes of transport.

3.7.2 **Section 5** of this TA shows that the proposed scheme can be adequately accommodated within the existing highway network with the proposed access strategy, which has been designed in accordance with current design guidelines and standards.

4 Existing Conditions

4.1 Introduction

4.1.1 This section provides a description of the site location and examines the level of accessibility to and from the site for all modes. The accessibility audit is in keeping with current national, regional and local planning policies which highlight the importance of integrating land-use, transport and planning decisions to address the needs of both present and future communities to create developments with good access to local infrastructure.

4.1.2 This section also includes a review of access to local facilities and amenities, a study of the existing local highway network and traffic conditions along with a preliminary study of collision data and a review of traffic data collected for the purposes of the TA.

4.1.3 The sustainability of the site is considered regarding the provision of alternative modes of transport to the car, including walking, cycling and public transport.

4.2 Site Location

4.2.1 The site as proposed development is located to the west of Buntingford, East Hertfordshire. The site is bounded by the A10 to the east, the A507 Baldock Road to the north and by open land to the west and south. An 'Application Boundary Plan', prepared by David Lock Associates, is shown in **Figure 4.1**. This is also included as **Appendix A** to this TA.

4.2.2 The A507 Baldock Road bounds the site to the north and is the main distributor road providing access to Buntingford from the west. The A507 runs on an east-west alignment providing access to Baldock, Shefford and up to the M1 at Ridgmont Interchange. To the east, the A507 finishes at the Baldock Road Roundabout junction with the A10. The B1038 Baldock Road keeps running on an eastbound direction towards the town centre.



Figure 4.1 – Application Boundary Plan

4.3 Complementary Uses for Employment

4.3.1 This section provides a comprehensive review of the sustainability credentials of the site, encompassing a review of accessibility to existing complementary services and facilities as well as opportunities for trips to and from the site to be made by sustainable modes.

4.3.2 The site is located in close proximity to Buntingford and a selection of the existing local facilities and services both within and surrounding the town centre. **Figure 4.2** presents a non-exhaustive overview of the range of facilities and services that are located within 2km from the site, reflecting the distance identified in Manual for Streets, which states that "*(...) walking offers the greatest potential to replace short car trips, particularly those under 2 km (...)*" in paragraph 4.4.1.

4.3.3 **Figure 4.2** also demonstrates that, while most or all of the local facilities and services are located well within 2km from the site, there are several local facilities located within close proximity and which include the MFG Howegreen grocery store, along with a Costa Coffee, a Greggs bakery, a car dealership, petrol station and several EV charging spaces accessed off the B1038 Baldock Road, along with a wide residential area within Buntingford.

4.3.4 It is worth noting that these distances are taken from the centre of the site. Due to the size of the application site, a significant percentage of the distance within the 2km isochrone is included within the application site. In reality, the facilities shown in **Figure 4.2** are within close proximity to the application boundary.

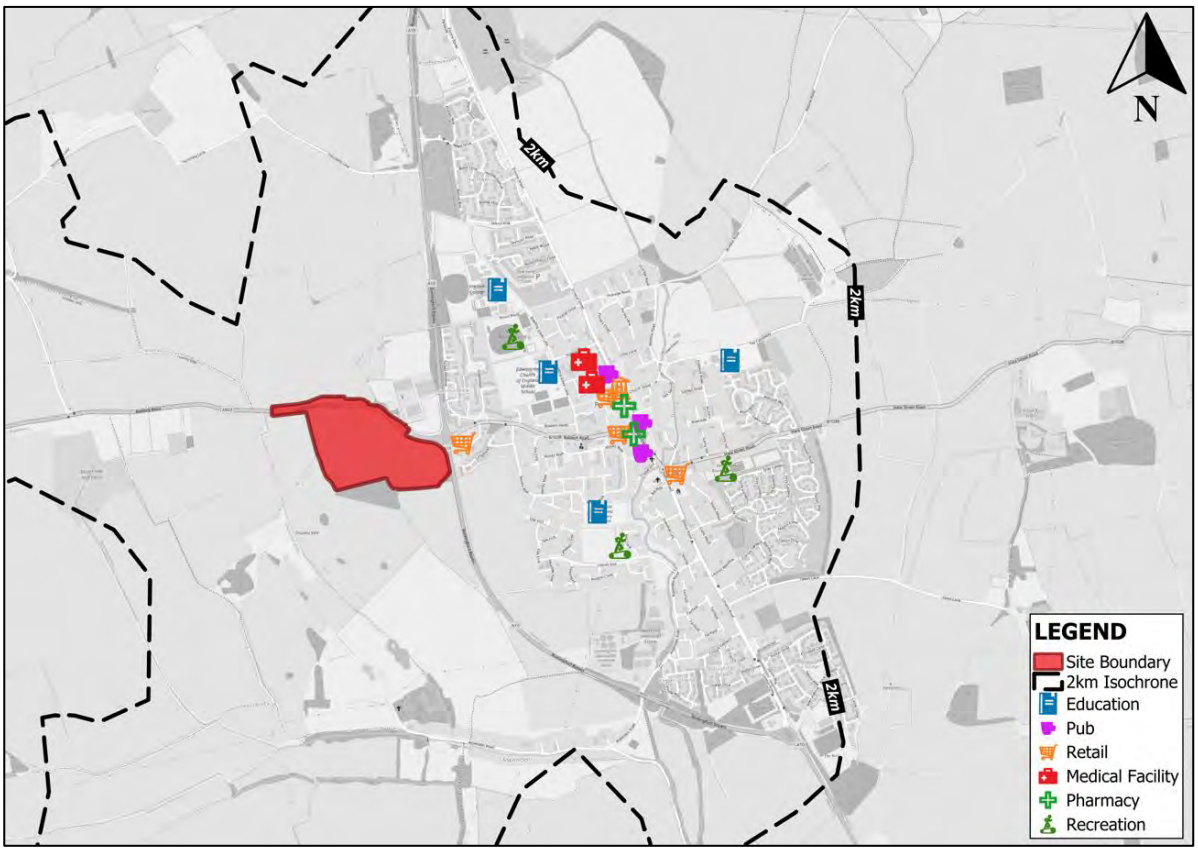


Figure 4.2 – 2km Isochrones with Existing Services and Facilities

4.3.5 **Table 4.1** summarises the walking distance from the centre of the site to these provisions. Again, these distances have been measured from the centre of the site and follow the existing walking routes.

4.3.6 Also included in the table are the estimated walking journey times calculated using a walking speed of 1.4 meters per second (abstracted from Institution of Highways and Transportation's [IHT] *Guidelines for Providing for Journeys on Foot*, 2000), and a cycling speed of 4 metres per second.

Service / Facility	Location		Distance (m)	Time (min)	Time (min)
Retail					
MFG Howegreen	A10, Buntingford	SG9 9EG	900	11	4
McColl's	Baldock Rd	SG9 9BL	1500	19	6
Sainsbury's Local	65-67 High St	SG9 9AE	1700	21	7
Co-op Food	Station Rd	SG9 9HT	1800	23	8
Education					
Freman College	The Causeway	SG9 9BT	1100	14	5
Millfield Primary and Nursery School	Monks Walk	SG9 9DT	1600	20	7
Edwinstree Middle School	Norfolk Rd	SG9 9AW	1600	20	7
Layston Primary School	The Causeway	SG9 9EU	2100	26	9
Public House					
Black Bull	16 High St	SG9 9AG	1600	20	7
The Crown	17 High St	SG9 9AB	1700	21	7
The Falcon Buntingford	69 High St	SG9 9AE	1700	21	7
Medical Facility					
Dr NSP Handysides - Orchard Surgery	Baldock Rd	SG9 9DL	1300	16	5
Buntingford Medical Centre	White Hart Cl	SG9 9DQ	1600	20	7
Dr M Partington - The Medical Centre	The White Hart Cl	SG9 9DQ	1600	20	7
Buntingford Dental Clinic	23 High St	SG9 9AB	1600	20	7
Pharmacy					
Lloyds Pharmacy	29 High St	SG9 9AB	1600	20	7
K & M Shah Chemist	55 High St	SG9 9AD	1700	21	7
Leisure					
Norfolk Road Playing Field	Bowling Green Lane	SG9 9BT	1100	14	5
Seth Ward Community Centre	Monks Walk	SG9 9DT	1600	20	7
Hare Street Road Recreation Ground	Station Rd	SG9 9HT	1800	23	8

Table 4.1: Distances to Services and Facilities

4.3.7 As shown in **Table 4.1**, the whole of the town lies within a 2km walk of the site, which means that most of the employees would be within walking distance from the town. Furthermore, the nearest education, health, retail and leisure facilities can also be reached within a 20-minute walk of the site. Many of these destinations could be required on a day-to-day basis for people commuting to the site, notably the education and retail facilities as part of multi-purpose trips, and as such walking offers an alternative to the use of the car for journeys to these locations.

4.3.8 Given this assessment, it is reasonable to conclude that the site presents the opportunity for the creation of a sustainable development, being well-related to the existing town of Buntingford and the amenities located within, and as a result there will by no means be a reliance on the use of the private car for day-to-day trips to these destinations. It is considered that the information contained within this TA demonstrates that the site presents the opportunity for the creation of a sustainable development.

4.4 Pedestrian Accessibility

4.4.1 There is a shared cycle-footway that connects Buntingford to Buntingford Business Park with a crossing on the A10 and which runs on the northern side of the A507 Baldock Road. This 3m wide shared cycle-footway provides dropped kerbs and tactile paving on the crossing of the A10 and the splitter island of the Baldock Road Roundabout operates as a pedestrian/cycle refuge.

4.5 Cycling Accessibility

4.5.1 Cycling is recognised as one of the most sustainable modes of transport, with it generally acknowledged as having the potential to replace car trips for journeys up to 5km. This is supported by Manual for Streets 2 (MfS2), which clearly identifies the contribution that cycling can make to transport sustainability and accessibility, identifying this mode of travel as a good substitute for short car trips, particularly those under 5km.

4.5.2 As discussed in **Section 4.4**, a shared cycle-footway measuring approximately 3m in width is provided on the northern boundary of the A507 Baldock Road and connects the Buntingford Business Park with Buntingford. Towards the town centre, once the cyclists have crossed the A10, the shared cycle-footway continues for approximately 50m before rejoining the B1038 Baldock Road carriageway. **Figure 4.3** shows the routing of this shared cycle-footway.

4.5.3 Cycling improvements are taking place in Buntingford. **Figure 4.3** shows the routing of an additional shared cycle-footway that Hertfordshire County Council (HCC) have provided along London Road as part of Active Travel England's funding for improving active travel connections in the County (further discussed in the following **Section 4.6**).

4.5.4 Furthermore, Buntingford local highway network is comprised of residential streets with 30mph vehicle speed limits and surrounded by quiet country roads and lanes which are considered safe for cycling.

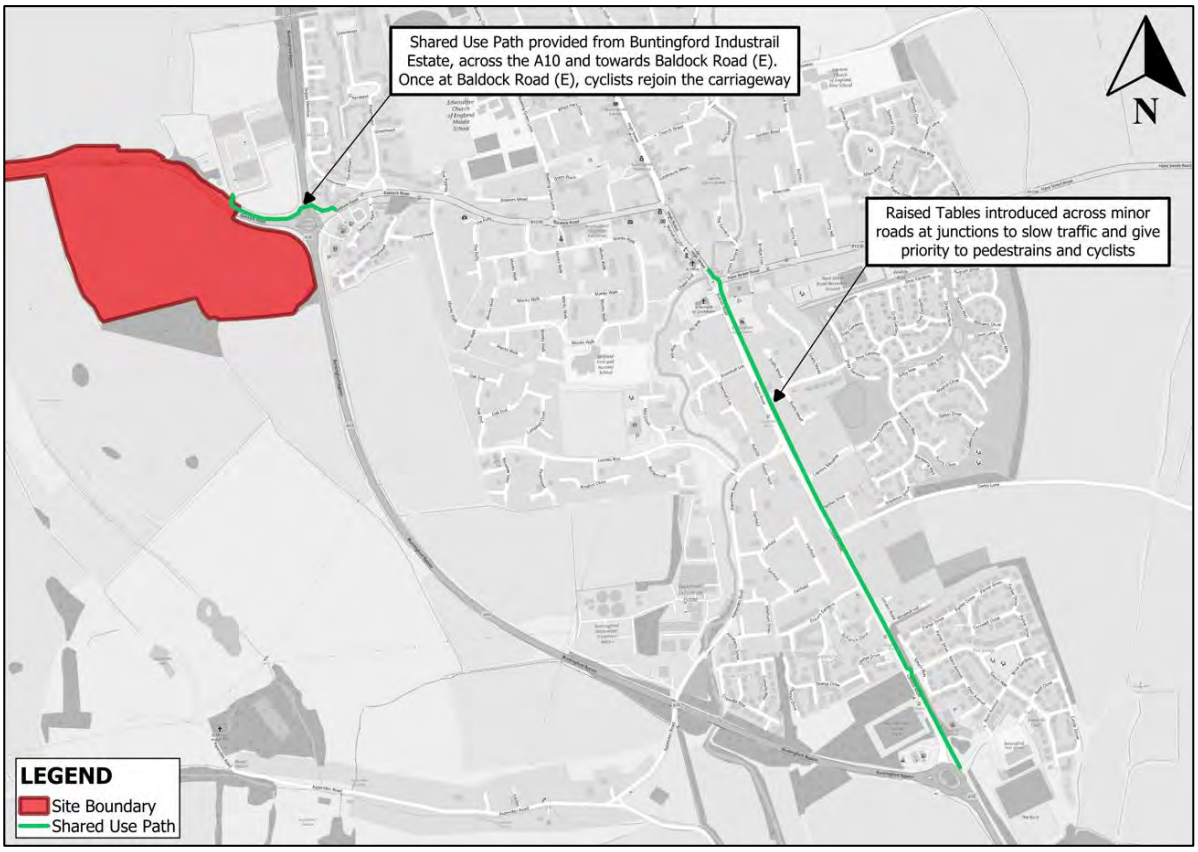


Figure 4.3 – Existing Local Cycle Network

4.5.5 Whilst there are no National Cycle Routes within the area, almost all of Buntingford falls within 2km of the site (**Figure 4.2**), with the remaining areas and some neighbouring settlements including Cottered, Westmill and Buckland falling within 5km of the site (21-minute cycle).

4.5.6 As discussed, this distance is widely recognised as a reasonable cycling distance and therefore facilities, services, and all of the residential area within Buntingford along with nearby settlements, lie within a reasonable cycling distance of the site.

4.5.7 It can therefore be concluded that the local facilities are situated within a reasonable distance to the site for cycling which could result in less requirement to travel by private car.

4.5.8 As part of the scheme, it is also proposed to extend the existing shared cycle-footway available along the A507 Baldock Road to serve the site. It is therefore expected that the existing accessibility for cyclists will be improved as this scheme is progressed.

4.6 Active Travel Improvements

4.6.1 Since November 2020, Active Travel England's active travel fund awarded HCC funds to improve the active travel connections around the County making it easier and safer to walk and cycle thus improving the health, air quality, road safety, the local economy and traffic congestion within Hertfordshire.

4.6.2 Within Buntingford, improvements along London Road started in October 2022. These improvements include:

- The provision of a shared use path for walking and cycling along the eastern side of London Road/ Station Road/ High Street;

- Provision of raised tables installed across minor roads at junctions to slow traffic approaching London Road and give priority to pedestrians and cyclists;
- Provision of a new raised Zebra crossing at Hare Street;
- Provision of five additional raised crossing points along London Road to better connect the neighbourhoods on either side of the main road;
- Provision of five additional parking spaces opposite Downhall Ley;
- Introduction of a 30mph speed limit along the entirety of London Road;
- Realignment of the Aspenden Road junction by narrowing the carriageway and modifying the central island to improve the pedestrian crossing experience;
- Provision of a pair of bus stops to both sides of the road near the A10 roundabout along with a new footway along the western side of the road and a zebra crossing. These facilities will serve a new First School development close to the roundabout.

4.7 Bus Accessibility

4.7.1 The site is located in close proximity to the routes of the existing bus services that pass through Buntingford, and as a result the site is well-placed to access these existing bus services for day-to-day journeys to and from the site.

4.7.2 **Figure 4.4** identifies the location of the bus routes within close proximity to the application site and which also travel through Buntingford.

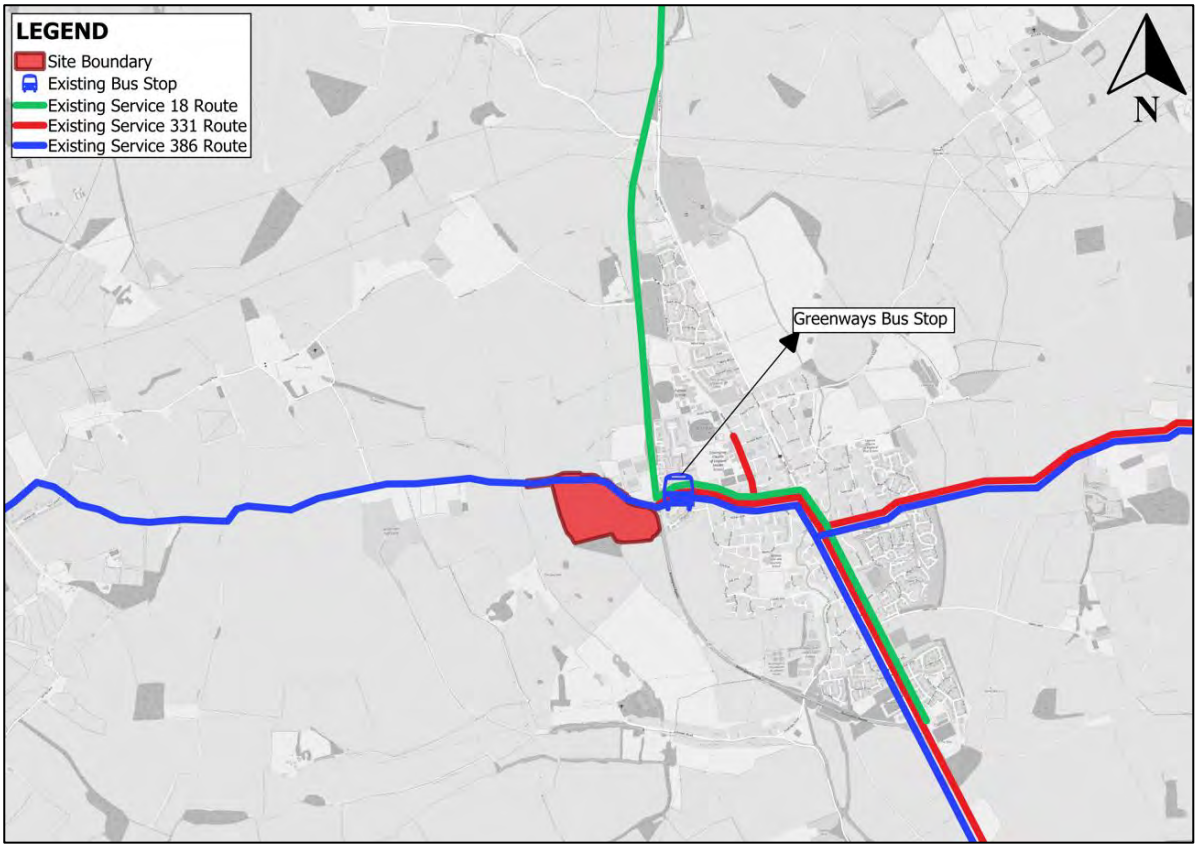


Figure 4.4 – Existing Bus Routes

4.7.3 As **Figure 4.4** illustrates, the closest pair of bus stops, named 'Greenway', are located on the B1038 Baldock Road and well within walking distance from the centre of the site.

4.7.4 Three regular bus routes (their routing has been identified in **Figure 4.4**) serve the 'Greenway' bus stops and an initial review of existing bus services has been carried out and is provided in **Table 4.2**.

Service	Route	Operating Days	Operator	Approximate Frequency
18	Royston Sassoon Drive (W) - Buntingford London Rd opp Kingfisher Park	Monday - Saturday	Richmond's Coaches	Every 2 hours
331	Hertford - Buntingford	Monday - Saturday	Arriva Hert and Essex	Hourly
386	Bishops Stortford - Stevenage	Monday - Saturday	Central Connect	Five times a day

Table 4.2 - Summary of Bus Services

4.7.5 There are additional services provided on Bowling Green with two additional bus services operating on schooldays only with one daily service on each direction to serve students on their daily education trips.

4.7.6 It is evident from the above review that Buntingford is connected to nearby towns in the surrounding area including Hertford, Royston and Letchworth via public transport. As a result, there is an opportunity to encourage the use of the existing bus services for day-to-day journeys to and from the site.

4.7.7 It can therefore be concluded that there is a regular bus service provision accessible from the site and within appropriate walking distance. The proposed scheme also proposes improvements in this regard to encourage and facilitate the use of bus services.

4.8 Local Highway Network

4.8.1 The A507 Baldock Road is a two-way principal road that bounds the application site to the north, and which connects the A10 with the towns of Baldock, Hitchin, Letchworth and Stevenage. It has the national speed limit by the section bounding the site.

4.8.2 The A10 is a single carriageway two-way road subject to national speed limit that bounds the application site to the east. This runs northbound to Cambridge via Royston and southbound to London passing by within close proximity to Hertford and Ware.

4.8.3 Ermine Street provides an access to Buntingford from the A10 to Buntingford town centre. This is a two-way single-carriageway road that is subject to national speed limit up to the junction Hummerston Close and 30mph further south.

4.8.4 High Street starts from the mini-roundabout with Ermine Street to the north and runs on a southbound direction and up to the mini-roundabout with Hare Street. High Street crosses the town centre and has a number of traffic calming features to encourage drivers to keep low vehicle speed limits.

4.8.5 High Street meets the B1038 Baldock Road at a priority junction. Baldock Road provides access to the A10 from the town centre on a westbound direction. It has a 30mph vehicle speed limit up to the junction with Greenways and has a national speed limit further west.

4.9 Review of Personal Injury Collision Data

4.9.1 An assessment of Personal Injury Collision (PIC) data has been undertaken for the local highway network for a study area surrounding the application site. PIC collision data has been assessed for a five-year period comprising from the 1st of January 2018 to the 31st of December 2022, extracted from the DfT's THINK Map website, which is based on real incident data from the Department for Transport. The study area is shown in **Figure 4.5** along with the recorded results. This has investigated the location and nature of PIC data in the following study area:

- A10, between the junction with Ermine Street to the junction with London Road to the south;
- Throcking Lane, between the settlement of Throcking to the west and the junction with the A10 to the east;
- A507 Baldock Road, between the access road to Throcking to the west and the roundabout junction with the A10 to the east;
- B1038 Baldock Road; and
- B1038 High Street.

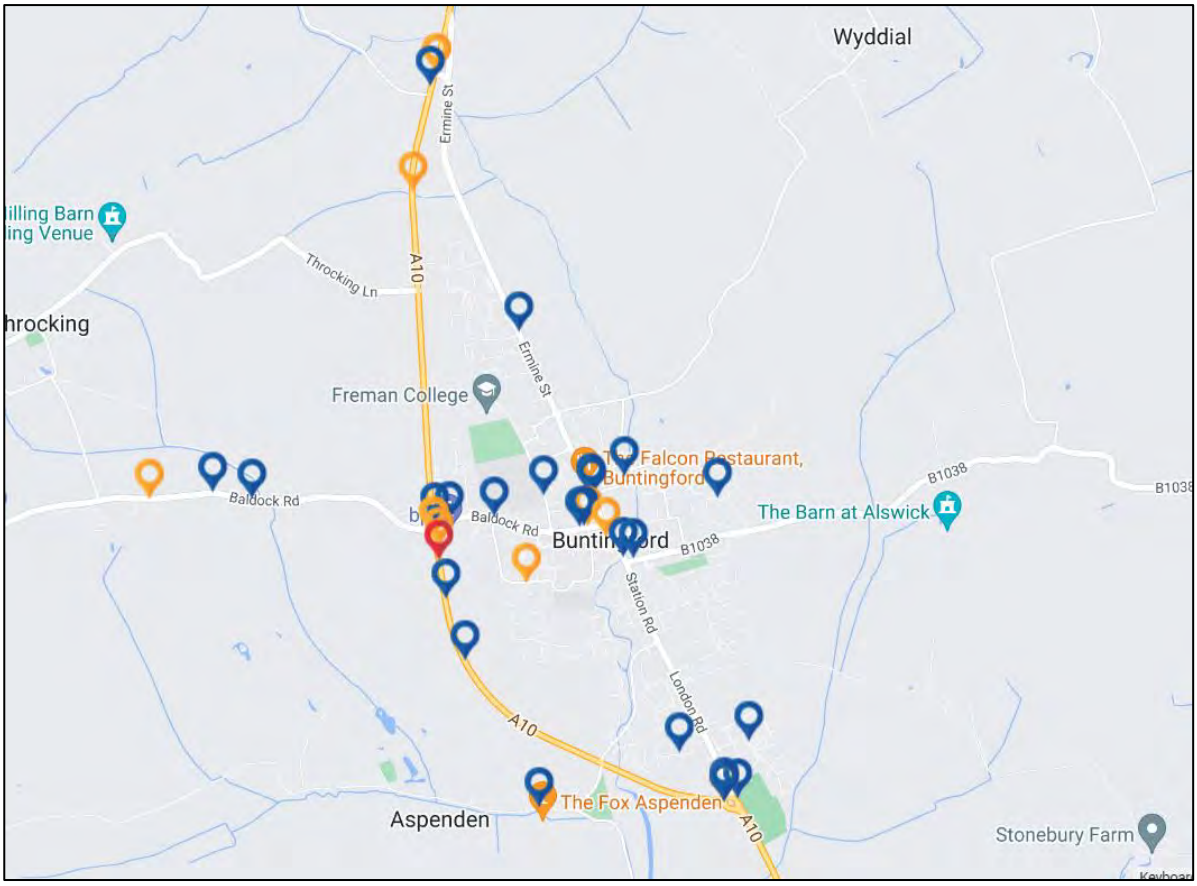


Figure 4.5: PIC Collision Map

4.9.2 **Table 4.3** shows a summary of the PIC collisions per year on the study area.

Year / Severity	Slight	Severe	Fatal	Total
2018	4	4	0	8
2019	2	0	0	2
2020	1	2	0	3
2021	4	2	0	6
2022	4	1	1	6

Table 4.3 – PIC Collision Results

4.9.3 The number of collisions is relatively low on such a wide study area, and which include sections of the A10 and the A507 Baldock Road.

4.9.4 The total number of PIC collisions was 25 during the 5-year period, which translates to an average of just 5 PIC collisions per year.

4.9.5 In terms of PIC collision clusters, it is worth noting that only the A10 roundabout junction with London Road has got 5 PIC collisions during the 5-year period with an average of 1 single collision per year. However, three of them took place in 2018 and there have only been two additional slight collisions from 2019 to 2021.

4.9.6 It is also worth noting that there have only been 3 PIC collisions at the Baldock Road Roundabout junction for the 5-year period. This will provide the main access to the site from the A10.

4.9.7 Furthermore, no PIC collisions have been recorded along the section of the A507 Baldock Road between the Baldock Road Roundabout junction and proposed access to the site.

4.9.8 Finally, it is also worth noting that HCC did not raise any issues in terms of highway safety for planning application 3/23/1447/OUT, which also provided a highway safety assessment for a wide area that included both the Baldock Road Roundabout junction and the A10/London Road Roundabout junction. For planning application 3/22/1030/OUT, proposed to the north of Baldock Road Roundabout junction, no highway safety assessment was provided in the transport report, and this was not raised as an issue.

4.9.9 Thus, given the overall dispersed nature of collisions, both in terms of geographical location and timescale, it is reasonable to conclude that the highway network surrounding the proposed development site does not include any geometric features that can be specifically linked to recorded collisions.

4.9.10 It is therefore concluded that there are no existing highway safety concerns to mitigate.

4.10 Existing Traffic Data

4.10.1 In order to assess the operating condition of the highways included within the study area at the present condition traffic count surveys were undertaken on the following highways:

- Junction 1: A10/Ermine Street;
- Junction 2: A10/Throcking Lane;
- Junction 3: A10/A507 Baldock Road/B1038 Baldock Road;
- Junction 4: B1038 Baldock Road/High Street/B1038 High Street;

- Junction 5: B1038 High Street/B1038 Hare Street Road/Station Road; and
- Junction 6: A10/London Road.

4.10.2 The traffic surveys were undertaken by an independent traffic survey company and took place on Tuesday the 03rd of October 2023. The results of these traffic counts are shown as **Appendix B** to this report.

5 Development Proposals

5.1 Introduction

5.1.1 This Transport Assessment relates to the proposals for the provision of an employment led development at the application site accessed off the A507 Baldock Road, to the west of Buntingford. This section of the Transport Assessment outlines the development proposals with particular consideration given to access to and from the site onto the surrounding public highway network.

5.1.2 The application proposal includes the provision of 4.71ha of employment land which will provide for approximately up to 27,420sqm of employment floorspace in a mix of employment uses (flexible use B2, B8, E(c) and E(g)), with all matters reserved except for access. A Land Use Components Plan, prepared by David Lock Associates, is shown in **Figure 5.1** below. This is also included as **Appendix C** to this report.



Figure 5.1 – Land Use Components Plan

5.1.3 Although layout is a reserved matter, the proposed scheme is being sensitively designed to provide a high-quality layout and environment maximising transport sustainability and integration. The internal road network is to be engineered with particular emphasis on the creation of safe routes around the site facilitating easy access by foot and cycle.

5.1.4 As such, extensive pedestrian, cycle and public transport improvements have been proposed as part of the application to connect the site with the rest of Buntingford without the need to use the private car. Whilst designed to provide appropriate access in isolation, these proposed measures would be complemented by the proposals for residential development to the north of the A507 Baldock Road and which would form part of a separate application.

5.2 Proposed Vehicular Access

5.2.1 The application site is proposed to be accessed off the A507 Baldock Road via a roundabout junction.

5.2.2 The proposed site access layout is shown in **Figure 5.2**. This is included as **Appendix D** to this report.

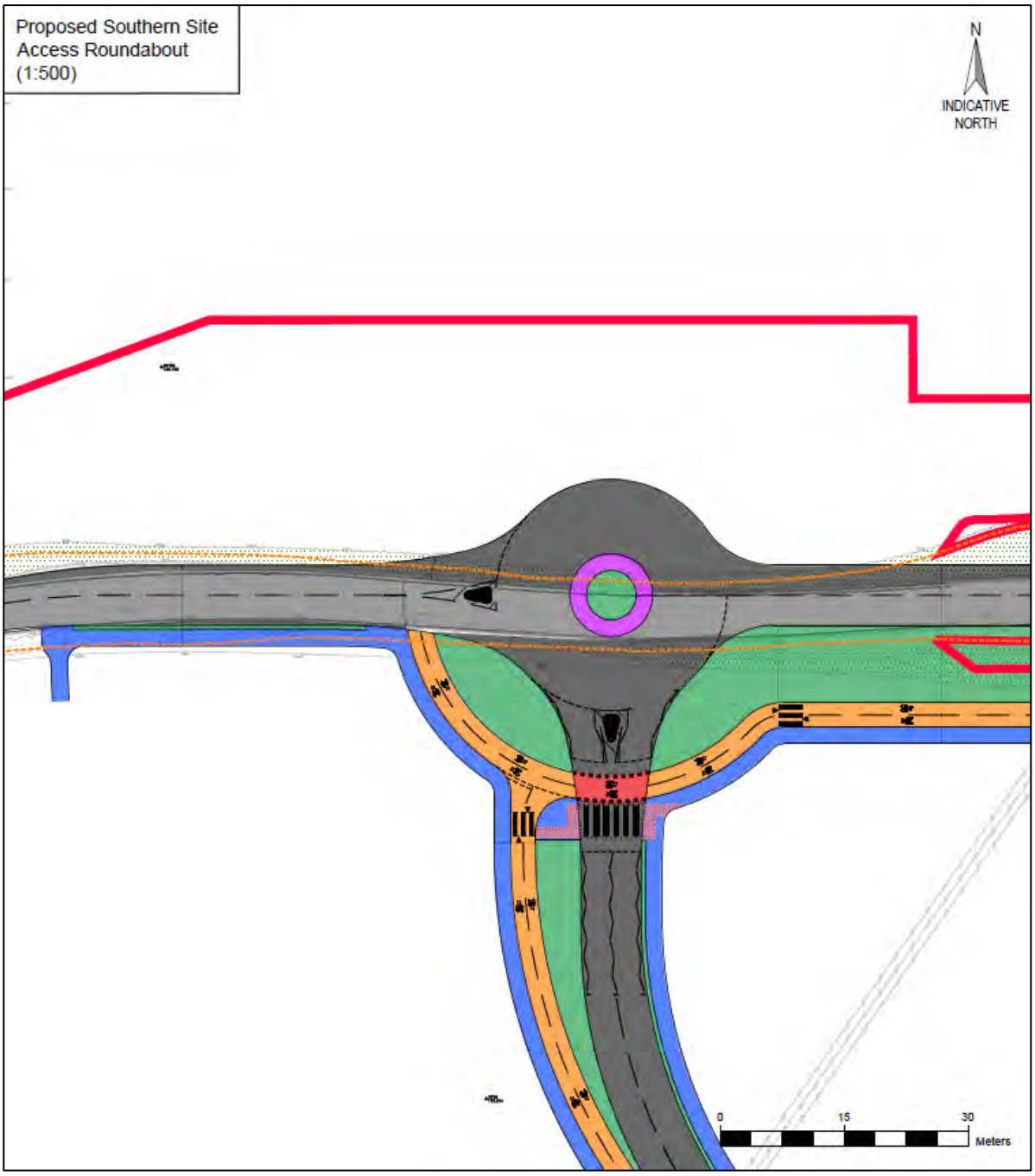


Figure 5.2 – Proposed Access off A507 Baldock Road

5.2.3 The proposed access off the A507 Baldock Road will consist of a continental roundabout junction that will provide access to the site. The roundabout junction has been designed in compliance with DMRB standards.

5.2.4 It is proposed to include segregated footways and cycle paths on the eastern and southern approaches to the roundabout junction, with a formal crossing and parallel cycle crossing on the southern arm of the junction. The crossing will include dropped kerbs, tactile paving and zig zag lines on its approach to the junction. These have been designed in accordance with the LTN 1/20 'Cycle Infrastructure Design' guidance.

5.2.5 It is clear from the access design layout proposed that priority has been placed on the provision of high-quality pedestrian and cycle infrastructure to access the proposed development.

5.2.6 The proposed layout will place priority to pedestrians and cyclists, and will encourage and promote the use of more sustainable modes of transport to and from the site, reducing the need to use the private car and, hence, the traffic impact on the surrounding public highway network.

5.2.7 The A507 Baldock Road will also see a number of traffic calming features to encourage lower vehicle speeds on its eastern section. It is proposed that a 30mph vehicle speed limit is introduced along the A507 for a section to the east of the access to the Buntingford Business Park and up to further west of the proposed access roundabout junction.

5.3 Proposed Walking and Cycling Access

5.3.1 It is considered long-standing good practice that a reasonable distance of 2km has been supported by the previous PPG13 planning policy; whilst this guidance is superseded the threshold is still widely recognised and this figure is still accepted as being suitable for walking to replace short journeys. **Table 4.1** above shows a wide number of local services and facilities that can be reached within 2km from the application site.

5.3.2 Cycling has the potential to replace short car journeys for distances under 5km. Manual for Streets 2 (MfS2) clearly identifies the contribution that cycling can make to transport sustainability and accessibility, identifying this mode of travel as a good substitute for short car trips, particularly those under 5km.

5.3.3 The proposed development provides an opportunity to extend and improve the local pedestrian and cycle network in the western area of Buntingford. This will promote walking and cycling as convenient and realistic modes of transport.

5.3.4 It is proposed to provide pedestrian and cycling facilities throughout the site to enhance permeability and connect directly to the existing shared cycle-footway that runs on the A507 Baldock Road between Buntingford and up to the access to Buntingford Business Park.

5.3.5 The pedestrian and cyclist access strategy will allow for the continuous access for pedestrians and cyclists taking advantage of the existing shared cycle-footway running on the northern section of the A507 Baldock Road.

5.3.6 It is proposed to upgrade this section of shared cycle-footway to provide segregated pedestrian and cycle routes in accordance with Local Transport Note 1/20 'Cycle Infrastructure Design' (2020) running on the northern side of the A507 Baldock Road from the crossing of the A10, which is proposed to be upgraded to a Toucan crossing in order to provide a safe and convenient access to pedestrians and cyclists.

5.3.7 The proposed pedestrian and cycle paths are proposed to be extended along the southern section of the A507 Baldock Road up to the proposed roundabout junction providing access to the site, creating a high-quality sustainable infrastructure. The proposals would also include a raised parallel pedestrian and cycle crossing across the access to Buntingford Business Park and a Toucan crossing to help pedestrians and cyclists across the A10.

5.3.8 The improvements proposed in terms of new pedestrian and cycling infrastructure mean that the town centre and most of the residential area within Buntingford will be reached within convenient pedestrian and cycling distances via high-quality segregated footways and cycle tracks, which will be connected to Buntingford by a Toucan crossing ensuring the safe and quick access across the A10.

5.3.9 The proposed improvements will also provide a significant improvement to the existing conditions of pedestrians and cyclists in the local area to the west of Buntingford.

5.4 Public Transport Access

5.4.1 The location for new bus stops on both sides of the A507 Baldock Road have been proposed as potential improvements to encourage the use of bus services to and from the development. These would be designed in accordance with the relevant guidance.

5.4.2 These bus stops would complement the extensive proposals for pedestrian and cycle facilities providing access to the site, in order to foster the use of more sustainable modes of transport between the site, Buntingford, and other towns accessible by bus such as Hertford.

5.4.3 Conversations with Arriva Group are currently taking place and more details on the public transport improvements will be provided in due course.

5.5 Off-site Highway Works

5.5.1 As part of the scheme, it is proposed to provide additional improvements along the A507 Baldock Road, the A10 and the B1038 Baldock Road, and therefore facilitating access along the main route connection between the site and the residential areas in Buntingford.

5.5.2 The proposed measures would include the following (measures provided on an eastbound direction) and up to the A10:

- Dragon's teeth traffic calming feature on the approach to the roundabout junction providing access to the site;
- It is proposed to reduce the existing vehicle speed limit on the A507 Baldock Road to 30mph to the west of the roundabout junction providing access to the site and up to the roundabout junction with the A10;
- Extension of segregated pedestrian and cycle path infrastructure between the access to Buntingford Business Park and the site;
- Parallel pedestrian and cycle crossing to the west of the access to Buntingford Business Park;
- Formal parallel pedestrian and cycle crossing at the access to Buntingford Business Park;
- Upgrade of the existing shared cycle-footway between the A10 and the access to Buntingford Business Park to segregated pedestrian and cycle path improvements; and
- Provision of Toucan crossing on the A10 to the north of the Baldock Road Roundabout junction.

5.5.3 These measures would be complemented with those proposed as part of the adjacent residential proposal to the north of the A507 Baldock Road, and which would comprise additional pedestrian and cycle crossings to the east and west of the proposed roundabout junction providing access to both sites. These would significantly extend the length of the segregated pedestrian and cycle network to the west of Buntingford and would promote walking and cycling as safe, efficient and convenient modes of transport between the sites and the town of Buntingford.

5.5.4 In this case, the proposed roundabout junction would be designed with the principles of 'Dutch' roundabouts in mind, which have been shown to significantly reduce the number of collisions involving vulnerable road users and improve the highway safety credentials of the junctions. This uses short turning radii to encourage low vehicle speeds and only one circulating vehicle lane on each approach to the junction. It will have kerb-segregated cycle lanes circulating around the outside of the roundabout and cyclists would have priority on all entry and exit lanes. It would also have pedestrian Zebra crossings across each arm, which would be parallel to those of the cycle paths. Due to the safety benefits and

priority that these junctions bring to pedestrians and cyclists a number of them are being proposed in the UK, with proposals for one of them already in Hertfordshire (Hemel Hempstead).

5.5.5 The proposed improvements that would also be delivered along with the residential application proposed to the north of the A507 Baldock Road would comprise the following:

- Vehicle connection via a northern arm to the 'Dutch' roundabout access;
- Pedestrian crossing to the west of the roundabout junction providing access to the site;
- Footway to the west of the roundabout junction to connect to the pedestrian crossing;
- Cycle crossing to the west of the roundabout junction; and
- Pedestrian crossing to the east of the roundabout junction.

5.5.6 On top of these improvements, the proposed measures are also proposed east of the A10. These are currently provided as an indicative design and would be subject to further conversation with HCC:

- Gateway feature at the entrance to Buntingford via the B1038 Baldock Road to incorporate and extend the 30mph vehicle speed limit, which currently starts between the junctions of the B1038 Baldock Road with Deacons Place and Greenways;
- Relocation of the bus shelter on the northern section of the B1038 Baldock Road to provide for an improved pedestrian connection;
- Raised crossing to facilitate the crossing of pedestrians and people with mobility impairment between the junctions of the B1038 Baldock Road with Deacons Place and Greenways;
- Raised crossing on Monks Walk at the two approaches to the junction of the B1038 Baldock Road with Monks Walk;
- Priority narrowing on the B1038 Baldock Road to the east of the junction with Monks Walk (west);
- Change in texture/colour at The Folly by the junction with the B1038 Baldock Road to denote the crossing by pedestrians;
- Raised crossing on the B1038 Baldock Road to the east of the junction with Monks Walk (east); and
- Relocation of parking spaces on the B1038 Baldock Road opposite the junction with Bowling Green Lane to facilitate the circulation of pedestrians.

5.5.7 The proposed improvements detailed in this section have been grouped and split in **Table 5.1**, which shows what would be comprised under the proposed application, and along with the residential application to the north of the A507 Baldock Road:

Proposed Improvements	Proposed Employment Led Development	Employment Led and Residential Led Developments Combined
A507 Baldock Road	Continental 'Dutch' Roundabout	Continental 'Dutch' Roundabout
	Pedestrian and cycle crossings on southern approach to roundabout junction	Pedestrian and/or cycle crossings on all approaches to roundabout junction
	Reduction of vehicle speed limit	Reduction of vehicle speed limit
	Provision of footways and cycle paths on southern side of A507 with a pedestrian and cycle crossing to the west of the access to the Buntingford Business Park	Provision of footways and cycle paths on both sides of A507, along with 3 pedestrian and cycle crossings
	Pedestrian and cycle crossing on access to Buntingford Business Park and across A507	Pedestrian and cycle crossing on access to Buntingford Business Park and across A507
	Provision of bus stops on both sides of A507	Provision of bus stops on both sides of A507, and connecting bus stops and a mobility hub within the residential led proposals
	Upgrade of existing shared cycle-footway to segregated footway and cycle paths	Upgrade of existing shared cycle-footway to segregated footway and cycle paths
A10	Provision of Toucan crossing	Provision of Toucan crossing
B1038 Baldock Road	Proposed improvements (par. 5.5.6) (indicative at this stage)	Proposed improvements (par. 5.5.6) (indicative at this stage)
Throcking Lane		Realignment of junction / Reduction of vehicle speed limit
PRoW Cottered Footpath 041		Pedestrian bridge across A10

Table 5.1 – Proposed Improvements for Proposed Development and Combined with Residential Application

5.5.8 **Figure 5.3** shows the proposed access improvements on the A507 Baldock Road proposed for the employment led development and stated in **Table 5.1** above. This is shown in **Appendix D** to this report.

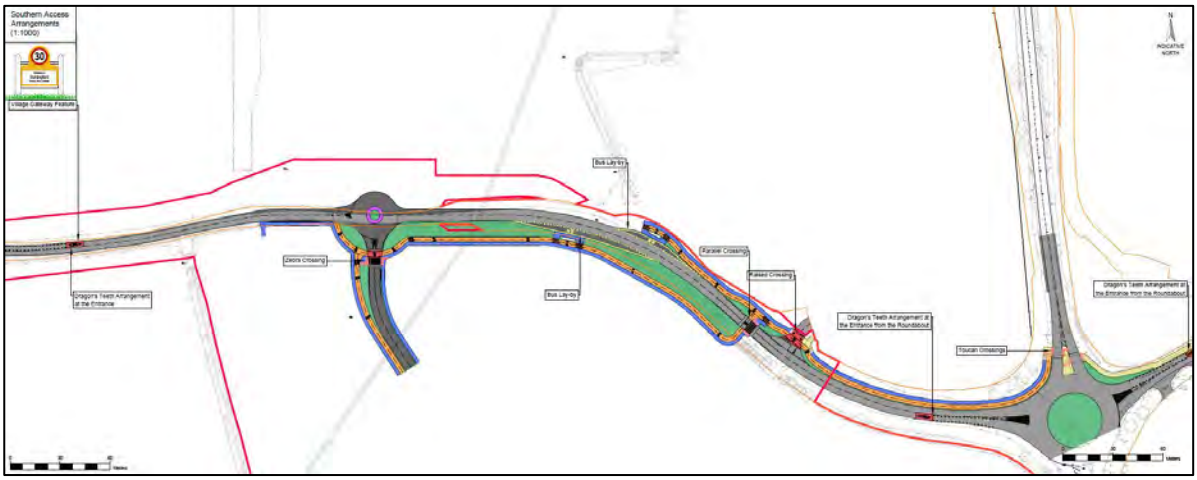


Figure 5.3 – Proposed Highway Improvements – A507 Baldock Road: Employment Led Development

5.5.9 **Figure 5.4** shows the proposed highway improvements to the A507 Baldock Road proposed for the combined employment and residential led developments and stated in **Table 5.1** above. This is also included as **Appendix E** to this report.

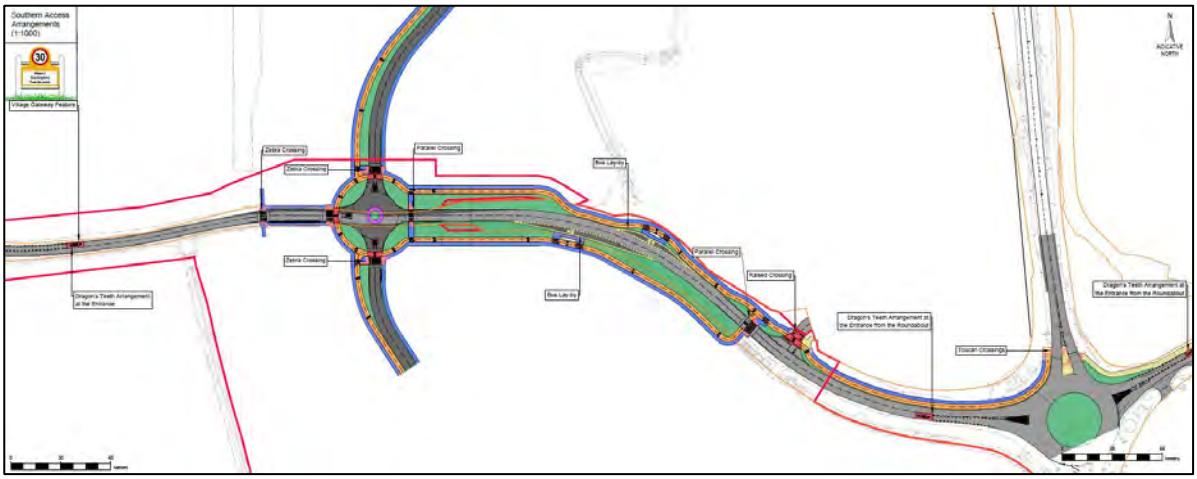


Figure 5.4 – Proposed Highway Improvements – A507 Baldock Road: Combined Developments

5.5.10 **Figure 5.5** and **Figure 5.6** show the proposed improvements on the B1038 Baldock Road. These are also included as **Appendix F** to this report.



Figure 5.5 – Proposed Off-Site Improvements – B1038 Baldock Road (West)



Figure 5.6 – Proposed Off-Site Improvements – B1038 Baldock Road (East)

5.6 Vehicle Parking Provision

5.6.1 Car parking will be provided in line with local policy, in particular the 'Updated Vehicle Parking Standards' SPD document from the East Hertfordshire Local Plan, adopted in July 2015. The updated car parking standards state that:

> "*There will be an initial presumption for the required car parking standard to be applied. Developers proposing car parking above or below these levels should provide robust evidence to support their case*."

5.6.2 This approach is corroborated by Policy TRA3 'Vehicle Parking Provision' of the Local Plan, which states that:

> "I. *Vehicle parking provision associated with development proposals will be assessed on a site-specific basis and should take into account the provisions of the District Council's currently adopted Supplementary Planning Document 'Vehicle Parking Provision at New Development'*".

5.6.3 The proposed development is located in a 'Zone 4 Accessibility Zone', which applies to all areas outside of the main settlements, and therefore it would be expected that 75-100% of the parking requirements would be provided. These standards are as follows:

Use Class	Description	Car Parking Standards
A2 Financial and professional services	Banks, building societies, estate agencies	1 space per 30 m² GFA
B1 Business	B1 (a) offices	1 space per 30m² 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
		1 lorry space per 200m² GFA to 1 lorry space per 1,000 m² GFA (to be determined on a case by case basis)
B8 Storage and distribution	Wholesale distribution, builders merchants, storage	1 space per 75 m² GFA
		1 lorry space per 200m² GFA (minimum 1 space) to 1 lorry space per 500 m² GFA (to be determined on a case by case basis)
Business Parks	Mixed B1/B2/B8 (unless heavily orientated to B8) for use where individual land-use components are not known	1 space per 40m² GFA

Table 5.2 – Vehicle Parking Standards

5.6.4 These standards also provide for disabled spaces as follows:

- Employment generating development:
- i) up to 200 space car park: Individual spaces for each disabled employee plus 2 spaces or 5% of total capacity, whichever is greater
- ii) more than 200 space car park: 6 spaces plus 2% of total capacity

5.6.5 The proposed provision will be discussed with the Highway Authority and the standards to be applied will be agreed. This is the approach that has been accepted by the Local Highway Authority for the neighbouring planning application 3/23/1447/OUT.

5.6.6 Electric vehicle charging points will also be provided on-site in accordance with Building Regulations 2010 Approved Document S 'Infrastructure for the Charging of Electric Vehicles' (2021 Edition), which states that:

> "*For new buildings other than residential or mixed-use buildings with more than 10 parking spaces, both of the following apply.*
>
> *a. One electric vehicle charge point must be provided for the building.*
>
> *b. At least one in every five remaining parking spaces must be provided with cable routes.*"

5.7 Cycle Parking Provision

5.7.1 Cycle parking will also be provided in line with the 'Updated Vehicle Parking Standards' SPD document from the East Hertfordshire Local Plan.

5.7.2 The standards refer to 'Minimum Cycle Parking Standards' to be provided and the 'zonal system' does not apply to cycle parking. The standards are as follows:

Use Class	Description	Car Parking Standards
A2 Financial and professional services	Banks, building societies, estate agencies	1 short-term space per 200 m² GFA plus 1 long-term space per 10 full-time staff
B1 Business	B1 (a) offices	1 short-term space per 500m² GFA plus 1 long-term space per 10 full-time staff
	B1 (b) research and development, high tech/B1 (c) light industry	
B2 General Industry	General industry	1 short-term space per 500m² GFA plus 1 long-term space per 10 full-time staff
B8 Storage and distribution	Wholesale distribution, builders merchants, storage	1 short-term space per 10 full-time staff
Business Parks	Mixed B1/B2/B8 (unless heavily orientated to B8) for use where individual land-use components are not known	1 short-term space per 500 m² GFA plus 1 long-term space per 10 full-time staff

Table 5.3 – Cycle Parking Standards

5.7.3 The proposed provision will be discussed with the Highway Authority and the standards to be applied will be agreed.

5.8 Conclusion

5.8.1 The proposed development is located within 2kms from the town centre in Buntingford and most of the residential area. It is therefore located within the recommended walking distances to replace short car trips.

5.8.2 Furthermore, a wider area is comprised within 5km, which is the recommended distance for cycle trips to replace car trips. This would include the whole extent of Buntingford plus a number of additional residential settlements.

5.8.3 The proposed development will provide an extensive improvement to the pedestrian and cycle networks provided to the west of Buntingford, which will make walking and cycling more accessible, safe and convenient for employees. The improvements proposed comprise the following:

- **Site Access Scheme and Parking**: Access to the site will be provided by a roundabout junction off the A507 Baldock Road, designed in compliance with the standards set out in the DMRB. A number of traffic calming features are proposed to reduce the existing vehicle speed limit on the A507 Baldock Road to 30mph on the approach to the site access.
- **Pedestrian and Cycle Facilities and Routes**: Pedestrian and cycle access to the development site will be significantly improved by the upgrading of the existing shared cycle-footway that runs on the northern side of the A507 Baldock Road up to Buntingford Business Park to a segregated pedestrian and cycle path network and a significant extension to connect to the site, along with a crossing on the A507. The proposed improvements also include a Toucan crossing on the A10.
- **Public Transport**: It is proposed to provide new bus stops on both sides of the A507 Baldock Road to serve the proposed development. The existing bus services provided are considered suitable to provide access to the town and main destinations in the area.

5.8.4 Therefore, the current accessibility and convenience from the site to encourage walking, cycling and public transport as main modes of transport will be significantly improved. On top of that, the proposed development could also bring improvements along the B1038 Baldock Road.

6 Development Trip Generation

6.1 Introduction

6.1.1 This section describes the traffic analysis undertaken to determine the likely effect that the proposed employment led development will have on the surrounding highway network.

6.1.2 The traffic analysis includes the calculation of the number of trips associated with the development and the distribution and assignment of these trips to the highway network. This is based on a proposed development comprising up to 27,420sqm of employment floorspace in a mix of employment uses (flexible use B2, B8, E(c) and E(g)). The proposed development is proposed to be accessed off the A507 Baldock Road.

6.2 Development Multi-Modal Trip Rates

6.2.1 In order to establish the predicted trip generation of the proposed development, trip rates have been established based on comparative multi-modal survey sites collated from TRICS database (using version 7.10.3) for the land category of 'Business Park' of the 'Employment' land use category.

6.2.2 Taking into account the setting of the site, and the anticipated employment area that would be delivered, the results were filtered as follows:

- Sites included within 'Greater London', Northern Ireland and Republic of Ireland have been excluded due to their different travel patterns associated to accessibility to local facilities and public transport;
- Only surveys undertaken on weekdays;
- Pre-date Covid before 2020; and
- 'Edge of Town' sites only.

6.2.3 **Table 6.1** sets out the resulting vehicle trip rates for the proposed development. The full TRICS output is attached as **Appendix G** to this TA.

Time	Arrivals	Departures	Total
AM Peak	1.227	0.130	1.357
PM Peak	0.082	0.872	0.954

Table 6.1 – Vehicle Trip Rates (per 100sqm)

6.2.4 The site has also been assessed for pedestrian, cycle and public transport trip rates and these have been set out in **Table 6.2**, **Table 6.3** and **Table 6.4**.

Time	Arrivals	Departures	Total
AM Peak	0.110	0.026	0.136
PM Peak	0.028	0.117	0.145

Table 6.2 – Pedestrian Trip Rates (per 100sqm)

Time	Arrivals	Departures	Total
AM Peak	0.129	0.014	0.143
PM Peak	0.018	0.104	0.122

Table 6.3 – Cycling Trip Rates (per 100sqm)

Time	Arrivals	Departures	Total
AM Peak	0.099	0.036	0.135
PM Peak	0.006	0.075	0.081

Table 6.4 – Public Transport Trip Rates (per 100sqm)

6.3 Adjustments to Vehicle Trip Rates

6.3.1 Taking into account the site's proximity to the existing residential area to the east of the A10, it is likely that a number of employment journeys would be undertaken between the site and nearby residential estates and, given the short distance, would likely be carried out on foot. This would therefore result in a subsequent reduction in vehicle journeys.

6.3.2 To forecast the total number of journeys this would account for, 2011 Census data was interrogated to ascertain the number of people likely to live and work within the same area. Thus, the internal journey to work vehicle data associated with the 'East Hertfordshire 001' MSOA, which is representative of the development area, has been reviewed. This analysis demonstrates that approximately 25% of the workplace population within the 'East Hertfordshire 001' MSOA that drive to work also work within this same area.

6.3.3 In light of this, it is proposed that a 5% reduction be applied to the forecast employment vehicle trip rates to take account of the fact that these trips would be short in distance and therefore unlikely to be carried out by car. This reduction is summarised in **Table 6.5** below.

Time	Employment - Commuting internal		
	Arrivals	Departures	Total
AM Peak	0.061	0.007	0.068
PM Peak	0.004	0.044	0.048
Time	**Employment - Commuting External**		
	Arrivals	**Departures**	**Total**
AM Peak	1.170	0.120	1.290
PM Peak	0.080	0.830	0.910

Table 6.5 – Adjustment for Access to Employment

6.3.4 It is noted that recent control measures introduced nationally as a result of the Covid 19 pandemic appear to have resulted in major behavioural change that has resulted in more home working that is likely to result in subsequent permanent long-term changes even after these measures are lifted. These changes in travel pattern are discussed in the Royal Town Planning Institute document titled 'Plan the World We Need', which was released in June 2020. Section 3.1 states the following:

> "*...In the UK during April, 39% of those in employment reported working only from home, while 6% both worked from home and travelled to work. This contrasts with 5% of the workforce who reported working mainly from home during 2019...*"

6.3.5 The Department for Transport (DfT), in conjunction with Ipsos MORI, published 'All Change? Travel Tracker – Wave 1 Summary for the Department for Transport' in June 2020. This summary document presents analysis and headline figures from a UK-wide survey commissioned by the DfT and undertaken during May-June 2020. The survey explored whether participants would use more sustainable travel or return to pre-lockdown travel and made the following statement in this regard:

> *"Thinking about the future more generally, the survey suggests that there could be some positive behavioural impacts from a sustainability perspective. There is a high degree of self-reported willingness to change behaviour in response to the long-term threat. Many say they are willing to do a range of things to reduce their contribution to climate change, reflecting a recognition that the long-term posed by climate change is as serious as coronavirus in the long-term (63% agree, 15% disagree)".*

6.3.6 It is also evident that there would likely be more changes in future years as technology, society and business continues to evolve. This is particularly evident for the emerging economy, which is home to an increasing number of research & development and technology companies that present more opportunity for home working than traditional industries.

6.3.7 To account for the impact of these innovations and the subsequent introduction of properties designed to cater for these future changes it is proposed that a reduction factor of 10% be applied to the forecast external employment vehicle trip rates as set out in **Table 6.5**. The subsequent reduction in terms of vehicle trip rates is summarised in **Table 6.6** below.

Time	Employment - Home working		
	Arrivals	**Departures**	**Total**
AM Peak	0.117	0.012	0.129
PM Peak	0.008	0.083	0.091
Time	**Employment - Commuting External**		
	Arrivals	**Departures**	**Total**
AM Peak	1.049	0.111	1.160
PM Peak	0.070	0.746	0.816

Table 6.6– Vehicle Traffic Adjustments for Access to Employment Including WFH

Behaviour Change

6.3.8 A robust site overarching Travel Plan will also be introduced at the development to reduce the reliance on solo-car journeys and thus to accomplish a positive mode shift from car travel to other sustainable modes. This Travel Plan will include measures to encourage sustainable travel behaviour from the point of occupation.

6.3.9 Sustainable travel connections linking with the existing pedestrian and cycling network in the local area will be provided across the site. The walking and cycle routes will enhance travel via active modes thereby contributing to the wellbeing of the future occupants.

6.3.10 Case Studies reviewed by the Department of Transport as part of the research paper titled 'Smarter Choice Document – Changing the Way We Travel' published in 2005, indicates that an average 18% reduction in private car use can be delivered through an effective Travel Plan.

6.3.11 In light of the above, it is reasonable to assume that by delivering appropriately sustainable travel infrastructure as well as targeted Travel Plan measures, a mode shift of 15% away from car usage can be achieved.

The Forecast Residual Vehicle External Trip Rates

6.3.12 The forecast residual external employment vehicle trip rates are established below:

Time	Residual Employment External Vehicle Trip Rates		
	Arrivals	Departures	Total
AM Peak	0.890	0.090	0.990
PM Peak	0.060	0.630	0.690

Table 6.7 – Forecast Residual Vehicle External Vehicle Trips

6.4 Adjustments to Trip Rates for Walking, Cycling and Public Transport

6.4.1 It is assumed that the forecast deduction on vehicle trip rates to account for the site's proximity to the existing settlement area will mainly be made by walking and cycling. In view of this it has assumed that the 70% of the forecast overall internal vehicle trip rates will be shifted to walking with the remaining 30% being cyclists. Applying these assumptions to **Table 6.7**, the additional internal walking and cycling trip rates are as follows:

Time	Employment – Walking		
	Arrivals	Departures	Total
AM Peak	0.043	0.005	0.047
PM Peak	0.003	0.031	0.033
Time	**Employment – Cycling**		
	Arrivals	**Departures**	**Total**
AM Peak	0.018	0.002	0.020
PM Peak	0.001	0.013	0.014

Table 6.8 – Additional Walking and Cycling Trips Transferred from Internal Vehicle Trip Rates

6.4.2 Taking into account the potential proposals for improving the site accessibility by sustainable modes of travel and promoting walking, cycling and public transport, the potential 15% modal shift on the forecast external vehicle trip rates as result of behaviour changing will see:

- 20% of these journeys will be made by walking;
- 40% of these trips will be transferred to cycling;
- 40% of these trips will be switched to public transport.

6.4.3 The additional walking, cycling and public transport trips as result of behaviour changing are as follows:

Time	Employment – Walking		
	Arrivals	Departures	Total
AM Peak	0.031	0.003	0.035
PM Peak	0.002	0.022	0.024
Time	**Employment – Cycling**		
	Arrivals	**Departures**	**Total**
AM Peak	0.063	0.007	0.070
PM Peak	0.004	0.045	0.049
Time	**Employment – Public Transport**		
	Arrivals	**Departures**	**Total**
AM Peak	0.063	0.007	0.070
PM Peak	0.004	0.045	0.049

Table 6.9 – Additional Walking, Cycling and Public Transport Trips as Result of Behaviour Changing

6.4.4 Applying the above adjustments to the forecast trip rates for walking, cycling and public transport as set out in **Table 6.2, Table 6.3** and **Table 6.4**, the forecast trip rates for sustainable modes of travel are summarised below:

Time	Employment – Walking		
	Arrivals	Departures	Total
AM Peak	0.184	0.034	0.218
PM Peak	0.033	0.170	0.203
Time	**Employment – Cycling**		
	Arrivals	**Departures**	**Total**
AM Peak	0.210	0.023	0.233
PM Peak	0.023	0.162	0.185
Time	**Employment – Public Transport**		
	Arrivals	**Departures**	**Total**
AM Peak	0.162	0.043	0.205
PM Peak	0.010	0.120	0.130

Table 6.10 – Forecast Walking, Cycling and Public Transport Trip Rates

6.5 Development Trip Generation

6.5.1 To allow a capacity margin, traffic generation is calculated for a proposed employment use of 28,000sqm in GFA. Applying the methodology set out in **Table 6.1**, **Table 6.5**, **Table 6.6** and **Table 6.7** the detailed breakdown of the forecast traffic generation is set out in **Table 6.11**:

Time	Initial Forecast		
	Arrivals	Departures	Total
AM Peak	344	36	380
PM Peak	23	244	267
Time	**Employment Commuting Internalisation**		
	Arrivals	**Departures**	**Total**
AM Peak	17	2	19
PM Peak	1	12	13
Time	**Innovation and Home Working**		
	Arrivals	**Departures**	**Total**
AM Peak	33	3	36
PM Peak	2	23	25
Time	**Mode Shift**		
	Arrivals	**Departures**	**Total**
AM Peak	44	5	49
PM Peak	3	31	34
Time	**Residual External Traffic**		
	Arrivals	**Departures**	**Total**
AM Peak	250	26	276
PM Peak	17	177	194

Table 6.11– Employment Traffic Generation

6.5.2 Using the trip rates set out in **Table 6.10** for sustainable modes of travel, the forecast trip generation for walking, cycling and public transport as result of the proposed employment use of 28,000sqm is tabulated in **Table 6.12** below:

Time	Employment – Walking		
	Arrivals	Departures	Total
AM Peak	52	10	61
PM Peak	9	48	57
Time	**Employment – Cycling**		
	Arrivals	**Departures**	**Total**
AM Peak	59	6	65
PM Peak	6	45	52
Time	**Employment – Public Transport**		
	Arrivals	**Departures**	**Total**
AM Peak	45	12	57
PM Peak	3	34	36

Table 6.12 – Employment Trip Generation by Walking, Cycling and Public Transport

6.6 Vehicle Trip Distribution

6.6.1 The distribution of development traffic has been based on analysis of the 2011 Census O/D data, available on the website www.nomisweb.co.uk using the WU03EW dataset 'Location of Usual Residence and Place of Work by Method of Travel to Work'. The area used for those working is the MSOA 'E02004878: East Hertfordshire 001'. This MSOA covers the town of Buntingford and is therefore considered to provide a reasonable proxy of origins / destinations of trips generated by the proposed development.

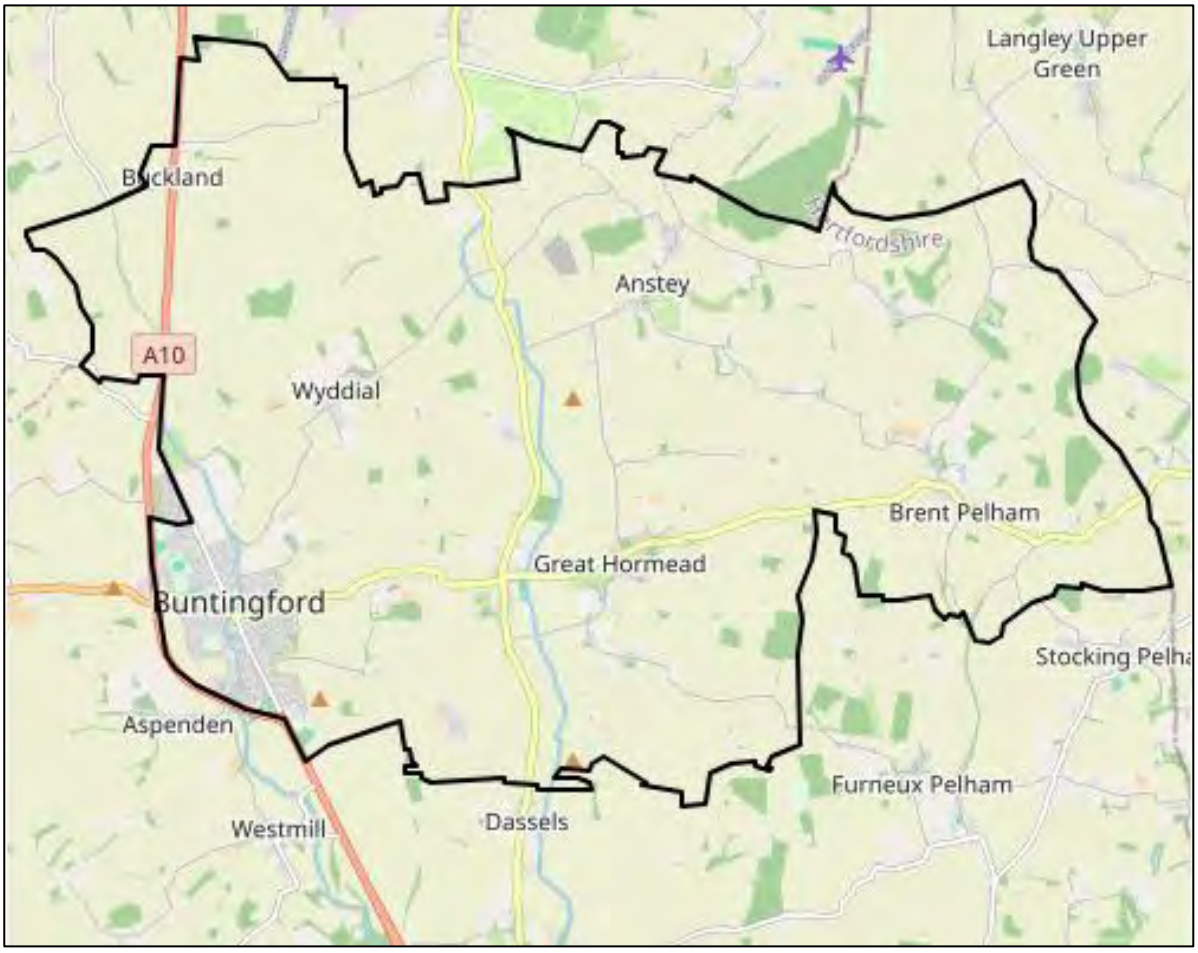


Figure 6.1 – Extent of 'East Hertfordshire 001' MSOA

6.6.2 Having determined the destinations for work-related trips, routes from the proposed development site via the identified local highway network were then established, using the routing assignments extracted from Google Maps. Where more than a single route offered comparable journey times the proportion of trips to this destination was shared between the other competing routes.

6.6.3 The percentage directional distribution for the proposed employment land uses that are derived based on car trips to/from the MSOA of 'East Hertfordshire 001' using 2011 Census Data are set out in **Table 6.13**.

Directional Distribution	Employment
A10 N	15%
A10 S	32%
Baldock Rd West	33%
Hare Street	9%
High Street	9%
Station Road	2%

Table 6.13 – Employment Traffic Distribution

7 Traffic Analysis

7.1 Introduction

7.1.1 This section sets out the methodology for preparing forecasts for the assessment of the impact of the proposed development on the study area network. This includes details relating to background traffic growth.

7.2 Scope of Assessment

7.2.1 The submitted Transport Assessment will include an assessment of the anticipated impact of the traffic generated by the proposed development. Taking into account the potential vehicle routes to the application site, a traffic impact study area encompassing the following junctions that are identified as potentially sensitive to changes in traffic flow have been considered:

- Proposed Site Access Roundabout junction off the A507 Baldock Road
- A10 Buntingford Bypass / Ermine Street
- A10 Buntingford Bypass / Throcking Lane
- A10 Buntingford Bypass / A507 Baldock Road / B1038 Baldock Road Roundabout junction
- B1038 Baldock Road / High Street
- B1038 High Street / Station Road / B1038 Hare Street Road Roundabout junction
- A10 / London Road Roundabout junction

7.3 Assessment Scenarios

7.3.1 The assessment year in respect of capacity analysis for the transport network is consistent with the size, scale and completion schedule of the proposed development.

7.3.2 The Year 2035 has been used as the future year for assessment.

7.4 Analysis Period

7.4.1 This TA has considered the following analysis periods: weekday morning and evening peak periods with a combined highway and development peak.

7.5 Background Growth

7.5.1 Traffic growth factors for the future year assessment have been derived from TEMPro (Version 8.1). TEMPro forecasts traffic growth based on factors such as changes in housing, employment, and car ownership over a growth period for a selected study area using the National Trip End Model (NTEM). These forecasts are informed by information derived from adopted Local Plans and, as such, can be reasonably expected to include neighbouring land allocations.

7.5.2 The correlated Origin/Destination growth rates for Car Drivers have been estimated using TEMPro Dataset 8.1 for the Mid Super Output Areas that cover the site, namely MSOAs 'E02004878: East Hertfordshire 001' and 'E02004879: East Hertfordshire 002'.

7.5.3 The factors were subsequently adjusted in line with the DfT TEMPro User Guidance to account for National Transport Model (NTM) Traffic Growth (using the NRTP 2022 Core) to reflect the characteristics of the local road network (i.e. Region - All Roads).

7.5.4 The projected local growth factors are summarised in **Table 7.1** below. The established average representation will be adopted to forecast the background traffic growth in the area.

MSOA Area	Year 2023 - 2035	
	AM	PM
East Hertfordshire 001	1.0995	1.1022
East Hertfordshire 002	1.1013	1.1031
Average - All	1.1004	1.1026

Table 7.1 TEMPRO Growth Factors

7.5.5 It is acknowledged that TEMPro NTEM datasets take into account the underlying planning information in the local area, as well as the strategic housing and employment allocations. Thus, committed development traffic is already accounted for in these growth figures.

7.5.6 In light of this, the impact of the development traffic will be assessed solely on the observed traffic levels that have been factored up to the design year 2035 level. The resultant traffic diagrams for Year 2035 Baseline scenario are illustrated in **Appendix H**.

7.6 Introduction to Junction Capacity Assessments

7.6.1 The LHA's Guidance on Transport Assessment states that junction assessment should be conducted where material changes in traffic volumes are experienced. In light of this, the percentage increase on the net 2035 base flow traffic for both AM and PM peak hours, as a result of the proposed development, is summarised below in **Table 7.2.**

Junction	Approach	AM			PM		
		2035	Dev	%	2035	Dev	%
The A10 Buntingford Bypass / Ermine Street	The A10 North	518	37	7%	453	2	1%
	Ermine St	142	0	0%	107	0	0%
	The A10 South	544	4	1%	571	26	5%
The A10 Buntingford Bypass / Throcking Lane	The A10 North	567	37	7%	486	2	1%
	Throcking Lane	15	0	0%	12	0	0%
	The A10 South	550	4	1%	583	26	5%
The A10 Buntingford Bypass / A507 Baldock Road / B1038 Baldock Road	The A10 North	571	37	6%	496	2	0%
	B1038 East	722	51	7%	533	3	1%
	The A10 South	872	79	9%	954	5	1%
	Baldock Road West	614	18	3%	517	119	23%
The B1038 Baldock Road / High Street	The B1038 West	288	5	2%	346	37	11%
	High Street	191	23	12%	161	2	1%
	The B1038 South	483	29	6%	470	2	0%
The B1038 High Street / Station Road / B1038 Hare Street Road	High Street	387	3	1%	431	20	5%
	Hare Street	272	23	8%	237	2	1%
	Station Road	421	6	1%	452	0	0%
The A10 Buntingford Bypass / London Road Roundabout	Station Road	570	0	0%	330	0	0%
	The A10 South	1051	79	8%	1420	5	0%
	The A10 North	1010	8	1%	730	56	8%

Table 7.2 Percentage Increase as Result of Development Traffic

7.6.2 As can be seen above, the development proposals are not forecast to result in a tangible growth in traffic volume along the study highway network with an overall average increase of less than 5% forecast. It is noted that an increase of less than 10% is generally within the range of typical daily variation and therefore insignificant in terms of traffic impact.

7.6.3 Notwithstanding the above, to provide a robust impact study, junction capacity tests have been carried out at the identified key junctions to determine the significance of development traffic impact on the local highway network using industry standard software (i.e. ARCADY and PICADY) under the following scenarios for the identified AM and PM peak periods:

- 2023 Base (based on 2023 traffic data);
- 2035 Base (includes 2023 -2035 traffic growth); and
- 2035 Base + Development (includes traffic growth and the proposed development).

7.6.4 As such, by comparing the differing results of the 2035 'Base' and the 2035 'With Development' assessments the junctions included within the study area can be viewed in the context of background traffic flows, and with the addition of the traffic flows generated by the development proposals.

7.6.5 A sensitivity test has also been carried out taking into account a potential residential led mixed use development on the land to the north of the A507 Baldock Road and west of the A10. The scheme will see the delivery of a self-contained residential estate that would encompass up to 600 residential dwellings and elderly accommodation (C3) for up to 60 units. A wide range of ancillary facilities are also proposed at this residential led mixed use scheme including a primary school, a GP surgery and a local centre.

7.6.6 Taking into account the close proximity of the two sites, further deduction has been made to the forecast traffic generation associated with both the proposed employment and residential developments to account for the potential internalisation on commuting journeys. According to 2011 Census Data, 12% of the residential population within the 'East Hertfordshire 001' MSOA that drive to work also work within this same area. In view of this, it has assumed that 12% of the commuting traffic associated with the neighbouring residential development will be internal trips to the proposed employment scheme:

- Sensitivity Test - 2035 Base + Both Employment and Residential Developments on Land either Side of the A507 Baldock Road.

7.7 Junction Assessments

7.7.1 Junction capacity modelling for the identified junctions was undertaken for the proposed assessment scenarios as set out in **Section 7.2**. The full set of modelling outputs for this modelling is presented at **Appendix I**.

7.7.2 Geometric inputs were established using AutoCAD GIS with appropriate measurements taken from the existing junction layout.

7.7.3 The results of these assessments provide details of calculated Queue, Delay and Ratio of Flow to Capacity (RFC) for priority and roundabout junctions. It is noted that where an RFC value is shown to exceed a value of 1.00 the associated approach is considered oversaturated.

A10 Buntingford Bypass / Ermine Street Priority T-Junction

7.7.4 This priority T-junction has been assessed using the industry standard Junctions 10 modelling package. The A10 forms the major arm of this priory T-junction in a north-south direction with Ermine Street joining from the east as the give way arm. Full output from this model is included as **Appendix I** with associated model results summarised in **Table 7.3**.

Period	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Year 2023 Baseline					
Ermine St	0.5	14.1	0.33	0.3	12.59	0.25
A10 South	0.1	6.73	0.05	0.1	6.73	0.07
	Year 2035 Baseline					
Ermine St	0.6	15.99	0.38	0.4	13.91	0.29
A10 South	0.1	6.93	0.05	0.1	6.93	0.08
	Year 2035 + Employment Development					
Ermine St	0.7	16.71	0.39	0.4	14.14	0.29
A10 South	0.1	7.07	0.06	0.1	6.94	0.08
	Year 2035 + Dev Both Sites					
Ermine St	0.7	16.93	0.39	0.4	14.28	0.3
A10 South	0.1	7.13	0.06	0.1	7	0.09

Table 7.3 Modelling Results for the A10 / Ermine Street Junction

7.7.5 As can be seen in the above table the predicted performance of the junction in the three future year scenarios predicts the junction will operate well within capacity on all movements in both the AM and PM peak hours.

7.7.6 Comparison between the two scenarios demonstrates that the junction operates almost identically, with only indiscernible increases in delay in the 'With Development' scenario.

7.7.7 As such, the addition of the traffic generated by the proposed development will not result in a severe cumulative residual impact and thus no mitigation works are required at this junction.

A10 / Throcking Lane Junction

7.7.8 This priority junction has been assessed using the industry standard Junctions 10 modelling package. The A10 forms the major arm of this priory T-junction in a north-south direction with Throcking Lane joining from the east as the give way arm. The full output from this model is included as **Appendix I** with associated model results summarised in **Table 7.4**.

Period	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Year 2023 Baseline					
Throcking Rd Left	0	6.74	0.01	0	6.68	0.01
Throcking Rd Right	0	11.94	0.03	0	10.57	0.01
A10 North	0	6.51	0.01	0	6.59	0.01
	Year 2035 Baseline					
Throcking Rd Left	0	6.94	0.01	0	6.85	0.01
Throcking Rd Right	0	12.71	0.03	0	11.32	0.01
A10 North	0	6.66	0.01	0	6.77	0.01
	Year 2035 + Employment Development					
Throcking Rd Left	0	6.96	0.01	0	6.94	0.02
Throcking Rd Right	0	12.98	0.03	0	11.55	0.01
A10 North	0	6.67	0.01	0	6.86	0.01
	Year 2035 Sensitivity Test					
Throcking Rd Left	0	6.95	0.03	0	6.94	0.03
Throcking Rd Right	0	13.14	0.03	0	12.09	0.01
A10 North	0	6.74	0.02	0	7.06	0.04

Table 7.4 Modelling Results for the A10 / Throcking Lane Junction

7.7.9 As can be seen in the above table the predicted performance of the junction in the three future year scenarios predicts the junction will operate well within capacity on all movements in both the AM and PM peak hours.

7.7.10 Comparison between the two scenarios demonstrates that the junction operates almost identically, with only indiscernible increases in delay in the 'With Development' scenario.

7.7.11 As such, the addition of the traffic generated by the proposed development will not result in a severe cumulative residual impact and thus no mitigation works are required at this junction.

A10 / A507 Baldock Road / B1038 Baldock Road Roundabout

7.7.12 This junction is a five-arm roundabout with an Inscribed Circle Diameter (ICD) of 55 metres encompassing the following arms:

- The A10 approaching from north and south directions;

- The A507 Baldock Road to the east;
- The B1038 Baldock Road to the south; and
- Site Access to Esso Petrol Station from the southeast.

7.7.13 A single lane approach with a short flare is facilitated along all arms. This 5-arm roundabout has been assessed using the industry standard Junctions 10 modelling package. The full output from this model is included as **Appendix I** with associated model results summarised in **Table 7.5**.

Period	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2023 Baseline Traffic					
1 - the A10 North	0.7	4.56	0.38	0.5	3.64	0.31
2 - the B1038	1.3	7.1	0.55	0.6	4.39	0.37
3 - Access Road	0	13.46	0.01	0	10.29	0.05
4 - the A10 South	0.8	3.71	0.43	0.9	3.58	0.46
5 - the A507	0.8	5.39	0.44	0.6	4.47	0.37
	2035 Baseline Traffic					
1 - the A10 North	0.8	5.15	0.43	0.5	3.97	0.35
2 - the B1038	1.8	9.12	0.64	0.7	4.91	0.42
3 - Access Road	0	15.76	0.02	0.1	11.31	0.06
4 - the A10 South	1	4.17	0.49	1.1	4.03	0.51
5 - the A507	1.1	6.23	0.5	0.7	5.02	0.42
	Year 2035 + Employment Development					
1 - the A10 North	0.9	5.48	0.46	0.6	4.24	0.37
2 - the B1038	2.4	11.28	0.7	0.8	5.18	0.43
3 - Access Road	0	17.89	0.02	0.1	11.97	0.06
4 - the A10 South	1.3	4.92	0.55	1.1	4.07	0.51
5 - the A507	1.1	6.42	0.51	1.1	6.02	0.51
	Year 2035 Sensitivity Test					
1 - the A10 North	1	5.98	0.48	0.6	4.46	0.38
2 - the B1038	3.3	14.77	0.76	0.9	5.6	0.46
3 - Access Road	0	21.07	0.02	0.1	12.8	0.06
4 - the A10 South	1.5	5.36	0.58	1.3	4.56	0.56
5 - the A507	1.5	7.66	0.59	1.3	6.85	0.57

Table 7.5 Modelling Results for the A10 / Baldock Road Roundabout

7.7.14 The future predicted performance of the junction is shown to be well within capacity on all movements in both the AM and PM peak hours under all assessed scenarios.

7.7.15 Comparison between the two scenarios demonstrates that minor increases in RFC, queuing and delay are predicted in the 'With Development' scenario. However, even with these increases the highest RFC value of 0.76 indicates that the junction is predicted to operate comfortably within capacity.

7.7.16 As such, the addition of the traffic generated by the proposed development will not result in a severe cumulative residual impact and thus no mitigation works are required at this junction.

The B1038 Baldock Road / High Street

7.7.17 This priority junction has been assessed using the industry standard Junctions 10 modelling package. The B1038 Baldock Road forms the major arm of this priory T-junction in a west-south direction with High Street joining from the north as the give way arm. Full output from this model is included as **Appendix I** with associated model results summarised in **Table 7.6**.

Period	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Year 2023 Baseline					
High Street	0.6	11.64	0.36	0.4	10.66	0.30
the B1038 South	0.9	8.74	0.36	1.1	9.73	0.40
	Year 2035 Baseline					
High Street	0.7	12.76	0.40	0.5	11.57	0.34
the B1038 South	1.2	9.21	0.41	1.4	10.53	0.46
	Year 2035 + Employment Development					
High Street	0.9	15.42	0.48	0.5	11.91	0.35
the B1038 South	1.2	9.09	0.41	1.4	10.83	0.47
	Year 2035 Sensitivity Test					
High Street	1	16.69	0.5	0.6	12.81	0.37
the B1038 South	1.4	9.11	0.43	1.6	10.96	0.49

Table 7.6 Modelling Results for the B1038 Baldock Road / High Street

7.7.18 As can be seen in the above table, the junction is predicted to operate within practical capacity on all arms in both the AM and PM peak hours under all assessment scenarios. Comparison between the two scenarios demonstrates that the junction operates almost identically, with only imperceptible changes in delay.

7.7.19 As such, given that there is no discernible difference in the performance of the junction with the addition of the development traffic, relevant to the future baseline situation, the proposed development will not result in a severe cumulative residual impact and thus no mitigation works are required at this junction.

B1038 High Street / Station Road / B1038 Hare Street Road Roundabout

7.7.20 The junction is a 3-arm mini roundabout with High Street approaching from the north, the B1038 Hare Street to the east and Station Road to the south. This 3-arm mini roundabout has been assessed using the industry standard Junctions 10 modelling package. The full output from this model is included as **Appendix I** with associated model results summarised in **Table 7.7**.

Period	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2023 Baseline					
1 - High Street	0.6	6	0.36	0.7	6.5	0.41
2 - Hare Street	0.4	6.42	0.30	0.4	6.34	0.27
3 - Station Road	0.8	7.39	0.43	0.8	7.46	0.46
	2035 Baseline					
1 - High Street	0.7	6.42	0.40	0.8	7.1	0.45
2 - Hare Street	0.5	6.88	0.34	0.4	6.8	0.30
3 - Station Road	1	8.17	0.48	1	8.32	0.51
	Year 2035 + Employment Development					
1 - High Street	0.7	6.46	0.40	0.9	7.39	0.48
2 - Hare Street	0.6	7.19	0.36	0.5	6.86	0.31
3 - Station Road	1	8.53	0.50	1	8.34	0.51
	Year 2035 Sensitivity Test					
1 - High Street	0.8	6.66	0.42	1	7.7	0.50
2 - Hare Street	0.6	7.39	0.38	0.5	7.06	0.32
3 - Station Road	1.1	9	0.52	1.1	8.66	0.53

Table 7.7 Modelling Results for the B1038 High Street/Station Road /Hare Street Roundabout

7.7.21 As can be seen in the above table, the junction is predicted to operate within practical capacity on all arms in both the AM and PM peak hours under all assessment scenarios.

7.7.22 Comparison between the two scenarios demonstrates that the junction operates almost identically, with only indiscernible increases in delay in the 'With Development' scenario.

7.7.23 As such, given that there is no discernible difference in the performance of the junction with the addition of the development traffic, relevant to the future baseline situation, the proposed development will not result in a severe cumulative residual impact and thus no mitigation works are required at this junction.

A10/London Road Roundabout

7.7.24 This junction is a four-arm roundabout with an Inscribed Circle Diameter (ICD) of 54 metres encompassing the following arms:

- The A10 approaching from south and west directions.
- Station Road to the north; and
- Site Access to Sainsbury Depot in the east.

7.7.25 A single lane approach flaring into two lane entry at the give way line is available along the A10 and Station Road. This 4-arm roundabout has been assessed using the industry standard Junctions 10 modelling package. The full output from this model is included as **Appendix I** with associated model results summarised in **Table 7.8**.

Period	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Year 2023 Baseline					
1 - London Rd	0.6	4.2	0.37	0.2	2.85	0.19
2 - Sainsbury Depot Access	0	3.61	0.01	0	3.15	0.01
3 - A10 (S)	0.9	3.35	0.46	1.6	4.4	0.61
4 - A10 (N)	1.1	4.38	0.51	0.7	3.65	0.40
	Year 2035 Baseline					
1 - London Rd	0.8	4.77	0.42	0.3	3.01	0.21
2 - Sainsbury Depot Access	0	3.93	0.01	0	3.29	0.01
3 - A10 (S)	1.1	3.68	0.50	2.1	5.26	0.67
4 - A10 (N)	1.4	4.99	0.57	0.8	4.05	0.45
	Year 2035 + Employment Development					
1 - London Rd	0.8	4.8	0.42	0.3	3.1	0.22
2 - Sainsbury Depot Access	0	3.96	0.01	0	3.39	0.01
3 - A10 (S)	1.2	3.98	0.54	2.1	5.3	0.67
4 - A10 (N)	1.4	5.05	0.58	0.9	4.31	0.48
	Year 2035 Sensitivity Test					
1 - London Rd	0.8	5.19	0.45	0.3	3.16	0.23
2 - Sainsbury Depot Access	0	4.18	0.01	0	3.45	0.01
3 - A10 (S)	1.3	4.13	0.55	2.5	5.97	0.71
4 - A10 (N)	1.7	5.59	0.62	1	4.55	0.51

Table 7.8 Modelling Results for the A10 / London Road Roundabout

7.7.26 As can be seen above, the junction is predicted to operate well within capacity on all movements in both the AM and PM peak hours.

7.7.27 Comparison between the two scenarios demonstrates that minor increases in RFC, queuing and delay are predicted in the 'With Development' scenario. However, even with these increases the highest RFC value of 0.71 indicates that the junction is predicted to operate comfortably within capacity.

7.7.28 As such, the addition of the traffic generated by the proposed development will not result in a severe cumulative residual impact and thus no mitigation works are required at this junction.

Site Access Junction

7.7.29 As stated in **Section 6**, the proposed vehicular access to the proposed development will be via a new roundabout directly off the A507 Baldock Road. To ensure the adequacy of the proposed access junction in terms of capacity, capacity tests were undertaken to assess its operational capacity with the outturn junction performance summarised in **Table 7.9** below.

Period	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Year 2035 + Employment Development					
1 - Site Access North	0	0	0.00	0	0	0.00
2 - Baldock Rd East	2.1	9.57	0.68	1	5.92	0.50
3 - Site Access South	0	4.9	0.04	0.3	5.99	0.23
4 - Baldock Rd West	1.4	7.48	0.59	0.9	5.97	0.46
	Year 2035 Sensitivity Test					
1 - Site Access North	0.2	6.23	0.18	0.1	5.21	0.12
2 - Baldock Rd East	3.5	14.51	0.78	1.5	7.3	0.59
3 - Site Access South	0	5.58	0.04	0.3	6.6	0.24
4 - Baldock Rd West	2.2	10.18	0.69	1.1	6.91	0.51

Table 7.9 Modelling Results for Site Access Junction

7.7.30 **Table 7.9** shows that the proposed access junction has sufficient capacity to accommodate the estimated development traffic with no significant queues predicted.

7.8 Summary

7.8.1 The Future Year Assessments forecast that the identified key junctions will operate within capacity and should also provide a capacity margin to accommodate any further traffic growth in the area should this occur. The proposed development is not forecast to constitute any discernible impact with a notional increase in queue length and delays predicted at all tested junctions and thus the proposal would not result in a severe residual cumulative impact as defined within the NPPF.

8 Summary and Conclusions

8.1 Summary

8.1.1 This Transport Assessment has been prepared in support of an outline planning application for development of employment land (flexible use B2, B8, E(c) and E(g)) for up to 27,420sqm of employment floorspace, informal open space, associated works and infrastructure including a new access from A507, with all matters reserved save for access.

8.1.2 This Transport Assessment has been undertaken in accordance with the guidance included within the National Planning Policy Framework and the National Planning Policy Guidance.

8.2 Existing Conditions

8.2.1 Buntingford is a market town located in East Hertfordshire. The application site benefits from being located in close proximity to a wide range of compatible and supportive 'day to day' local services and the site is located within 2km of Buntingford town centre.

8.2.2 The site is very well located in terms of access to the local and strategic highway network being accessed off the A507 Baldock Road and easily accessible from the strategic road network with the A10 located within close proximity.

8.2.3 A number of connections have been identified that would link the site to the wider pedestrian network. These linkages comprise a continuous segregated footway and cycle path that is proposed as part of the access strategy. The surrounding area is also served by sustainable links to the east of the application site, offering a range of walking and cycling opportunities that connect with Buntingford.

8.2.4 The site is conveniently located to access the local bus services. The nearest existing bus stop to the proposed site access lies on the B1038 Baldock Road, known as 'Greenways'. This bus stop would be located within close proximity to the site boundary and provides access to three different bus services.

8.3 Preliminary Review on Highway Safety

8.3.1 Records of personal injury collisions have been assessed in the vicinity of the site for the 5-year period between January 2018 and December 2022. Considering the wide study area and the type roads within it the number of collisions is of a very low level.

8.3.2 Thus, the conclusion of this preliminary study of PIC collision data is that it is not considered to be any specific accident problems in the vicinity of the development site.

8.4 Proposed Development

8.4.1 The proposed employment development is for up to 27,420sqm of employment floorspace in a mix of employment uses (flexible use B2, B8, E(c) and E(g)), with associated works and infrastructure.

8.4.2 The main vehicular access point to the proposed development will be provided off the A507 Baldock Road via a roundabout junction.

8.4.3 It is also proposed to reduce the existing vehicle speed limit along the A507 to 30mph in the vicinity to the application site.

8.4.4 Car and cycle parking will be provided in line with local policy, in particular the 'Updated Vehicle Parking Standards' SPD document from the East Hertfordshire Local Plan, and following consultation with the Local Highways Authority as required in the Local Plan.

8.4.5 It is proposed to provide extensive pedestrian, cycle and public transport facilities throughout the site and on the way to Buntingford town centre to provide a high-quality sustainable network that will encourage the use of alternative modes of transport to the private car.

8.4.6 The proposals comprise the upgrading of the existing 3.0m cycle-footway connecting Buntingford with the Buntingford Business Park to a segregated network of footways and cycle paths that will be extended to the site and which will also include the provision of a Toucan crossing on the A10. It is also proposed to potentially improve conditions with additional measures that could include off-site highway improvements along the B1038 Baldock Road, which would be subject to feasibility and further conversations with HCC. Additional improvements are also proposed in terms of public transport infrastructure and bus services to serve the site.

8.5 Traffic Generation, Distribution and Assignment

8.5.1 In order to establish the predicted trip generation of the proposed development, trip rates have been established based on comparative multi-modal survey sites collated from TRICS database (using version 7.10.3) for the land category of 'Business Park' of the 'Employment' land use category.

8.5.2 Appropriate adjustments have been undertaken to the nature of the site as an employment development located within walking and cycling distance from Buntingford and with new travel patterns that indicate a higher percentage of employees working from home.

8.5.3 Furthermore, a robust site overarching Travel Plan will also be introduced at the development to reduce the reliance on solo-car journeys and thus to accomplish a positive mode shift from car travel to other sustainable modes. This Travel Plan will include measures to encourage sustainable travel behaviour from the point of occupation.

8.5.4 The vehicle trip distribution for the proposed residential and retirement living units has been based on the 2011 Census O/D data, available on the website www.nomisweb.co.uk, using the WU03EW dataset 'Location of Usual Residence and Place of Work by Method of Travel to Work'.

8.6 Impact on the Local Highway Network

8.6.1 The capacity analyses undertaken for the junctions included within the study area have shown that the proposed development will have a limited and acceptable impact on all the junctions assessed. Furthermore, the proposed main access is also shown to operate within capacity in all assessed scenarios.

8.6.2 The Future Year Assessments forecast that the identified key junctions will operate satisfactorily within their capacity and should also provide further capacity margin to accommodate the further traffic growth in the area should this occur.

8.6.3 The proposed development is not forecast to constitute any discernible impact with a notional increase in queue length and delays predicted at all testing junctions and thus the proposal would not result in a severe impact as defined within NPPF.

8.7 Overall Conclusion

8.7.1 This Transport Assessment has assessed the traffic impacts from the proposed development.

8.7.2 The strategy for Hertfordshire County Council has a strong emphasis on minimising car use by integrating land use and transport planning and improving the choice of sustainable modes to access key services and facilities.

8.7.3 The site is located within walking and cycle distance from most of the residential area of Buntingford. There are good opportunities to encourage high levels of walking, cycling and public transport use.

8.7.4 It has been identified that there are no accident black spots on the highway in the vicinity of the site; and that the impact of development traffic on the local highway will be below levels which could be described as 'severe'.

8.7.5 This TA has assessed the likely effects of the traffic associated with the development proposals. It is the conclusion of this TA that the proposed development will have a minimal impact on the highway network near the site.

8.7.6 Therefore, it is concluded that this development is appropriate and acceptable in traffic and transport terms. The proposal is compliant with NPPF and NPPG. Based on the above, it is considered that the proposed development is in accordance with policy and will not cause a 'severe' impact on the local road network.

Appendix A: Application Boundary Plan

Site Boundary (13.28ha)

Path (um)
FB
45 to 55
Pond
Mast
Reservoir (covered)
Buntingford Business Park
El Sub Sta
SKEPES MEADOW
Tire Hill
125.9m
A 507
BALDOCK ROAD
A10
Ivy House
Oak View
Fairview
The Old Farmhouse
B 1038
The Thicket
Thistley Vale
Pond

Rev	Description	Date

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Client:

Hallam Land Management

Land West of Buntingford

Application Boundary Plan (South of Baldock Road)

Scale@ A3 :	Drawn:	Designed:	Approved:
1:2,500	ADW	SJP	SJP

0m 100m

Drawing Number:	Revision:	Date:
HLM082/020	C	30.05.24

50 North Thirteenth Street, Central Milton Keynes, MK9 3BP
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DAVID LOCK ASSOCIATES

Appendix B: Traffic Survey Data

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 1A
Approach: A10 North

	Left to Ermine Street									Ahead to A10 (S)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	0	60	22	1	0	1	84	85.5
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	1	81	27	5	2	0	116	120.5
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	1	67	22	2	1	0	93	94.7
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	0	110	26	5	2	1	144	150.1
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**2**	**318**	**97**	**13**	**5**	**2**	**437**	**450.8**
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	0	87	25	5	1	1	119	123.8
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	0	89	12	6	3	1	111	118.9
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	48	16	8	1	0	73	78.3
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	1	76	20	3	1	0	101	103.2
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**300**	**73**	**22**	**6**	**2**	**404**	**424.2**
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	76	19	8	4	0	107	116.2
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	58	17	5	6	1	87	98.3
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	14	37	13	5	2	0	71	67.7
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	0	48	5	5	3	1	62	69.4
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**14**	**219**	**54**	**23**	**15**	**2**	**327**	**351.6**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**17**	**837**	**224**	**58**	**26**	**6**	**1168**	**1226.6**
16:00 - 16:15	0	0	0	0	0	0	0	0	0.0	0	1	58	17	5	0	0	81	82.9
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	1	1	75	18	3	1	1	100	102.4
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	0	73	17	0	1	0	91	92.3
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	0	94	17	0	1	0	112	113.3
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**1**	**2**	**300**	**69**	**8**	**3**	**1**	**384**	**390.9**
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	0	87	14	0	1	0	102	103.3
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	1	96	19	1	0	0	117	116.9
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	1	97	10	2	1	1	112	114.7
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	67	7	0	0	1	75	76.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**2**	**347**	**50**	**3**	**2**	**2**	**406**	**410.9**
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	0	63	7	1	3	0	74	78.4
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	1	65	5	1	0	0	72	71.9
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	49	6	0	1	0	56	57.3
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	39	2	1	1	0	43	44.8
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**216**	**20**	**3**	**5**	**0**	**245**	**252.4**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**1**	**5**	**863**	**139**	**14**	**10**	**3**	**1035**	**1054.2**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 1A
Approach: Ermine Street

	Left to A10 (S)									Right to A10 (N)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	3	1	0	0	0	4	4.0	0	0	9	0	0	0	0	9	9.0
07:15 - 07:30	0	0	6	2	1	0	0	9	9.5	0	1	9	3	0	0	0	13	12.4
07:30 - 07:45	1	0	8	1	1	0	0	11	10.7	0	1	9	4	0	0	0	14	13.4
07:45 - 08:00	0	0	9	1	0	0	0	10	10.0	0	0	10	1	1	0	0	12	12.5
Hourly Total	**1**	**0**	**26**	**5**	**2**	**0**	**0**	**34**	**34.2**	**0**	**2**	**37**	**8**	**1**	**0**	**0**	**48**	**47.3**
08:00 - 08:15	0	0	6	4	0	0	0	10	10.0	0	0	10	1	0	1	0	12	13.3
08:15 - 08:30	0	0	15	2	0	1	0	18	19.3	0	0	22	3	1	0	0	26	26.5
08:30 - 08:45	0	0	15	0	1	0	0	16	16.5	0	0	21	0	0	0	0	21	21.0
08:45 - 09:00	0	0	8	1	0	0	0	9	9.0	0	0	12	3	0	0	0	15	15.0
Hourly Total	**0**	**0**	**44**	**7**	**1**	**1**	**0**	**53**	**54.8**	**0**	**0**	**65**	**7**	**1**	**1**	**0**	**74**	**75.8**
09:00 - 09:15	0	0	8	1	0	1	0	10	11.3	0	0	8	3	0	0	0	11	11.0
09:15 - 09:30	0	0	3	1	0	0	0	4	4.0	0	0	6	2	0	1	0	9	10.3
09:30 - 09:45	0	0	2	1	0	0	0	3	3.0	0	1	6	0	0	0	0	7	6.4
09:45 - 10:00	0	0	8	0	0	0	0	8	8.0	0	0	6	0	0	0	0	6	6.0
Hourly Total	**0**	**0**	**21**	**3**	**0**	**1**	**0**	**25**	**26.3**	**0**	**1**	**26**	**5**	**0**	**1**	**0**	**33**	**33.7**
TOTAL	**1**	**0**	**91**	**15**	**3**	**2**	**0**	**112**	**115.3**	**0**	**3**	**128**	**20**	**2**	**2**	**0**	**155**	**156.8**
16:00 - 16:15	0	0	3	2	0	0	0	5	5.0	0	0	13	0	0	0	0	13	13.0
16:15 - 16:30	1	0	2	2	0	0	0	5	4.2	0	0	10	2	1	0	0	13	13.5
16:30 - 16:45	0	0	4	1	0	0	0	5	5.0	0	0	11	2	0	0	0	13	13.0
16:45 - 17:00	0	0	1	0	0	0	0	1	1.0	0	0	11	0	0	0	0	11	11.0
Hourly Total	**1**	**0**	**10**	**5**	**0**	**0**	**0**	**16**	**15.2**	**0**	**0**	**45**	**4**	**1**	**0**	**0**	**50**	**50.5**
17:00 - 17:15	0	1	17	1	0	0	0	19	18.4	0	0	15	0	0	0	0	15	15.0
17:15 - 17:30	0	0	5	1	0	0	0	6	6.0	0	0	15	4	1	0	0	20	20.5
17:30 - 17:45	0	0	3	1	0	0	0	4	4.0	0	0	15	0	0	1	0	16	17.3
17:45 - 18:00	0	0	6	0	0	0	0	6	6.0	0	0	10	0	0	0	0	10	10.0
Hourly Total	**0**	**1**	**31**	**3**	**0**	**0**	**0**	**35**	**34.4**	**0**	**0**	**55**	**4**	**1**	**1**	**0**	**61**	**62.8**
18:00 - 18:15	0	0	4	0	0	0	0	4	4.0	0	0	16	2	0	0	0	18	18.0
18:15 - 18:30	0	0	5	0	0	0	0	5	5.0	0	0	6	0	1	0	0	7	7.5
18:30 - 18:45	0	0	2	0	0	0	0	2	2.0	0	0	4	1	0	0	0	5	5.0
18:45 - 19:00	0	0	1	0	0	0	1	2	3.0	0	0	7	0	0	0	0	7	7.0
Hourly Total	**0**	**0**	**12**	**0**	**0**	**0**	**1**	**13**	**14.0**	**0**	**0**	**33**	**3**	**1**	**0**	**0**	**37**	**37.5**
TOTAL	**1**	**1**	**53**	**8**	**0**	**0**	**1**	**64**	**63.6**	**0**	**0**	**133**	**11**	**3**	**1**	**0**	**148**	**150.8**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 1A
Approach: A10 South

	Ahead to A10 (N)									Right to Ermine Street								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	67	26	3	1	0	**97**	**99.8**	1	0	1	1	0	1	0	**4**	**4.5**
07:15 - 07:30	0	0	82	22	3	1	0	**108**	**110.8**	0	0	5	0	0	0	0	**5**	**5.0**
07:30 - 07:45	0	0	70	24	5	2	0	**101**	**106.1**	0	0	5	1	0	1	0	**7**	**8.3**
07:45 - 08:00	0	0	71	25	5	1	0	**102**	**105.8**	0	0	0	2	0	0	0	**2**	**2.0**
Hourly Total	**0**	**0**	**290**	**97**	**16**	**5**	**0**	**408**	**422.5**	**1**	**0**	**11**	**4**	**0**	**2**	**0**	**18**	**19.8**
08:00 - 08:15	0	0	71	27	1	1	1	**101**	**103.8**	0	0	2	2	0	0	0	**4**	**4.0**
08:15 - 08:30	0	0	89	22	4	3	0	**118**	**123.9**	0	0	8	0	0	0	0	**8**	**8.0**
08:30 - 08:45	0	0	102	17	1	4	2	**126**	**133.7**	0	0	11	2	0	0	0	**13**	**13.0**
08:45 - 09:00	0	1	81	14	3	5	0	**104**	**111.4**	0	0	6	1	0	1	0	**8**	**9.3**
Hourly Total	**0**	**1**	**343**	**80**	**9**	**13**	**3**	**449**	**472.8**	**0**	**0**	**27**	**5**	**0**	**1**	**0**	**33**	**34.3**
09:00 - 09:15	0	0	55	17	7	1	0	**80**	**84.8**	0	0	5	1	0	1	0	**7**	**8.3**
09:15 - 09:30	0	0	48	13	6	4	0	**71**	**79.2**	0	0	5	1	0	0	0	**6**	**6.0**
09:30 - 09:45	0	2	62	10	4	3	0	**81**	**85.7**	0	0	2	0	0	0	0	**2**	**2.0**
09:45 - 10:00	0	1	52	18	5	1	0	**77**	**80.2**	0	0	0	0	0	0	0	**0**	**0.0**
Hourly Total	**0**	**3**	**217**	**58**	**22**	**9**	**0**	**309**	**329.9**	**0**	**0**	**12**	**2**	**0**	**1**	**0**	**15**	**16.3**
TOTAL	**0**	**4**	**850**	**235**	**47**	**27**	**3**	**1166**	**1225.2**	**1**	**0**	**50**	**11**	**0**	**4**	**0**	**66**	**70.4**
16:00 - 16:15	0	0	65	24	2	2	0	**93**	**96.6**	0	0	4	2	0	0	0	**6**	**6.0**
16:15 - 16:30	0	1	91	26	2	1	1	**122**	**124.7**	0	0	7	3	0	0	0	**10**	**10.0**
16:30 - 16:45	0	0	89	24	4	1	0	**118**	**121.3**	0	0	8	3	0	0	0	**11**	**11.0**
16:45 - 17:00	0	0	86	18	0	1	0	**105**	**106.3**	1	0	9	3	0	0	0	**13**	**12.2**
Hourly Total	**0**	**1**	**331**	**92**	**8**	**5**	**1**	**438**	**448.9**	**1**	**0**	**28**	**11**	**0**	**0**	**0**	**40**	**39.2**
17:00 - 17:15	0	2	93	27	1	2	0	**125**	**126.9**	0	0	9	0	0	0	0	**9**	**9.0**
17:15 - 17:30	0	1	102	14	2	1	0	**120**	**121.7**	0	0	15	0	0	0	0	**15**	**15.0**
17:30 - 17:45	0	0	102	13	1	0	0	**116**	**116.5**	0	0	12	2	0	0	0	**14**	**14.0**
17:45 - 18:00	0	0	95	13	0	0	1	**109**	**110.0**	0	0	5	0	0	0	0	**5**	**5.0**
Hourly Total	**0**	**3**	**392**	**67**	**4**	**3**	**1**	**470**	**475.1**	**0**	**0**	**41**	**2**	**0**	**0**	**0**	**43**	**43.0**
18:00 - 18:15	0	0	91	7	0	2	0	**100**	**102.6**	1	0	5	0	0	0	0	**6**	**5.2**
18:15 - 18:30	0	0	77	10	0	0	0	**87**	**87.0**	0	0	1	1	0	0	0	**2**	**2.0**
18:30 - 18:45	0	0	48	9	2	0	0	**59**	**60.0**	0	0	5	1	0	0	0	**6**	**6.0**
18:45 - 19:00	0	0	42	6	0	1	0	**49**	**50.3**	0	0	8	0	0	0	0	**8**	**8.0**
Hourly Total	**0**	**0**	**258**	**32**	**2**	**3**	**0**	**295**	**299.9**	**1**	**0**	**19**	**2**	**0**	**0**	**0**	**22**	**21.2**
TOTAL	**0**	**4**	**981**	**191**	**14**	**11**	**2**	**1203**	**1223.9**	**2**	**0**	**88**	**15**	**0**	**0**	**0**	**105**	**103.4**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

From: 1) 07:00

To: 1) 10:00

Class: All Vehicles

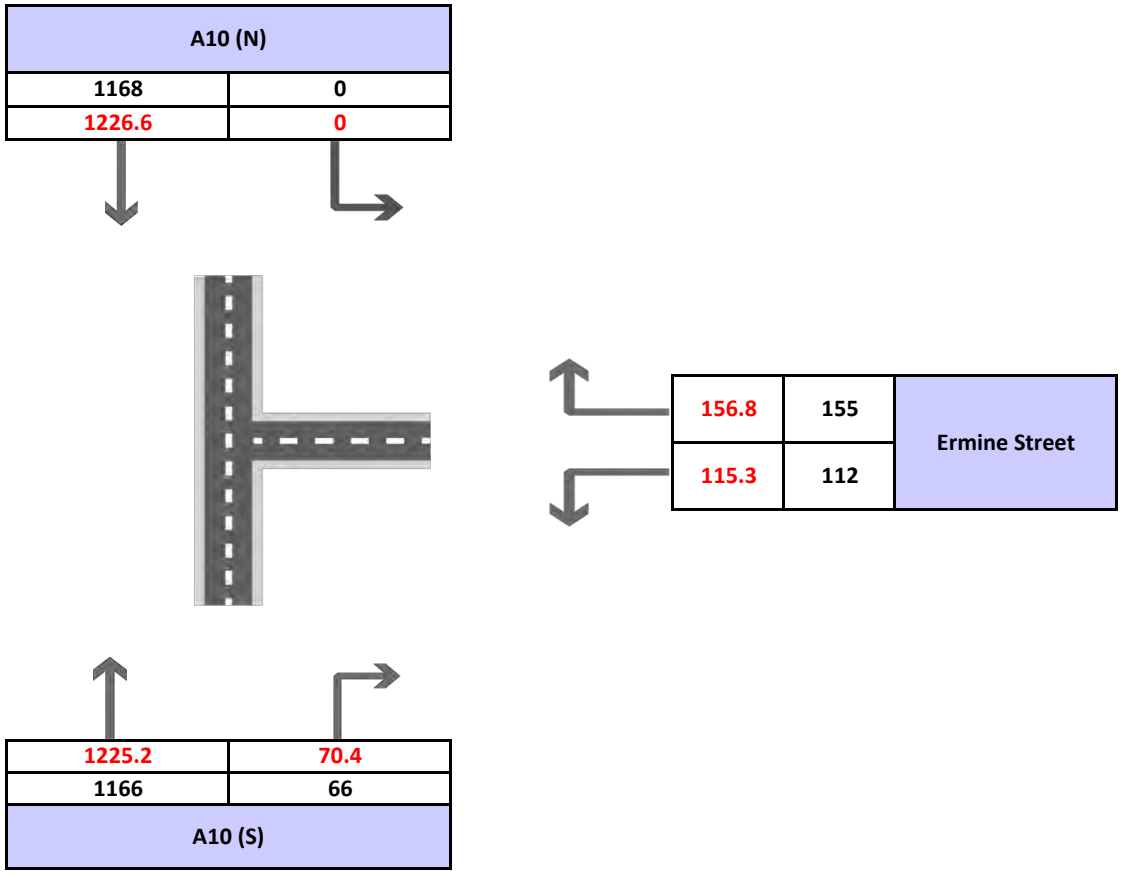
Show Peak Hour: ☐

Show PCUs: ☑

Show Session 2

Tuesday 3rd October 2023

PCUs



Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 1B
Approach: Ermine Street North (A10 Offslip)

	Left to Ermine Street (S)									Right to Ermine Street (W)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	2	1	1	1	0	5	6.8	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	5	3	0	0	0	8	8.0	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	7	3	0	0	0	10	10.0	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	16	3	0	0	0	19	19.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**30**	**10**	**1**	**1**	**0**	**42**	**43.8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	22	2	0	0	0	24	24.0	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	45	4	0	0	0	49	49.0	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	20	3	0	0	0	23	23.0	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	7	3	0	0	0	10	10.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**94**	**12**	**0**	**0**	**0**	**106**	**106.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
09:00 - 09:15	0	0	11	3	0	0	0	14	14.0	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	1	4	1	0	0	0	6	5.4	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	0	10	1	1	0	0	12	12.5	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	9	2	1	0	0	12	12.5	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**1**	**34**	**7**	**2**	**0**	**0**	**44**	**44.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**1**	**158**	**29**	**3**	**1**	**0**	**192**	**194.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
16:00 - 16:15	0	1	12	4	0	0	0	17	16.4	0	0	0	0	0	0	0	0	0.0
16:15 - 16:30	0	0	17	4	0	0	0	21	21.0	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	14	3	1	0	0	18	18.5	0	0	0	0	0	0	0	0	0.0
16:45 - 17:00	0	0	17	3	1	0	0	21	21.5	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**1**	**60**	**14**	**2**	**0**	**0**	**77**	**77.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
17:00 - 17:15	0	0	15	2	0	0	0	17	17.0	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	0	15	2	0	0	0	17	17.0	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	1	16	3	0	0	0	20	19.4	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	13	1	0	0	0	14	14.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**1**	**59**	**8**	**0**	**0**	**0**	**68**	**67.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
18:00 - 18:15	0	0	11	2	0	0	0	13	13.0	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	12	2	0	0	0	14	14.0	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	0	7	1	1	0	0	9	9.5	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	9	0	0	0	0	9	9.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**39**	**5**	**1**	**0**	**0**	**45**	**45.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**2**	**158**	**27**	**3**	**0**	**0**	**190**	**190.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 1B
Approach: Ermine Street South

	Ahead to Ermine Street (W)									Right to Ermine Street (N) A10 Offslip								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	12	1	0	0	0	13	13.0	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	1	15	5	1	0	0	22	21.9	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	1	1	17	5	1	0	0	25	24.1	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	19	2	1	0	0	22	22.5	0	0	0	0	0	0	0	0	0.0
Hourly Total	**1**	**2**	**63**	**13**	**3**	**0**	**0**	**82**	**81.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	16	5	0	1	0	22	23.3	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	37	5	1	1	0	44	45.8	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	36	0	1	0	0	37	37.5	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	20	4	0	0	0	24	24.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**109**	**14**	**2**	**2**	**0**	**127**	**130.6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
09:00 - 09:15	0	0	16	4	0	1	0	21	22.3	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	9	3	0	1	0	13	14.3	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	1	8	1	0	0	0	10	9.4	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	14	0	0	0	0	14	14.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**1**	**47**	**8**	**0**	**2**	**0**	**58**	**60.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**1**	**3**	**219**	**35**	**5**	**4**	**0**	**267**	**272.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
16:00 - 16:15	0	0	16	2	0	0	0	18	18.0	0	0	0	0	0	0	0	0	0.0
16:15 - 16:30	1	0	12	4	1	0	0	18	17.7	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	15	3	0	0	0	18	18.0	0	0	0	0	0	0	0	0	0.0
16:45 - 17:00	0	0	12	0	0	0	0	12	12.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**1**	**0**	**55**	**9**	**1**	**0**	**0**	**66**	**65.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
17:00 - 17:15	0	1	32	1	0	0	0	34	33.4	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	0	20	5	1	0	0	26	26.5	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	18	1	0	1	0	20	21.3	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	16	0	0	0	0	16	16.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**1**	**86**	**7**	**1**	**1**	**0**	**96**	**97.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
18:00 - 18:15	0	0	20	2	0	0	0	22	22.0	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	11	0	1	0	0	12	12.5	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	0	6	1	0	0	0	7	7.0	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	8	0	0	0	1	9	10.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**45**	**3**	**1**	**0**	**1**	**50**	**51.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**1**	**1**	**186**	**19**	**3**	**1**	**1**	**212**	**214.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 1B
Approach: Ermine Street West

	Left to Ermine Street (N) A10 Offslip									Ahead to Ermine Street (S)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	1	0	1	1	0	1	0	4	4.5
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	0	5	0	0	0	0	5	5.0
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	0	5	1	0	1	0	7	8.3
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	0	0	2	0	0	0	2	2.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0.0	**1**	**0**	**11**	**4**	**0**	**2**	**0**	18	19.8
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	0	2	2	0	0	0	4	4.0
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	0	8	0	0	0	0	8	8.0
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	11	2	0	0	0	13	13.0
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	0	6	1	0	1	0	8	9.3
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0.0	**0**	**0**	**27**	**5**	**0**	**1**	**0**	33	34.3
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	5	1	0	1	0	7	8.3
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	5	1	0	0	0	6	6.0
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0.0	**0**	**0**	**12**	**2**	**0**	**1**	**0**	15	16.3
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0.0	**1**	**0**	**50**	**11**	**0**	**4**	**0**	66	70.4
16:00 - 16:15	0	0	0	0	0	0	0	0	0.0	0	0	4	2	0	0	0	6	6.0
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	0	7	3	0	0	0	10	10.0
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	0	8	3	0	0	0	11	11.0
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	1	0	9	3	0	0	0	13	12.2
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0.0	**1**	**0**	**28**	**11**	**0**	**0**	**0**	40	39.2
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	0	9	0	0	0	0	9	9.0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	0	15	0	0	0	0	15	15.0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	0	12	2	0	0	0	14	14.0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	5	0	0	0	0	5	5.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0.0	**0**	**0**	**41**	**2**	**0**	**0**	**0**	43	43.0
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	1	0	5	0	0	0	0	6	5.2
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	1	1	0	0	0	2	2.0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	5	1	0	0	0	6	6.0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	8	0	0	0	0	8	8.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0.0	**1**	**0**	**19**	**2**	**0**	**0**	**0**	22	21.2
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0.0	**2**	**0**	**88**	**15**	**0**	**0**	**0**	105	103.4

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

From: 1) 07:00 **To:** 1) 10:00 **Class:** All Vehicles

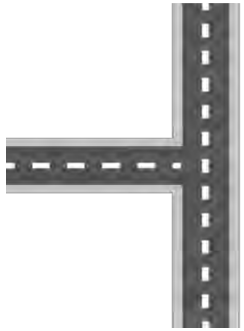
Show Peak Hour: ☐ **Show PCUs:** ☑ Show Session 2

Tuesday 3rd October 2023

PCUs

Ermine Street (N) A10 Offslip	
0	192
0	194.2

Ermine Street (W)		
	0	0
	66	70.4



272.1	0
267	0
Ermine Street (S)	

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 2
Approach: A10 North

	Ahead to A10 (S)									Right to Throcking Lane								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	64	26	0	0	1	**91**	**92.0**	0	0	0	0	0	0	0	**0**	**0.0**
07:15 - 07:30	0	1	83	25	7	3	0	**119**	**125.8**	0	0	1	0	0	0	0	**1**	**1.0**
07:30 - 07:45	0	1	78	26	2	1	0	**108**	**109.7**	0	0	0	0	0	0	0	**0**	**0.0**
07:45 - 08:00	0	0	111	27	6	1	1	**146**	**151.3**	0	0	0	2	0	0	0	**2**	**2.0**
Hourly Total	**0**	**2**	**336**	**104**	**15**	**5**	**2**	**464**	**478.8**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**3**	**3.0**
08:00 - 08:15	0	0	94	29	6	1	1	**131**	**136.3**	0	0	0	1	0	0	0	**1**	**1.0**
08:15 - 08:30	0	0	104	12	5	4	1	**126**	**134.7**	0	0	0	0	0	0	0	**0**	**0.0**
08:30 - 08:45	0	0	62	14	7	1	0	**84**	**88.8**	0	0	1	0	0	0	0	**1**	**1.0**
08:45 - 09:00	0	1	81	18	2	1	0	**103**	**104.7**	0	0	3	2	0	0	0	**5**	**5.0**
Hourly Total	**0**	**1**	**341**	**73**	**20**	**7**	**2**	**444**	**464.5**	**0**	**0**	**4**	**3**	**0**	**0**	**0**	**7**	**7.0**
09:00 - 09:15	0	0	80	19	6	5	0	**110**	**119.5**	0	0	0	1	0	0	0	**1**	**1.0**
09:15 - 09:30	0	0	59	17	9	5	1	**91**	**103.0**	0	0	1	0	0	0	0	**1**	**1.0**
09:30 - 09:45	0	14	49	17	5	2	0	**87**	**83.7**	0	0	0	0	0	0	0	**0**	**0.0**
09:45 - 10:00	0	0	48	8	5	3	1	**65**	**72.4**	0	0	1	0	0	0	0	**1**	**1.0**
Hourly Total	**0**	**14**	**236**	**61**	**25**	**15**	**2**	**353**	**378.6**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**3**	**3.0**
TOTAL	**0**	**17**	**913**	**238**	**60**	**27**	**6**	**1261**	**1321.9**	**0**	**0**	**7**	**6**	**0**	**0**	**0**	**13**	**13.0**
16:00 - 16:15	0	0	60	18	6	0	0	**84**	**87.0**	0	1	0	0	0	0	0	**1**	**0.4**
16:15 - 16:30	0	1	75	20	3	1	1	**101**	**104.2**	0	0	0	1	0	0	0	**1**	**1.0**
16:30 - 16:45	0	0	77	18	0	1	0	**96**	**97.3**	0	0	2	0	0	0	0	**2**	**2.0**
16:45 - 17:00	0	0	86	18	0	1	0	**105**	**106.3**	0	0	2	1	0	0	0	**3**	**3.0**
Hourly Total	**0**	**1**	**298**	**74**	**9**	**3**	**1**	**386**	**394.8**	**0**	**1**	**4**	**2**	**0**	**0**	**0**	**7**	**6.4**
17:00 - 17:15	0	0	103	14	0	1	0	**118**	**119.3**	0	1	0	1	0	0	0	**2**	**1.4**
17:15 - 17:30	0	1	95	19	1	0	0	**116**	**115.9**	0	0	0	0	0	0	0	**0**	**0.0**
17:30 - 17:45	0	1	103	11	1	1	1	**118**	**120.2**	0	0	0	0	0	0	0	**0**	**0.0**
17:45 - 18:00	0	0	72	8	0	0	1	**81**	**82.0**	0	0	1	2	0	0	0	**3**	**3.0**
Hourly Total	**0**	**2**	**373**	**52**	**2**	**2**	**2**	**433**	**437.4**	**0**	**1**	**1**	**3**	**0**	**0**	**0**	**5**	**4.4**
18:00 - 18:15	0	0	63	9	1	3	0	**76**	**80.4**	0	0	1	0	0	0	0	**1**	**1.0**
18:15 - 18:30	0	1	65	5	1	0	0	**72**	**71.9**	0	0	2	0	0	0	0	**2**	**2.0**
18:30 - 18:45	0	0	49	6	0	1	0	**56**	**57.3**	0	0	1	0	0	0	0	**1**	**1.0**
18:45 - 19:00	0	1	41	2	1	1	1	**47**	**49.2**	0	0	2	0	0	0	0	**2**	**2.0**
Hourly Total	**0**	**2**	**218**	**22**	**3**	**5**	**1**	**251**	**258.8**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**6**	**6.0**
TOTAL	**0**	**5**	**889**	**148**	**14**	**10**	**4**	**1070**	**1091.0**	**0**	**2**	**11**	**5**	**0**	**0**	**0**	**18**	**16.8**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 2
Approach: A10 South

	Left to Throcking Lane									Ahead to A10 (N)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	1	1	0	0	**2**	**2.5**	0	0	69	23	4	2	0	**98**	**102.6**
07:15 - 07:30	0	0	0	0	0	0	0	**0**	**0.0**	0	0	89	21	3	1	0	**114**	**116.8**
07:30 - 07:45	0	0	0	1	0	0	0	**1**	**1.0**	0	0	79	23	4	4	0	**110**	**117.2**
07:45 - 08:00	0	0	1	2	0	0	0	**3**	**3.0**	0	0	71	28	5	1	0	**105**	**108.8**
Hourly Total	**0**	**0**	**1**	**4**	**1**	**0**	**0**	**6**	**6.5**	**0**	**0**	**308**	**95**	**16**	**8**	**0**	**427**	**445.4**
08:00 - 08:15	0	0	1	0	0	0	0	**1**	**1.0**	0	0	77	29	1	1	1	**109**	**111.8**
08:15 - 08:30	0	0	1	0	0	0	0	**1**	**1.0**	0	0	93	21	4	3	0	**121**	**126.9**
08:30 - 08:45	0	0	2	0	0	0	0	**2**	**2.0**	0	0	111	23	2	2	2	**140**	**145.6**
08:45 - 09:00	0	0	1	0	0	0	0	**1**	**1.0**	0	1	87	20	3	7	0	**118**	**128.0**
Hourly Total	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**5**	**5.0**	**0**	**1**	**368**	**93**	**10**	**13**	**3**	**488**	**512.3**
09:00 - 09:15	0	0	1	0	0	0	0	**1**	**1.0**	0	0	68	20	8	2	0	**98**	**104.6**
09:15 - 09:30	0	0	1	1	0	0	0	**2**	**2.0**	0	0	53	12	5	4	0	**74**	**81.7**
09:30 - 09:45	0	0	0	1	0	0	0	**1**	**1.0**	0	2	56	10	5	3	0	**76**	**81.2**
09:45 - 10:00	0	0	1	0	0	0	0	**1**	**1.0**	0	1	53	12	4	1	0	**71**	**73.7**
Hourly Total	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**5**	**5.0**	**0**	**3**	**230**	**54**	**22**	**10**	**0**	**319**	**341.2**
TOTAL	**0**	**0**	**9**	**6**	**1**	**0**	**0**	**16**	**16.5**	**0**	**4**	**906**	**242**	**48**	**31**	**3**	**1234**	**1298.9**
16:00 - 16:15	0	0	2	1	0	1	0	**4**	**5.3**	0	0	72	24	2	2	0	**100**	**103.6**
16:15 - 16:30	0	0	1	0	0	0	0	**1**	**1.0**	0	1	89	29	2	1	1	**123**	**125.7**
16:30 - 16:45	0	0	1	0	0	0	0	**1**	**1.0**	0	0	96	26	3	1	0	**126**	**128.8**
16:45 - 17:00	0	0	2	0	0	0	0	**2**	**2.0**	0	0	88	11	0	1	0	**100**	**101.3**
Hourly Total	**0**	**0**	**6**	**1**	**0**	**1**	**0**	**8**	**9.3**	**0**	**1**	**345**	**90**	**7**	**5**	**1**	**449**	**459.4**
17:00 - 17:15	0	0	0	1	0	0	0	**1**	**1.0**	0	2	103	28	1	2	0	**136**	**137.9**
17:15 - 17:30	0	0	1	1	0	0	0	**2**	**2.0**	0	1	125	13	2	1	0	**142**	**143.7**
17:30 - 17:45	0	0	1	0	0	0	0	**1**	**1.0**	0	0	115	14	1	0	0	**130**	**130.5**
17:45 - 18:00	0	0	1	0	0	0	0	**1**	**1.0**	0	0	97	13	0	0	1	**111**	**112.0**
Hourly Total	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**5**	**5.0**	**0**	**3**	**440**	**68**	**4**	**3**	**1**	**519**	**524.1**
18:00 - 18:15	0	0	0	1	0	0	0	**1**	**1.0**	0	0	96	8	0	2	0	**106**	**108.6**
18:15 - 18:30	0	0	2	0	0	0	0	**2**	**2.0**	0	0	78	8	0	0	0	**86**	**86.0**
18:30 - 18:45	0	0	1	0	0	0	0	**1**	**1.0**	0	0	53	7	2	0	0	**62**	**63.0**
18:45 - 19:00	0	0	0	0	0	0	0	**0**	**0.0**	0	0	53	9	1	0	0	**63**	**63.5**
Hourly Total	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**4**	**4.0**	**0**	**0**	**280**	**32**	**3**	**2**	**0**	**317**	**321.1**
TOTAL	**0**	**0**	**12**	**4**	**0**	**1**	**0**	**17**	**18.3**	**0**	**4**	**1065**	**190**	**14**	**10**	**2**	**1285**	**1304.6**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 2
Approach: Throcking Lane

	Left to A10 (N)									Right to A10 (S)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0	0	**0**	**0.0**	0	0	1	1	0	0	0	**2**	**2.0**
07:15 - 07:30	0	0	1	0	0	0	0	**1**	**1.0**	0	0	3	0	0	0	0	**3**	**3.0**
07:30 - 07:45	0	0	0	0	0	0	0	**0**	**0.0**	0	0	1	1	0	0	0	**2**	**2.0**
07:45 - 08:00	0	0	0	0	0	0	0	**0**	**0.0**	0	0	0	1	0	0	0	**1**	**1.0**
Hourly Total	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**5**	**3**	**0**	**0**	**0**	**8**	**8.0**
08:00 - 08:15	0	0	0	0	0	0	0	**0**	**0.0**	0	0	0	1	0	0	0	**1**	**1.0**
08:15 - 08:30	0	0	2	0	0	0	0	**2**	**2.0**	0	0	4	0	0	0	0	**4**	**4.0**
08:30 - 08:45	0	0	2	0	0	0	0	**2**	**2.0**	0	0	1	1	1	0	0	**3**	**3.5**
08:45 - 09:00	0	0	0	0	0	0	0	**0**	**0.0**	0	0	0	0	1	0	0	**1**	**1.5**
Hourly Total	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**4**	**4.0**	**0**	**0**	**5**	**2**	**2**	**0**	**0**	**9**	**10.0**
09:00 - 09:15	0	0	0	0	0	0	0	**0**	**0.0**	0	0	1	0	0	0	0	**1**	**1.0**
09:15 - 09:30	0	0	0	0	0	0	0	**0**	**0.0**	0	0	0	0	0	0	0	**0**	**0.0**
09:30 - 09:45	0	0	1	0	0	0	0	**1**	**1.0**	0	0	0	0	0	0	0	**0**	**0.0**
09:45 - 10:00	0	0	4	1	0	0	0	**5**	**5.0**	0	0	2	0	0	0	0	**2**	**2.0**
Hourly Total	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**6**	**6.0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**
TOTAL	**0**	**0**	**10**	**1**	**0**	**0**	**0**	**11**	**11.0**	**0**	**0**	**13**	**5**	**2**	**0**	**0**	**20**	**21.0**
16:00 - 16:15	0	0	0	1	0	0	0	**1**	**1.0**	0	0	1	0	0	0	0	**1**	**1.0**
16:15 - 16:30	0	0	1	1	0	0	0	**2**	**2.0**	0	0	2	1	0	0	0	**3**	**3.0**
16:30 - 16:45	0	0	1	1	1	0	0	**3**	**3.5**	0	0	2	2	0	0	0	**4**	**4.0**
16:45 - 17:00	0	0	1	1	0	1	0	**3**	**4.3**	1	0	1	0	0	0	0	**2**	**1.2**
Hourly Total	**0**	**0**	**3**	**4**	**1**	**1**	**0**	**9**	**10.8**	**1**	**0**	**6**	**3**	**0**	**0**	**0**	**10**	**9.2**
17:00 - 17:15	0	0	0	0	0	0	0	**0**	**0.0**	0	0	0	0	0	0	0	**0**	**0.0**
17:15 - 17:30	0	0	1	1	0	0	0	**2**	**2.0**	0	0	0	1	0	0	0	**1**	**1.0**
17:30 - 17:45	0	0	1	2	0	0	0	**3**	**3.0**	0	0	1	0	0	0	0	**1**	**1.0**
17:45 - 18:00	0	0	1	1	0	0	0	**2**	**2.0**	0	0	2	0	0	0	0	**2**	**2.0**
Hourly Total	**0**	**0**	**3**	**4**	**0**	**0**	**0**	**7**	**7.0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**4**	**4.0**
18:00 - 18:15	0	0	0	0	0	0	0	**0**	**0.0**	0	0	0	0	0	0	0	**0**	**0.0**
18:15 - 18:30	0	0	3	1	0	0	0	**4**	**4.0**	0	0	0	1	0	0	0	**1**	**1.0**
18:30 - 18:45	0	0	2	0	0	0	0	**2**	**2.0**	0	0	0	0	0	0	0	**0**	**0.0**
18:45 - 19:00	0	0	2	0	0	0	0	**2**	**2.0**	0	0	1	0	0	0	0	**1**	**1.0**
Hourly Total	**0**	**0**	**7**	**1**	**0**	**0**	**0**	**8**	**8.0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**2.0**
TOTAL	**0**	**0**	**13**	**9**	**1**	**1**	**0**	**24**	**25.8**	**1**	**0**	**10**	**5**	**0**	**0**	**0**	**16**	**15.2**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

From: 1) 07:00

To: 1) 10:00

Class: All Vehicles

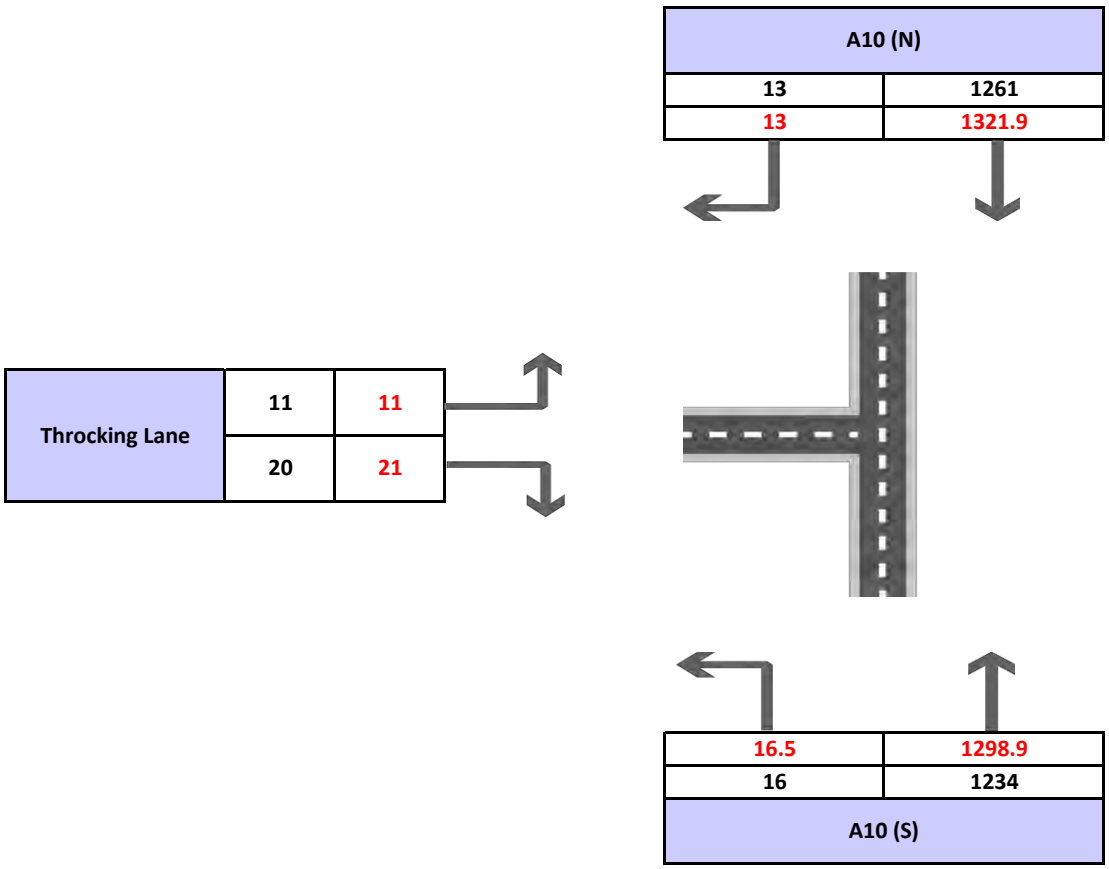
Show Peak Hour: ☐

Show PCUs: ☑

Show Session 2

Tuesday 3rd October 2023

PCUs



Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 3
Approach: A10 North

	To B1038									To Esso Howe Green									To A10 (S)									To A507								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	1	2	2	0	0	0	5	4.4	0	0	3	3	0	0	0	6	6.0	0	0	44	15	0	0	0	59	59.0	0	0	13	8	1	0	0	22	22.5
07:15 - 07:30	0	0	3	3	0	0	0	6	6.0	0	0	2	3	2	0	0	7	8.0	0	1	64	13	3	2	0	83	86.5	0	0	17	5	3	0	0	25	26.5
07:30 - 07:45	0	0	6	2	0	0	0	8	8.0	0	0	3	2	0	0	0	5	5.0	0	0	56	8	1	2	0	67	70.1	0	1	20	10	0	0	0	31	30.4
07:45 - 08:00	0	0	11	4	0	0	1	16	17.0	0	0	4	2	0	0	0	6	6.0	0	0	58	14	4	0	0	76	78.0	0	0	31	7	2	1	0	41	43.3
Hourly Total	**0**	**1**	**22**	**11**	**0**	**0**	**1**	**35**	**35.4**	**0**	**0**	**12**	**10**	**2**	**0**	**0**	**24**	**25.0**	**0**	**1**	**222**	**50**	**8**	**4**	**0**	**285**	**293.6**	**0**	**1**	**81**	**30**	**6**	**1**	**0**	**119**	**122.7**
08:00 - 08:15	0	0	7	4	1	0	1	13	14.5	0	0	4	2	1	0	0	7	7.5	0	0	57	10	1	1	0	69	70.8	0	0	22	9	5	0	0	36	38.5
08:15 - 08:30	0	0	10	1	0	0	2	13	15.0	0	0	3	0	1	0	0	4	4.5	0	0	66	7	2	3	0	78	82.9	0	0	20	7	1	0	0	28	28.5
08:30 - 08:45	0	0	10	2	2	0	0	14	15.0	0	0	2	1	1	0	0	4	4.5	0	0	38	9	5	1	0	53	56.8	0	0	24	5	2	1	0	32	34.3
08:45 - 09:00	0	0	15	3	0	0	0	18	18.0	0	0	3	2	0	0	0	5	5.0	0	1	36	7	1	1	0	46	47.2	0	0	31	10	2	0	0	43	44.0
Hourly Total	**0**	**0**	**42**	**10**	**3**	**0**	**3**	**58**	**62.5**	**0**	**0**	**12**	**5**	**3**	**0**	**0**	**20**	**21.5**	**0**	**1**	**197**	**33**	**9**	**6**	**0**	**246**	**257.7**	**0**	**0**	**97**	**31**	**10**	**1**	**0**	**139**	**145.3**
09:00 - 09:15	0	0	14	0	1	0	0	15	15.5	0	0	5	2	0	0	0	7	7.0	0	0	35	11	4	4	0	54	61.2	0	0	24	4	0	0	0	28	28.0
09:15 - 09:30	0	0	10	2	1	0	0	13	13.5	0	0	3	1	0	0	0	4	4.0	0	0	27	10	4	6	0	47	56.8	0	0	21	1	4	0	1	27	30.0
09:30 - 09:45	0	0	6	1	1	0	0	8	8.5	0	0	2	2	0	0	0	4	4.0	0	0	20	7	4	3	0	34	39.9	0	14	13	7	0	0	0	34	25.6
09:45 - 10:00	0	0	10	1	2	0	1	14	16.0	0	0	2	1	0	0	0	3	3.0	0	0	24	2	2	0	0	28	29.0	0	0	13	4	2	2	0	21	24.6
Hourly Total	**0**	**0**	**40**	**4**	**5**	**0**	**1**	**50**	**53.5**	**0**	**0**	**12**	**6**	**0**	**0**	**0**	**18**	**18.0**	**0**	**0**	**106**	**30**	**14**	**13**	**0**	**163**	**186.9**	**0**	**14**	**71**	**16**	**6**	**2**	**1**	**110**	**108.2**
TOTAL	**0**	**1**	**104**	**25**	**8**	**0**	**5**	**143**	**151.4**	**0**	**0**	**36**	**21**	**5**	**0**	**0**	**62**	**64.5**	**0**	**2**	**525**	**113**	**31**	**23**	**0**	**694**	**738.2**	**0**	**15**	**249**	**77**	**22**	**4**	**1**	**368**	**376.2**
16:00 - 16:15	0	0	15	6	2	0	0	23	24.0	0	0	3	1	0	0	0	4	4.0	0	0	24	7	3	0	0	34	35.5	0	0	16	7	1	0	0	24	24.5
16:15 - 16:30	0	0	21	4	0	0	0	25	25.0	0	0	2	0	0	0	0	2	2.0	0	1	37	8	3	0	0	49	49.9	0	0	16	8	0	1	1	26	28.3
16:30 - 16:45	0	0	18	2	0	0	0	20	20.0	0	0	3	1	0	0	0	4	4.0	0	0	47	10	0	1	0	58	59.3	0	0	17	7	0	0	0	24	24.0
16:45 - 17:00	0	0	14	3	0	0	0	17	17.0	0	0	3	1	0	0	0	4	4.0	0	0	45	10	0	1	0	56	57.3	0	0	17	4	0	0	0	21	21.0
Hourly Total	**0**	**0**	**68**	**15**	**2**	**0**	**0**	**85**	**86.0**	**0**	**0**	**11**	**3**	**0**	**0**	**0**	**14**	**14.0**	**0**	**1**	**153**	**35**	**6**	**2**	**0**	**197**	**202.0**	**0**	**0**	**66**	**26**	**1**	**1**	**1**	**95**	**97.8**
17:00 - 17:15	0	0	16	0	0	0	0	16	16.0	0	0	4	2	0	0	0	6	6.0	0	0	59	5	0	1	0	65	66.3	0	0	27	6	0	0	0	33	33.0
17:15 - 17:30	0	0	18	2	1	0	0	21	21.5	0	0	5	0	0	0	0	5	5.0	0	1	48	7	0	0	1	57	57.4	0	0	23	9	0	0	0	32	32.0
17:30 - 17:45	0	0	23	2	0	0	0	25	25.0	0	0	4	0	0	0	0	4	4.0	0	1	46	8	2	1	0	58	59.7	0	0	27	4	1	0	0	32	32.5
17:45 - 18:00	0	0	20	1	0	0	2	23	25.0	0	0	5	0	0	0	0	5	5.0	0	0	42	3	0	0	0	45	45.0	0	0	15	1	0	0	0	16	16.0
Hourly Total	**0**	**0**	**77**	**5**	**1**	**0**	**2**	**85**	**87.5**	**0**	**0**	**18**	**2**	**0**	**0**	**0**	**20**	**20.0**	**0**	**2**	**195**	**23**	**2**	**2**	**1**	**225**	**228.4**	**0**	**0**	**92**	**20**	**1**	**0**	**0**	**113**	**113.5**
18:00 - 18:15	0	0	11	3	0	0	0	14	14.0	0	0	3	0	0	0	0	3	3.0	0	0	36	3	1	3	0	43	47.4	0	0	12	2	0	0	0	14	14.0
18:15 - 18:30	0	0	12	1	0	0	0	13	13.0	0	0	3	0	0	0	0	3	3.0	0	1	45	3	0	0	0	49	48.4	0	0	14	3	1	0	0	18	18.5
18:30 - 18:45	0	0	12	1	0	0	0	13	13.0	0	0	2	0	0	0	0	2	2.0	0	0	23	2	0	1	0	26	27.3	0	0	12	3	0	0	0	15	15.0
18:45 - 19:00	0	0	6	0	0	0	0	6	6.0	0	0	3	0	0	0	0	3	3.0	0	0	27	2	1	1	0	31	32.8	0	1	8	1	0	0	1	11	11.4
Hourly Total	**0**	**0**	**41**	**5**	**0**	**0**	**0**	**46**	**46.0**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**11**	**11.0**	**0**	**1**	**131**	**10**	**2**	**5**	**0**	**149**	**155.9**	**0**	**1**	**46**	**9**	**1**	**0**	**1**	**58**	**58.9**
TOTAL	**0**	**0**	**186**	**25**	**3**	**0**	**2**	**216**	**219.5**	**0**	**0**	**40**	**5**	**0**	**0**	**0**	**45**	**45.0**	**0**	**4**	**479**	**68**	**10**	**9**	**1**	**571**	**586.3**	**0**	**1**	**204**	**55**	**3**	**1**	**2**	**266**	**270.2**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 3
Approach: B1038

	To Esso Howe Green									To A10 (S)									To A507									To A10 (N)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	5	4	1	0	0	10	10.5	0	0	40	14	1	0	0	55	55.5	0	0	13	5	1	0	1	20	21.5	0	0	18	10	1	0	0	29	29.5
07:15 - 07:30	0	0	2	1	2	0	0	5	6.0	0	2	61	11	3	1	1	79	81.6	0	0	14	7	3	0	1	25	27.5	0	0	13	9	1	0	0	23	23.5
07:30 - 07:45	0	0	3	3	1	0	0	7	7.5	0	0	48	6	2	0	0	56	57.0	0	0	18	7	4	0	0	29	31.0	0	0	23	15	2	0	0	40	41.0
07:45 - 08:00	0	0	12	2	1	0	0	15	15.5	0	0	49	9	0	0	0	58	58.0	0	0	27	6	0	0	1	34	35.0	0	0	29	12	0	0	0	41	41.0
Hourly Total	**0**	**0**	**22**	**10**	**5**	**0**	**0**	**37**	**39.5**	**0**	**2**	**198**	**40**	**6**	**1**	**1**	**248**	**252.1**	**0**	**0**	**72**	**25**	**8**	**0**	**3**	**108**	**115.0**	**0**	**0**	**83**	**46**	**4**	**0**	**0**	**133**	**135.0**
08:00 - 08:15	0	0	4	2	1	0	0	7	7.5	0	0	43	9	0	0	0	52	52.0	0	0	16	9	1	0	2	28	30.5	0	0	24	15	0	0	1	40	41.0
08:15 - 08:30	0	0	12	2	1	0	0	15	15.5	0	0	71	8	3	1	0	83	85.8	0	0	21	8	1	0	0	30	30.5	0	0	42	10	2	0	0	54	55.0
08:30 - 08:45	0	0	13	1	0	0	0	14	14.0	0	0	54	7	2	0	2	65	68.0	0	0	36	4	2	0	2	44	47.0	0	0	47	10	0	0	1	58	59.0
08:45 - 09:00	0	0	20	3	1	0	0	24	24.5	0	2	46	6	2	0	0	56	55.8	0	0	34	7	2	0	0	43	44.0	0	0	34	6	1	0	0	41	41.5
Hourly Total	**0**	**0**	**49**	**8**	**3**	**0**	**0**	**60**	**61.5**	**0**	**2**	**214**	**30**	**7**	**1**	**2**	**256**	**261.6**	**0**	**0**	**107**	**28**	**6**	**0**	**4**	**145**	**152.0**	**0**	**0**	**147**	**41**	**3**	**0**	**2**	**193**	**196.5**
09:00 - 09:15	0	0	10	0	0	0	0	10	10.0	0	0	37	5	2	0	2	46	49.0	0	0	24	2	0	0	2	28	30.0	0	0	24	6	3	0	0	33	34.5
09:15 - 09:30	0	0	4	0	0	0	0	4	4.0	0	0	32	7	1	0	0	40	40.5	0	0	16	1	1	0	2	20	22.5	0	0	16	5	0	0	0	21	21.0
09:30 - 09:45	0	0	5	3	0	0	0	8	8.0	0	0	29	8	0	2	0	39	41.6	0	0	19	5	0	0	0	24	24.0	0	0	16	3	0	0	0	19	19.0
09:45 - 10:00	0	0	6	4	0	0	0	10	10.0	0	0	31	5	2	0	0	38	39.0	0	0	17	9	2	1	2	31	35.3	0	0	17	3	1	0	0	21	21.5
Hourly Total	**0**	**0**	**25**	**7**	**0**	**0**	**0**	**32**	**32.0**	**0**	**0**	**129**	**25**	**5**	**2**	**2**	**163**	**170.1**	**0**	**0**	**76**	**17**	**3**	**1**	**6**	**103**	**111.8**	**0**	**0**	**73**	**17**	**4**	**0**	**0**	**94**	**96.0**
TOTAL	**0**	**0**	**96**	**25**	**8**	**0**	**0**	**129**	**133.0**	**0**	**4**	**541**	**95**	**18**	**4**	**5**	**667**	**683.8**	**0**	**0**	**255**	**70**	**17**	**1**	**13**	**356**	**378.8**	**0**	**0**	**303**	**104**	**11**	**0**	**2**	**420**	**427.5**
16:00 - 16:15	0	0	5	3	0	0	0	8	8.0	0	1	41	10	3	0	0	55	55.9	0	1	23	8	1	0	0	33	32.9	0	0	19	10	0	0	0	29	29.0
16:15 - 16:30	0	0	7	4	0	0	0	11	11.0	0	0	27	8	0	0	0	35	35.0	0	2	11	7	0	0	2	22	22.8	0	0	26	5	0	0	1	32	33.0
16:30 - 16:45	0	0	7	3	1	0	0	11	11.5	0	0	47	9	2	0	0	58	59.0	0	0	14	7	1	0	0	22	22.5	0	0	17	7	2	0	0	26	27.0
16:45 - 17:00	0	0	4	0	0	0	0	4	4.0	0	0	31	6	0	0	0	37	37.0	0	0	11	2	0	0	0	13	13.0	0	0	18	4	0	0	0	22	22.0
Hourly Total	**0**	**0**	**23**	**10**	**1**	**0**	**0**	**34**	**34.5**	**0**	**1**	**146**	**33**	**5**	**0**	**0**	**185**	**186.9**	**0**	**3**	**59**	**24**	**2**	**0**	**2**	**90**	**91.2**	**0**	**0**	**80**	**26**	**2**	**0**	**1**	**109**	**111.0**
17:00 - 17:15	0	0	9	0	0	0	0	9	9.0	0	0	42	7	0	0	0	49	49.0	0	0	20	11	0	0	1	32	33.0	0	0	35	2	0	0	1	38	39.0
17:15 - 17:30	0	0	2	2	0	0	0	4	4.0	0	0	34	7	0	0	0	41	41.0	0	0	18	7	0	0	0	25	25.0	0	0	33	4	0	0	0	37	37.0
17:30 - 17:45	0	0	8	0	0	0	0	8	8.0	0	0	47	10	0	0	0	57	57.0	0	0	25	8	0	0	2	35	37.0	0	0	19	2	0	0	0	21	21.0
17:45 - 18:00	0	0	2	2	0	0	0	4	4.0	0	0	59	1	0	0	0	60	60.0	0	0	23	7	0	1	0	31	32.3	0	0	21	4	0	0	1	26	27.0
Hourly Total	**0**	**0**	**21**	**4**	**0**	**0**	**0**	**25**	**25.0**	**0**	**0**	**182**	**25**	**0**	**0**	**0**	**207**	**207.0**	**0**	**0**	**86**	**33**	**0**	**1**	**3**	**123**	**127.3**	**0**	**0**	**108**	**12**	**0**	**0**	**2**	**122**	**124.0**
18:00 - 18:15	0	0	7	0	1	0	0	8	8.5	0	0	30	6	1	0	0	37	37.5	0	0	12	2	1	0	1	16	17.5	0	0	29	1	0	0	0	30	30.0
18:15 - 18:30	0	0	5	0	0	0	0	5	5.0	0	0	30	1	0	0	0	31	31.0	0	0	9	1	0	0	1	11	12.0	0	0	12	1	0	0	0	13	13.0
18:30 - 18:45	0	0	3	1	0	0	0	4	4.0	0	0	28	0	0	0	0	28	28.0	0	0	13	0	0	0	2	15	17.0	0	0	17	0	0	0	0	17	17.0
18:45 - 19:00	0	0	3	1	0	0	0	4	4.0	0	0	14	5	0	0	0	19	19.0	0	0	8	1	0	0	0	9	9.0	0	0	15	1	0	0	0	16	16.0
Hourly Total	**0**	**0**	**18**	**2**	**1**	**0**	**0**	**21**	**21.5**	**0**	**0**	**102**	**12**	**1**	**0**	**0**	**115**	**115.5**	**0**	**0**	**42**	**4**	**1**	**0**	**4**	**51**	**55.5**	**0**	**0**	**73**	**3**	**0**	**0**	**0**	**76**	**76.0**
TOTAL	**0**	**0**	**62**	**16**	**2**	**0**	**0**	**80**	**81.0**	**0**	**1**	**430**	**70**	**6**	**0**	**0**	**507**	**509.4**	**0**	**3**	**187**	**61**	**3**	**1**	**9**	**264**	**274.0**	**0**	**0**	**261**	**41**	**2**	**0**	**3**	**307**	**311.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 3
Approach: Esso Howe Green

	To A10 (S)									To A507									To A10 (N)									To B1038								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	1	1	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	0	1	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**2**	**2**	**1**	**0**	**0**	**5**	**5.5**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	2	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**4**	**4.0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
09:00 - 09:15	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	1	0	0	0	0	0	1	0.4	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**1**	**3**	**2**	**0**	**0**	**0**	**6**	**5.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**1**	**7**	**6**	**1**	**0**	**0**	**15**	**14.9**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
16:00 - 16:15	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
16:15 - 16:30	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	0	1	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
16:45 - 17:00	0	0	0	1	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**4**	**4.0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**
17:00 - 17:15	0	0	1	1	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	1	0	0	1	1.5
17:15 - 17:30	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0
17:45 - 18:00	0	0	3	0	0	0	0	3	3.0	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**8**	**1**	**0**	**0**	**0**	**9**	**9.0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	**2.5**
18:00 - 18:15	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
18:30 - 18:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**
TOTAL	**0**	**0**	**10**	**5**	**0**	**0**	**0**	**15**	**15.0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**5**	**5.0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**5**	**5.0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**4**	**4.5**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 3
Approach: A10 South

	To A507									To A10 (N)									To B1038									To Esso Howe Green								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	36	12	6	1	0	**55**	**59.3**	0	0	53	14	2	3	0	**72**	**76.9**	0	0	12	2	0	0	2	**16**	**18.0**	0	0	6	3	1	0	0	**10**	**10.5**
07:15 - 07:30	0	0	49	16	4	0	0	**69**	**71.0**	0	0	62	11	1	1	0	**75**	**76.8**	0	0	8	1	0	0	0	**9**	**9.0**	0	0	3	1	1	0	0	**5**	**5.5**
07:30 - 07:45	0	1	53	24	1	2	0	**81**	**83.5**	0	0	50	13	4	2	0	**69**	**73.6**	0	0	11	4	2	0	0	**17**	**18.0**	0	0	7	6	0	0	0	**13**	**13.0**
07:45 - 08:00	0	0	43	24	4	3	0	**74**	**79.9**	0	0	38	14	4	1	0	**57**	**60.3**	0	0	28	8	1	0	0	**37**	**37.5**	0	0	7	3	0	0	0	**10**	**10.0**
Hourly Total	**0**	**1**	**181**	**76**	**15**	**6**	**0**	**279**	**293.7**	**0**	**0**	**203**	**52**	**11**	**7**	**0**	**273**	**287.6**	**0**	**0**	**59**	**15**	**3**	**0**	**2**	**79**	**82.5**	**0**	**0**	**23**	**13**	**2**	**0**	**0**	**38**	**39.0**
08:00 - 08:15	0	0	41	15	1	1	0	**58**	**59.8**	0	0	43	13	1	1	0	**58**	**59.8**	0	0	42	7	3	1	2	**55**	**59.8**	0	0	6	5	0	0	0	**11**	**11.0**
08:15 - 08:30	0	0	48	9	2	1	0	**60**	**62.3**	0	0	44	12	3	3	0	**62**	**67.4**	0	0	64	7	2	0	0	**73**	**74.0**	0	0	6	1	1	0	0	**8**	**8.5**
08:30 - 08:45	0	0	52	18	5	5	0	**80**	**89.0**	0	0	56	9	2	2	1	**70**	**74.6**	0	0	31	6	0	0	0	**37**	**37.0**	0	0	4	2	0	0	0	**6**	**6.0**
08:45 - 09:00	0	0	40	6	4	4	0	**54**	**61.2**	0	1	36	12	3	5	0	**57**	**64.4**	0	0	36	4	0	0	0	**40**	**40.0**	0	1	6	2	0	0	0	**9**	**8.4**
Hourly Total	**0**	**0**	**181**	**48**	**12**	**11**	**0**	**252**	**272.3**	**0**	**1**	**179**	**46**	**9**	**11**	**1**	**247**	**266.2**	**0**	**0**	**173**	**24**	**5**	**1**	**2**	**205**	**210.8**	**0**	**1**	**22**	**10**	**1**	**0**	**0**	**34**	**33.9**
09:00 - 09:15	0	0	28	8	6	0	0	**42**	**45.0**	0	0	38	12	5	3	0	**58**	**64.4**	0	0	13	3	0	0	0	**16**	**16.0**	0	0	4	2	1	0	0	**7**	**7.5**
09:15 - 09:30	0	0	29	16	4	1	0	**50**	**53.3**	0	0	35	4	4	4	0	**47**	**54.2**	0	0	12	4	0	0	0	**16**	**16.0**	0	0	4	1	1	1	0	**7**	**8.8**
09:30 - 09:45	0	1	29	5	3	2	0	**40**	**43.5**	0	1	36	5	6	2	0	**50**	**55.0**	0	0	9	2	2	0	0	**13**	**14.0**	0	0	4	1	0	1	0	**6**	**7.3**
09:45 - 10:00	0	0	22	5	3	1	0	**31**	**33.8**	0	1	33	9	2	2	0	**47**	**50.0**	0	0	9	3	0	0	1	**13**	**14.0**	0	0	2	3	1	0	0	**6**	**6.5**
Hourly Total	**0**	**1**	**108**	**34**	**16**	**4**	**0**	**163**	**175.6**	**0**	**2**	**142**	**30**	**17**	**11**	**0**	**202**	**223.6**	**0**	**0**	**43**	**12**	**2**	**0**	**1**	**58**	**60.0**	**0**	**0**	**14**	**7**	**3**	**2**	**0**	**26**	**30.1**
TOTAL	**0**	**2**	**470**	**158**	**43**	**21**	**0**	**694**	**741.6**	**0**	**3**	**524**	**128**	**37**	**29**	**1**	**722**	**777.4**	**0**	**0**	**275**	**51**	**10**	**1**	**5**	**342**	**353.3**	**0**	**1**	**59**	**30**	**6**	**2**	**0**	**98**	**103.0**
16:00 - 16:15	0	0	29	23	8	0	0	**60**	**64.0**	0	0	50	14	1	2	0	**67**	**70.1**	0	2	42	5	0	0	0	**49**	**47.8**	0	0	7	3	0	0	0	**10**	**10.0**
16:15 - 16:30	0	1	42	27	1	2	0	**73**	**75.5**	0	1	67	26	2	1	0	**97**	**98.7**	0	0	34	8	0	0	0	**42**	**42.0**	0	0	4	0	0	0	0	**4**	**4.0**
16:30 - 16:45	0	0	39	27	2	0	0	**68**	**69.0**	0	0	64	16	1	1	0	**82**	**83.8**	0	0	30	10	1	0	0	**41**	**41.5**	0	0	4	3	0	0	0	**7**	**7.0**
16:45 - 17:00	0	0	55	15	1	0	0	**71**	**71.5**	0	0	66	8	1	1	0	**76**	**77.8**	0	0	22	8	0	0	0	**30**	**30.0**	0	0	4	1	0	0	0	**5**	**5.0**
Hourly Total	**0**	**1**	**165**	**92**	**12**	**2**	**0**	**272**	**280.0**	**0**	**1**	**247**	**64**	**5**	**5**	**0**	**322**	**330.4**	**0**	**2**	**128**	**31**	**1**	**0**	**0**	**162**	**161.3**	**0**	**0**	**19**	**7**	**0**	**0**	**0**	**26**	**26.0**
17:00 - 17:15	0	2	51	22	0	0	0	**75**	**73.8**	0	3	64	27	1	2	0	**97**	**98.3**	0	0	33	2	2	1	1	**39**	**42.3**	0	0	6	1	0	0	0	**7**	**7.0**
17:15 - 17:30	0	1	65	19	6	0	0	**91**	**93.4**	0	1	85	13	2	1	0	**102**	**103.7**	0	1	47	5	0	0	0	**53**	**52.4**	0	0	7	0	0	0	0	**7**	**7.0**
17:30 - 17:45	0	0	51	17	3	0	0	**71**	**72.5**	0	0	79	15	1	0	0	**95**	**95.5**	0	0	30	3	0	0	1	**34**	**35.0**	0	0	5	1	0	0	0	**6**	**6.0**
17:45 - 18:00	0	0	48	10	2	2	0	**62**	**65.6**	0	0	76	11	0	0	0	**87**	**87.0**	0	0	14	5	0	0	1	**20**	**21.0**	0	0	4	0	0	0	0	**4**	**4.0**
Hourly Total	**0**	**3**	**215**	**68**	**11**	**2**	**0**	**299**	**305.3**	**0**	**4**	**304**	**66**	**4**	**3**	**0**	**381**	**384.5**	**0**	**1**	**124**	**15**	**2**	**1**	**3**	**146**	**150.7**	**0**	**0**	**22**	**2**	**0**	**0**	**0**	**24**	**24.0**
18:00 - 18:15	0	0	42	9	0	0	0	**51**	**51.0**	0	0	68	7	0	2	0	**77**	**79.6**	0	0	33	5	0	0	0	**38**	**38.0**	0	0	7	1	0	0	0	**8**	**8.0**
18:15 - 18:30	0	0	42	6	1	1	0	**50**	**51.8**	0	0	61	9	0	0	0	**70**	**70.0**	0	1	19	1	2	0	0	**23**	**23.4**	0	0	4	0	0	0	0	**4**	**4.0**
18:30 - 18:45	0	0	40	7	0	1	1	**49**	**51.3**	0	0	32	8	2	0	0	**42**	**43.0**	0	0	18	3	0	0	0	**21**	**21.0**	0	0	3	0	0	0	0	**3**	**3.0**
18:45 - 19:00	0	0	28	7	0	0	0	**35**	**35.0**	0	0	34	6	2	0	0	**42**	**43.0**	0	0	16	1	0	0	0	**17**	**17.0**	0	0	3	0	0	0	0	**3**	**3.0**
Hourly Total	**0**	**0**	**152**	**29**	**1**	**2**	**1**	**185**	**189.1**	**0**	**0**	**195**	**30**	**4**	**2**	**0**	**231**	**235.6**	**0**	**1**	**86**	**10**	**2**	**0**	**0**	**99**	**99.4**	**0**	**0**	**17**	**1**	**0**	**0**	**0**	**18**	**18.0**
TOTAL	**0**	**4**	**532**	**189**	**24**	**6**	**1**	**756**	**774.4**	**0**	**5**	**746**	**160**	**13**	**10**	**0**	**934**	**950.5**	**0**	**4**	**338**	**56**	**5**	**1**	**3**	**407**	**411.4**	**0**	**0**	**58**	**10**	**0**	**0**	**0**	**68**	**68.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 3
Approach: A507

	To A10 (N)									To B1038									To Esso Howe Green									To A10 (S)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	4	2	0	0	0	6	6.0	0	0	11	2	0	0	0	13	13.0	0	0	2	3	0	0	0	5	5.0	0	0	43	15	3	0	0	61	62.5
07:15 - 07:30	0	0	8	1	1	0	0	10	10.5	0	0	18	7	0	0	0	25	25.0	0	0	2	5	2	0	0	9	10.0	0	0	61	27	4	1	0	93	96.3
07:30 - 07:45	0	0	4	1	0	0	0	5	5.0	0	0	12	3	2	0	1	18	20.0	0	0	4	5	0	0	0	9	9.0	0	0	68	23	5	1	0	97	100.8
07:45 - 08:00	0	0	4	4	1	0	0	9	9.5	0	0	19	6	1	0	0	26	26.5	0	0	4	4	0	0	0	8	8.0	0	1	55	22	6	1	0	85	88.7
Hourly Total	**0**	**0**	**20**	**8**	**2**	**0**	**0**	**30**	**31.0**	**0**	**0**	**60**	**18**	**3**	**0**	**1**	**82**	**84.5**	**0**	**0**	**12**	**17**	**2**	**0**	**0**	**31**	**32.0**	**0**	**1**	**227**	**87**	**18**	**3**	**0**	**336**	**348.3**
08:00 - 08:15	0	0	7	0	0	0	0	7	7.0	0	0	24	7	5	0	0	36	38.5	0	0	3	4	2	0	0	9	10.0	0	0	48	28	5	0	0	81	83.5
08:15 - 08:30	0	0	6	3	0	0	0	9	9.0	0	0	34	12	2	0	2	50	53.0	0	1	3	2	1	0	0	7	6.9	0	0	57	19	2	1	0	79	81.3
08:30 - 08:45	0	0	9	1	0	0	0	10	10.0	0	0	26	6	1	0	0	33	33.5	0	0	3	2	1	0	0	6	6.5	0	0	63	13	2	3	0	81	85.9
08:45 - 09:00	0	0	10	1	1	1	0	13	14.8	0	0	13	9	0	0	0	22	22.0	0	0	3	2	0	0	0	5	5.0	0	0	49	21	6	4	0	80	88.2
Hourly Total	**0**	**0**	**32**	**5**	**1**	**1**	**0**	**39**	**40.8**	**0**	**0**	**97**	**34**	**8**	**0**	**2**	**141**	**147.0**	**0**	**1**	**12**	**10**	**4**	**0**	**0**	**27**	**28.4**	**0**	**0**	**217**	**81**	**15**	**8**	**0**	**321**	**338.9**
09:00 - 09:15	0	0	6	4	1	0	0	11	11.5	0	0	18	7	0	0	0	25	25.0	0	0	4	2	1	0	0	7	7.5	0	0	22	14	6	5	0	47	56.5
09:15 - 09:30	0	0	3	0	0	1	0	4	5.3	0	0	12	4	0	0	0	16	16.0	0	0	3	1	0	0	0	4	4.0	0	0	35	12	5	4	0	56	63.7
09:30 - 09:45	0	1	6	2	0	0	0	9	8.4	0	0	8	5	2	0	0	15	16.0	0	0	2	2	0	0	0	4	4.0	0	0	27	10	6	2	0	45	50.6
09:45 - 10:00	0	0	2	0	1	0	0	3	3.5	0	0	20	3	1	3	0	27	31.4	0	0	1	5	1	0	0	7	7.5	0	0	15	8	9	0	0	32	36.5
Hourly Total	**0**	**1**	**17**	**6**	**2**	**1**	**0**	**27**	**28.7**	**0**	**0**	**58**	**19**	**3**	**3**	**0**	**83**	**88.4**	**0**	**0**	**10**	**10**	**2**	**0**	**0**	**22**	**23.0**	**0**	**0**	**99**	**44**	**26**	**11**	**0**	**180**	**207.3**
TOTAL	**0**	**1**	**69**	**19**	**5**	**2**	**0**	**96**	**100.5**	**0**	**0**	**215**	**71**	**14**	**3**	**3**	**306**	**319.9**	**0**	**1**	**34**	**37**	**8**	**0**	**0**	**80**	**83.4**	**0**	**1**	**543**	**212**	**59**	**22**	**0**	**837**	**894.5**
16:00 - 16:15	0	0	4	2	0	0	0	6	6.0	1	0	13	1	0	0	0	15	14.2	0	0	3	0	0	0	0	3	3.0	0	0	21	5	3	1	0	30	32.8
16:15 - 16:30	0	0	6	3	0	0	0	9	9.0	0	0	15	2	0	0	0	17	17.0	0	0	2	0	0	0	0	2	2.0	0	0	33	8	3	0	0	44	45.5
16:30 - 16:45	0	0	9	0	0	0	0	9	9.0	0	0	26	4	0	0	0	30	30.0	0	0	2	2	0	0	0	4	4.0	0	2	30	5	1	0	0	38	37.3
16:45 - 17:00	0	0	5	0	0	0	0	5	5.0	0	0	21	11	3	0	0	35	36.5	0	0	2	1	0	0	0	3	3.0	0	0	30	8	0	0	0	38	38.0
Hourly Total	**0**	**0**	**24**	**5**	**0**	**0**	**0**	**29**	**29.0**	**1**	**0**	**75**	**18**	**3**	**0**	**0**	**97**	**97.7**	**0**	**0**	**9**	**3**	**0**	**0**	**0**	**12**	**12.0**	**0**	**2**	**114**	**26**	**7**	**1**	**0**	**150**	**153.6**
17:00 - 17:15	0	0	7	1	0	0	0	8	8.0	0	0	30	7	1	0	1	39	40.5	0	0	4	1	0	0	0	5	5.0	0	1	53	7	0	0	0	61	60.4
17:15 - 17:30	0	0	7	0	0	0	0	7	7.0	0	0	35	7	0	0	0	42	42.0	0	0	4	0	0	0	0	4	4.0	0	0	41	13	0	0	0	54	54.0
17:30 - 17:45	0	0	7	3	0	0	0	10	10.0	0	0	33	10	0	0	0	43	43.0	0	0	3	1	0	0	0	4	4.0	0	0	52	8	0	0	0	60	60.0
17:45 - 18:00	0	0	4	0	1	0	0	5	5.5	0	0	54	4	0	0	0	58	58.0	0	0	4	0	0	0	0	4	4.0	0	0	53	7	0	1	0	61	62.3
Hourly Total	**0**	**0**	**25**	**4**	**1**	**0**	**0**	**30**	**30.5**	**0**	**0**	**152**	**28**	**1**	**0**	**1**	**182**	**183.5**	**0**	**0**	**15**	**2**	**0**	**0**	**0**	**17**	**17.0**	**0**	**1**	**199**	**35**	**0**	**1**	**0**	**236**	**236.7**
18:00 - 18:15	0	0	2	1	0	0	0	3	3.0	0	0	21	2	0	0	0	23	23.0	0	0	3	1	0	0	0	4	4.0	0	1	40	6	0	0	0	47	46.4
18:15 - 18:30	0	0	1	0	0	0	0	1	1.0	0	0	27	1	1	0	0	29	29.5	0	0	2	0	0	0	0	2	2.0	0	0	31	7	0	1	0	39	40.3
18:30 - 18:45	0	0	6	1	0	0	0	7	7.0	0	0	18	2	0	0	2	22	24.0	0	0	3	0	0	0	0	3	3.0	0	0	37	10	0	0	0	47	47.0
18:45 - 19:00	0	0	5	2	0	0	0	7	7.0	0	0	24	1	0	0	0	25	25.0	0	0	3	0	0	0	0	3	3.0	0	0	29	3	3	1	0	36	38.8
Hourly Total	**0**	**0**	**14**	**4**	**0**	**0**	**0**	**18**	**18.0**	**0**	**0**	**90**	**6**	**1**	**0**	**2**	**99**	**101.5**	**0**	**0**	**11**	**1**	**0**	**0**	**0**	**12**	**12.0**	**0**	**1**	**137**	**26**	**3**	**2**	**0**	**169**	**172.5**
TOTAL	**0**	**0**	**63**	**13**	**1**	**0**	**0**	**77**	**77.5**	**1**	**0**	**317**	**52**	**5**	**0**	**3**	**378**	**382.7**	**0**	**0**	**35**	**6**	**0**	**0**	**0**	**41**	**41.0**	**0**	**4**	**450**	**87**	**10**	**4**	**0**	**555**	**562.8**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

From: 1) 07:00

To: 1) 10:00

Class: All Vehicles

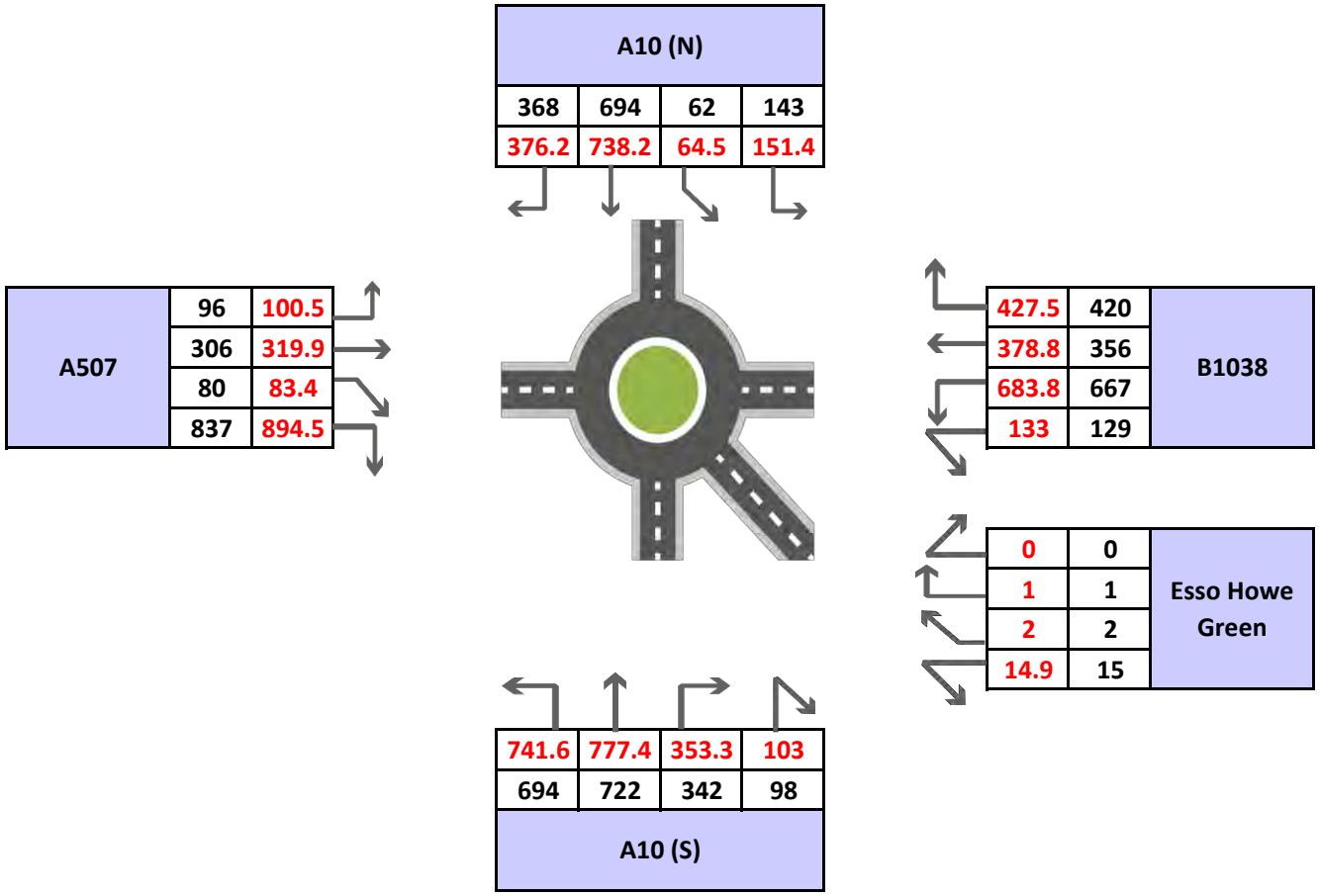
Show Peak Hour: ☐

Show PCUs: ☑

Show Session 2

Tuesday 3rd October 2023

PCUs



Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 4
Approach: High Street North

	Left to High Street (S)									Right to Baldock Road								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	1	1	22	4	0	0	0	28	26.6	0	1	4	3	0	0	0	8	7.4
07:15 - 07:30	1	0	18	3	1	0	0	23	22.7	0	1	3	2	0	0	0	6	5.4
07:30 - 07:45	0	0	19	7	0	0	0	26	26.0	0	0	5	3	0	0	0	8	8.0
07:45 - 08:00	0	0	23	10	0	0	0	33	33.0	0	0	6	2	0	0	0	8	8.0
Hourly Total	**2**	**1**	**82**	**24**	**1**	**0**	**0**	**110**	**108.3**	**0**	**2**	**18**	**10**	**0**	**0**	**0**	**30**	**28.8**
08:00 - 08:15	0	0	17	3	0	0	0	20	20.0	0	0	1	0	1	0	0	2	2.5
08:15 - 08:30	0	0	29	7	0	0	0	36	36.0	0	0	11	0	0	0	0	11	11.0
08:30 - 08:45	0	0	46	1	0	0	0	47	47.0	0	0	12	3	1	0	0	16	16.5
08:45 - 09:00	0	0	24	3	0	0	0	27	27.0	0	0	7	2	0	0	0	9	9.0
Hourly Total	**0**	**0**	**116**	**14**	**0**	**0**	**0**	**130**	**130.0**	**0**	**0**	**31**	**5**	**2**	**0**	**0**	**38**	**39.0**
09:00 - 09:15	0	0	18	6	0	0	0	24	24.0	0	0	6	3	1	0	0	10	10.5
09:15 - 09:30	1	0	19	6	0	0	0	26	25.2	0	1	3	1	1	0	0	6	5.9
09:30 - 09:45	0	0	18	2	0	0	0	20	20.0	0	0	6	4	0	0	0	10	10.0
09:45 - 10:00	0	0	14	2	0	0	0	16	16.0	0	0	8	3	0	0	0	11	11.0
Hourly Total	**1**	**0**	**69**	**16**	**0**	**0**	**0**	**86**	**85.2**	**0**	**1**	**23**	**11**	**2**	**0**	**0**	**37**	**37.4**
TOTAL	**3**	**1**	**267**	**54**	**1**	**0**	**0**	**326**	**323.5**	**0**	**3**	**72**	**26**	**4**	**0**	**0**	**105**	**105.2**
16:00 - 16:15	0	0	16	8	0	0	0	24	24.0	0	0	7	3	0	0	0	10	10.0
16:15 - 16:30	0	1	14	5	0	0	0	20	19.4	0	0	4	2	0	0	0	6	6.0
16:30 - 16:45	0	0	28	5	0	0	0	33	33.0	0	0	5	0	0	0	0	5	5.0
16:45 - 17:00	1	0	17	3	0	0	0	21	20.2	0	0	3	1	0	0	0	4	4.0
Hourly Total	**1**	**1**	**75**	**21**	**0**	**0**	**0**	**98**	**96.6**	**0**	**0**	**19**	**6**	**0**	**0**	**0**	**25**	**25.0**
17:00 - 17:15	1	0	33	5	0	0	0	39	38.2	0	0	7	2	0	0	0	9	9.0
17:15 - 17:30	0	0	30	1	0	0	0	31	31.0	0	0	2	3	0	0	0	5	5.0
17:30 - 17:45	0	0	21	4	0	0	0	25	25.0	0	0	4	2	0	0	0	6	6.0
17:45 - 18:00	1	0	26	1	0	0	0	28	27.2	0	0	3	2	0	0	0	5	5.0
Hourly Total	**2**	**0**	**110**	**11**	**0**	**0**	**0**	**123**	**121.4**	**0**	**0**	**16**	**9**	**0**	**0**	**0**	**25**	**25.0**
18:00 - 18:15	0	1	18	1	0	0	0	20	19.4	0	0	7	1	0	0	0	8	8.0
18:15 - 18:30	0	0	17	3	0	0	0	20	20.0	0	0	4	0	0	0	0	4	4.0
18:30 - 18:45	0	0	13	1	0	0	0	14	14.0	0	0	5	2	0	0	0	7	7.0
18:45 - 19:00	0	0	17	2	0	0	0	19	19.0	0	0	3	0	0	0	0	3	3.0
Hourly Total	**0**	**1**	**65**	**7**	**0**	**0**	**0**	**73**	**72.4**	**0**	**0**	**19**	**3**	**0**	**0**	**0**	**22**	**22.0**
TOTAL	**3**	**2**	**250**	**39**	**0**	**0**	**0**	**294**	**290.4**	**0**	**0**	**54**	**18**	**0**	**0**	**0**	**72**	**72.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 4
Approach: High Street South

	Ahead to Baldock Road									Right to High Street (N)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	19	11	0	0	1	31	32.0	0	0	2	4	0	0	0	6	6.0
07:15 - 07:30	0	0	32	9	5	0	1	47	50.5	1	1	10	4	0	0	0	16	14.6
07:30 - 07:45	0	0	39	11	0	0	0	50	50.0	0	0	3	4	1	0	0	8	8.5
07:45 - 08:00	0	0	52	16	0	0	1	69	70.0	0	0	14	3	2	0	0	19	20.0
Hourly Total	**0**	**0**	**142**	**47**	**5**	**0**	**3**	**197**	**202.5**	**1**	**1**	**29**	**15**	**3**	**0**	**0**	**49**	**49.1**
08:00 - 08:15	0	0	57	10	0	0	2	69	71.0	0	0	16	8	2	0	0	26	27.0
08:15 - 08:30	0	0	77	14	1	0	3	95	98.5	0	0	38	1	0	0	0	39	39.0
08:30 - 08:45	2	0	67	7	0	0	2	78	78.4	0	0	33	2	0	0	0	35	35.0
08:45 - 09:00	0	0	54	4	1	0	1	60	61.5	0	0	30	2	1	0	0	33	33.5
Hourly Total	**2**	**0**	**255**	**35**	**2**	**0**	**8**	**302**	**309.4**	**0**	**0**	**117**	**13**	**3**	**0**	**0**	**133**	**134.5**
09:00 - 09:15	0	0	47	8	1	0	3	59	62.5	1	0	18	2	0	0	0	21	20.2
09:15 - 09:30	0	0	43	6	0	0	0	49	49.0	0	0	15	7	0	0	0	22	22.0
09:30 - 09:45	0	0	33	6	0	0	1	40	41.0	0	0	9	3	0	0	0	12	12.0
09:45 - 10:00	0	0	34	7	1	1	1	44	46.8	1	0	20	1	1	0	0	23	22.7
Hourly Total	**0**	**0**	**157**	**27**	**2**	**1**	**5**	**192**	**199.3**	**2**	**0**	**62**	**13**	**1**	**0**	**0**	**78**	**76.9**
TOTAL	**2**	**0**	**554**	**109**	**9**	**1**	**16**	**691**	**711.2**	**3**	**1**	**208**	**41**	**7**	**0**	**0**	**260**	**260.5**
16:00 - 16:15	0	0	66	18	0	0	2	86	88.0	0	0	30	5	1	0	0	36	36.5
16:15 - 16:30	0	0	37	12	1	0	2	52	54.5	0	0	19	5	0	0	0	24	24.0
16:30 - 16:45	0	0	36	15	3	1	0	55	57.8	0	0	31	7	0	0	0	38	38.0
16:45 - 17:00	0	1	41	8	0	0	1	51	51.4	0	0	23	6	0	0	0	29	29.0
Hourly Total	**0**	**1**	**180**	**53**	**4**	**1**	**5**	**244**	**251.7**	**0**	**0**	**103**	**23**	**1**	**0**	**0**	**127**	**127.5**
17:00 - 17:15	0	1	65	12	0	0	1	79	79.4	0	0	27	7	0	0	0	34	34.0
17:15 - 17:30	0	1	54	8	0	0	0	63	62.4	1	1	29	5	0	0	0	36	34.6
17:30 - 17:45	0	0	66	10	0	1	0	77	78.3	0	0	33	6	1	0	0	40	40.5
17:45 - 18:00	0	0	59	7	0	0	2	68	70.0	0	1	23	3	0	0	0	27	26.4
Hourly Total	**0**	**2**	**244**	**37**	**0**	**1**	**3**	**287**	**290.1**	**1**	**2**	**112**	**21**	**1**	**0**	**0**	**137**	**135.5**
18:00 - 18:15	1	0	44	3	1	0	0	49	48.7	0	0	29	5	0	0	0	34	34.0
18:15 - 18:30	1	0	36	5	0	0	0	42	41.2	0	0	26	0	0	0	0	26	26.0
18:30 - 18:45	0	0	36	2	0	1	3	42	46.3	0	0	29	5	0	0	0	34	34.0
18:45 - 19:00	0	0	31	5	0	0	0	36	36.0	0	0	14	2	0	0	0	16	16.0
Hourly Total	**2**	**0**	**147**	**15**	**1**	**1**	**3**	**169**	**172.2**	**0**	**0**	**98**	**12**	**0**	**0**	**0**	**110**	**110.0**
TOTAL	**2**	**3**	**571**	**105**	**5**	**3**	**11**	**700**	**714.0**	**1**	**2**	**313**	**56**	**2**	**0**	**0**	**374**	**373.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 4
Approach: Baldock Road

	Left to High Street (N)									Ahead to High Street (S)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	1	0	2	0	0	0	0	**3**	**2.2**	0	0	16	9	0	0	1	**26**	**27.0**
07:15 - 07:30	0	0	5	1	0	0	0	**6**	**6.0**	0	0	15	8	0	0	2	**25**	**27.0**
07:30 - 07:45	0	0	3	4	0	0	0	**7**	**7.0**	0	0	17	8	3	0	0	**28**	**29.5**
07:45 - 08:00	0	0	7	2	0	0	0	**9**	**9.0**	0	0	28	15	2	0	1	**46**	**48.0**
Hourly Total	**1**	**0**	**17**	**7**	**0**	**0**	**0**	**25**	**24.2**	**0**	**0**	**76**	**40**	**5**	**0**	**4**	**125**	**131.5**
08:00 - 08:15	0	0	8	3	2	0	0	**13**	**14.0**	0	0	29	7	4	0	0	**40**	**42.0**
08:15 - 08:30	0	0	6	4	2	0	0	**12**	**13.0**	0	0	38	10	2	0	2	**52**	**55.0**
08:30 - 08:45	0	0	13	2	1	0	0	**16**	**16.5**	0	0	52	10	1	0	0	**63**	**63.5**
08:45 - 09:00	0	0	8	4	0	0	0	**12**	**12.0**	0	0	47	16	1	0	2	**66**	**68.5**
Hourly Total	**0**	**0**	**35**	**13**	**5**	**0**	**0**	**53**	**55.5**	**0**	**0**	**166**	**43**	**8**	**0**	**4**	**221**	**229.0**
09:00 - 09:15	0	0	6	3	0	0	0	**9**	**9.0**	0	0	44	5	1	1	1	**52**	**54.8**
09:15 - 09:30	0	0	3	2	0	0	0	**5**	**5.0**	0	0	28	9	1	0	0	**38**	**38.5**
09:30 - 09:45	0	0	8	1	2	0	0	**11**	**12.0**	0	0	18	8	3	0	0	**29**	**30.5**
09:45 - 10:00	0	0	6	2	0	0	0	**8**	**8.0**	0	0	32	4	2	2	2	**42**	**47.6**
Hourly Total	**0**	**0**	**23**	**8**	**2**	**0**	**0**	**33**	**34.0**	**0**	**0**	**122**	**26**	**7**	**3**	**3**	**161**	**171.4**
TOTAL	**1**	**0**	**75**	**28**	**7**	**0**	**0**	**111**	**113.7**	**0**	**0**	**364**	**109**	**20**	**3**	**11**	**507**	**531.9**
16:00 - 16:15	0	0	10	1	0	0	0	**11**	**11.0**	1	0	64	14	4	0	0	**83**	**84.2**
16:15 - 16:30	0	0	8	0	0	0	0	**8**	**8.0**	0	0	51	8	1	0	0	**60**	**60.5**
16:30 - 16:45	0	0	6	1	0	0	0	**7**	**7.0**	0	0	52	11	1	0	0	**64**	**64.5**
16:45 - 17:00	0	0	10	2	0	0	0	**12**	**12.0**	1	0	49	13	1	0	0	**64**	**63.7**
Hourly Total	**0**	**0**	**34**	**4**	**0**	**0**	**0**	**38**	**38.0**	**2**	**0**	**216**	**46**	**7**	**0**	**0**	**271**	**272.9**
17:00 - 17:15	0	0	8	2	0	0	0	**10**	**10.0**	0	0	51	12	2	1	3	**69**	**74.3**
17:15 - 17:30	0	0	6	3	0	0	0	**9**	**9.0**	0	1	72	3	0	0	0	**76**	**75.4**
17:30 - 17:45	0	0	6	1	0	0	0	**7**	**7.0**	0	0	60	8	0	0	0	**68**	**68.0**
17:45 - 18:00	0	0	6	1	0	0	0	**7**	**7.0**	1	0	53	4	0	0	3	**61**	**63.2**
Hourly Total	**0**	**0**	**26**	**7**	**0**	**0**	**0**	**33**	**33.0**	**1**	**1**	**236**	**27**	**2**	**1**	**6**	**274**	**280.9**
18:00 - 18:15	0	0	8	1	0	0	0	**9**	**9.0**	0	0	59	9	0	0	0	**68**	**68.0**
18:15 - 18:30	0	1	7	2	0	0	0	**10**	**9.4**	1	0	43	3	1	0	0	**48**	**47.7**
18:30 - 18:45	0	0	7	3	0	0	0	**10**	**10.0**	0	0	39	3	0	0	0	**42**	**42.0**
18:45 - 19:00	0	0	9	0	0	0	0	**9**	**9.0**	1	0	34	3	0	0	1	**39**	**39.2**
Hourly Total	**0**	**1**	**31**	**6**	**0**	**0**	**0**	**38**	**37.4**	**2**	**0**	**175**	**18**	**1**	**0**	**1**	**197**	**196.9**
TOTAL	**0**	**1**	**91**	**17**	**0**	**0**	**0**	**109**	**108.4**	**5**	**1**	**627**	**91**	**10**	**1**	**7**	**742**	**750.7**

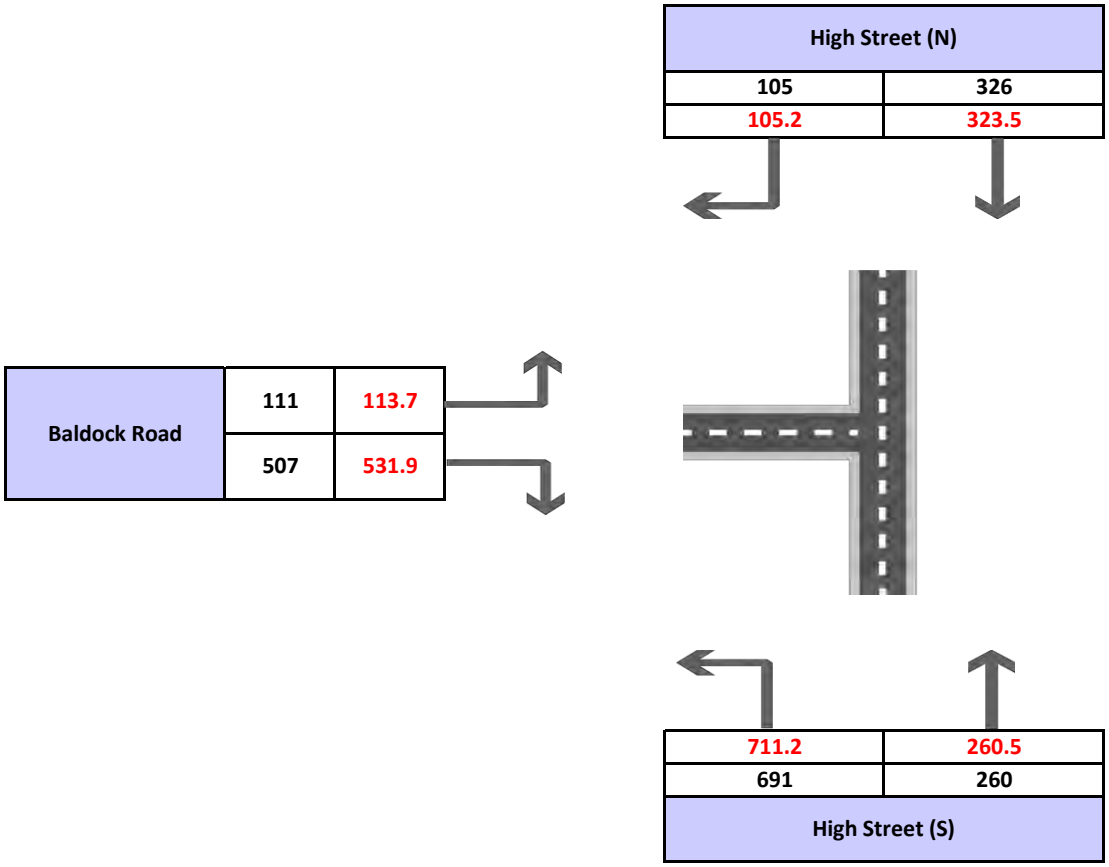
PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

From:	1) 07:00	**Show Peak Hour:**	☐
To:	1) 10:00	**Show PCUs:**	☑
Class:	All Vehicles		Show Session 2

Tuesday 3rd October 2023

PCUs



Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 5
Approach: High Street

	Left to Hare Street Road									Ahead to Station Road								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	10	7	0	0	1	18	19.0	1	1	27	7	0	0	0	36	34.6
07:15 - 07:30	0	0	8	5	0	0	2	15	17.0	1	0	31	6	1	0	0	39	38.7
07:30 - 07:45	0	0	8	5	1	0	0	14	14.5	0	0	32	8	2	0	0	42	43.0
07:45 - 08:00	0	0	18	6	2	0	0	26	27.0	0	0	34	18	0	0	1	53	54.0
Hourly Total	**0**	**0**	**44**	**23**	**3**	**0**	**3**	**73**	**77.5**	**2**	**1**	**124**	**39**	**3**	**0**	**1**	**170**	**170.3**
08:00 - 08:15	0	0	15	4	2	0	0	21	22.0	0	0	34	7	2	0	0	43	44.0
08:15 - 08:30	0	0	27	8	2	0	1	38	40.0	0	0	39	9	0	0	1	49	50.0
08:30 - 08:45	0	0	36	4	0	0	0	40	40.0	0	0	66	7	1	0	0	74	74.5
08:45 - 09:00	0	0	21	9	0	0	2	32	34.0	0	0	45	9	1	0	0	55	55.5
Hourly Total	**0**	**0**	**99**	**25**	**4**	**0**	**3**	**131**	**136.0**	**0**	**0**	**184**	**32**	**4**	**0**	**1**	**221**	**224.0**
09:00 - 09:15	0	0	13	7	1	1	1	23	25.8	0	0	51	5	0	0	0	56	56.0
09:15 - 09:30	0	0	12	7	1	0	0	20	20.5	0	0	32	8	0	0	0	40	40.0
09:30 - 09:45	1	0	8	3	1	0	0	13	12.7	0	0	31	4	2	0	0	37	38.0
09:45 - 10:00	0	0	15	2	1	2	2	22	27.1	0	0	34	6	1	0	0	41	41.5
Hourly Total	**1**	**0**	**48**	**19**	**4**	**3**	**3**	**78**	**86.1**	**0**	**0**	**148**	**23**	**3**	**0**	**0**	**174**	**175.5**
TOTAL	**1**	**0**	**191**	**67**	**11**	**3**	**9**	**282**	**299.6**	**2**	**1**	**456**	**94**	**10**	**0**	**2**	**565**	**569.8**
16:00 - 16:15	1	0	13	9	2	0	0	25	25.2	1	0	64	16	2	0	0	83	83.2
16:15 - 16:30	0	0	13	2	1	0	0	16	16.5	0	1	55	8	0	0	0	64	63.4
16:30 - 16:45	0	0	18	5	0	0	0	23	23.0	0	0	61	10	1	0	0	72	72.5
16:45 - 17:00	0	0	23	6	1	0	0	30	30.5	0	0	43	15	0	0	0	58	58.0
Hourly Total	**1**	**0**	**67**	**22**	**4**	**0**	**0**	**94**	**95.2**	**1**	**1**	**223**	**49**	**3**	**0**	**0**	**277**	**277.1**
17:00 - 17:15	0	0	23	8	2	0	0	33	34.0	2	0	62	5	0	0	3	72	73.4
17:15 - 17:30	0	0	35	1	0	0	0	36	36.0	0	1	64	3	0	1	0	69	69.7
17:30 - 17:45	0	0	20	3	0	0	0	23	23.0	0	0	56	10	0	0	0	66	66.0
17:45 - 18:00	1	0	22	3	0	0	2	28	29.2	1	0	56	2	0	0	1	60	60.2
Hourly Total	**1**	**0**	**100**	**15**	**2**	**0**	**2**	**120**	**122.2**	**3**	**1**	**238**	**20**	**0**	**1**	**4**	**267**	**269.3**
18:00 - 18:15	0	0	27	2	0	0	0	29	29.0	1	0	52	7	0	0	0	60	59.2
18:15 - 18:30	0	0	19	2	1	0	0	22	22.5	1	0	44	5	0	0	0	50	49.2
18:30 - 18:45	0	0	19	2	0	0	0	21	21.0	0	0	33	2	0	0	0	35	35.0
18:45 - 19:00	0	0	8	1	0	0	0	9	9.0	0	0	42	5	0	0	1	48	49.0
Hourly Total	**0**	**0**	**73**	**7**	**1**	**0**	**0**	**81**	**81.5**	**2**	**0**	**171**	**19**	**0**	**0**	**1**	**193**	**192.4**
TOTAL	**2**	**0**	**240**	**44**	**7**	**0**	**2**	**295**	**298.9**	**6**	**2**	**632**	**88**	**3**	**1**	**5**	**737**	**738.8**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 5
Approach: Hare Street Road

	Left to Station Road									Right to High Street								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	16	2	0	0	0	18	18.0	0	0	12	4	0	0	0	16	16.0
07:15 - 07:30	0	0	22	5	2	0	0	29	30.0	0	0	18	6	0	0	0	24	24.0
07:30 - 07:45	0	0	26	6	0	0	0	32	32.0	0	0	8	4	0	0	0	12	12.0
07:45 - 08:00	0	0	12	4	1	0	0	17	17.5	0	0	20	6	0	0	0	26	26.0
Hourly Total	**0**	**0**	**76**	**17**	**3**	**0**	**0**	**96**	**97.5**	**0**	**0**	**58**	**20**	**0**	**0**	**0**	**78**	**78.0**
08:00 - 08:15	0	0	29	4	2	0	0	35	36.0	0	0	20	6	0	0	0	26	26.0
08:15 - 08:30	0	0	24	3	0	0	0	27	27.0	0	0	42	5	0	0	2	49	51.0
08:30 - 08:45	0	0	19	4	0	1	0	24	25.3	1	0	35	1	0	0	1	38	38.2
08:45 - 09:00	0	0	39	6	0	0	0	45	45.0	0	0	31	3	0	0	0	34	34.0
Hourly Total	**0**	**0**	**111**	**17**	**2**	**1**	**0**	**131**	**133.3**	**1**	**0**	**128**	**15**	**0**	**0**	**3**	**147**	**149.2**
09:00 - 09:15	0	0	24	1	0	0	0	25	25.0	0	0	20	2	0	0	1	23	24.0
09:15 - 09:30	0	0	21	3	0	0	0	24	24.0	0	0	14	4	0	0	0	18	18.0
09:30 - 09:45	0	0	18	2	0	0	0	20	20.0	0	0	12	3	0	0	0	15	15.0
09:45 - 10:00	0	0	11	5	1	0	0	17	17.5	0	0	18	3	0	1	0	22	23.3
Hourly Total	**0**	**0**	**74**	**11**	**1**	**0**	**0**	**86**	**86.5**	**0**	**0**	**64**	**12**	**0**	**1**	**1**	**78**	**80.3**
TOTAL	**0**	**0**	**261**	**45**	**6**	**1**	**0**	**313**	**317.3**	**1**	**0**	**250**	**47**	**0**	**1**	**4**	**303**	**307.5**
16:00 - 16:15	0	0	8	4	0	0	0	12	12.0	0	0	24	6	0	0	1	31	32.0
16:15 - 16:30	0	0	18	5	0	0	0	23	23.0	0	0	15	5	0	0	1	21	22.0
16:30 - 16:45	0	0	15	2	0	0	0	17	17.0	0	0	20	10	0	1	0	31	32.3
16:45 - 17:00	0	0	19	5	0	0	0	24	24.0	0	0	11	3	0	0	1	15	16.0
Hourly Total	**0**	**0**	**60**	**16**	**0**	**0**	**0**	**76**	**76.0**	**0**	**0**	**70**	**24**	**0**	**1**	**3**	**98**	**102.3**
17:00 - 17:15	0	0	23	5	0	0	0	28	28.0	0	1	26	2	0	0	1	30	30.4
17:15 - 17:30	0	0	23	9	1	0	0	33	33.5	0	0	24	5	0	0	0	29	29.0
17:30 - 17:45	0	0	11	3	0	0	0	14	14.0	0	0	36	1	1	1	0	39	40.8
17:45 - 18:00	0	0	4	7	0	0	0	11	11.0	0	0	24	2	0	0	1	27	28.0
Hourly Total	**0**	**0**	**61**	**24**	**1**	**0**	**0**	**86**	**86.5**	**0**	**1**	**110**	**10**	**1**	**1**	**2**	**125**	**128.2**
18:00 - 18:15	0	0	23	2	0	0	0	25	25.0	0	0	14	2	0	0	0	16	16.0
18:15 - 18:30	0	0	16	3	0	0	0	19	19.0	0	0	19	4	0	0	0	23	23.0
18:30 - 18:45	0	0	10	0	0	0	0	10	10.0	0	0	5	1	0	1	1	8	10.3
18:45 - 19:00	0	0	9	2	0	0	0	11	11.0	0	0	7	1	0	0	0	8	8.0
Hourly Total	**0**	**0**	**58**	**7**	**0**	**0**	**0**	**65**	**65.0**	**0**	**0**	**45**	**8**	**0**	**1**	**1**	**55**	**57.3**
TOTAL	**0**	**0**	**179**	**47**	**1**	**0**	**0**	**227**	**227.5**	**0**	**1**	**225**	**42**	**1**	**3**	**6**	**278**	**287.8**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 5
Approach: Station Road

	Ahead to High Street									Right to Hare Street Road								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	15	9	1	0	1	**26**	**27.5**	0	0	4	2	0	1	0	**7**	**8.3**
07:15 - 07:30	1	1	27	7	4	0	1	**41**	**42.6**	0	0	5	1	0	0	0	**6**	**6.0**
07:30 - 07:45	0	0	35	12	2	0	0	**49**	**50.0**	0	0	13	9	0	0	0	**22**	**22.0**
07:45 - 08:00	0	0	42	13	1	0	1	**57**	**58.5**	0	0	10	1	2	0	0	**13**	**14.0**
Hourly Total	**1**	**1**	**119**	**41**	**8**	**0**	**3**	**173**	**178.6**	**0**	**0**	**32**	**13**	**2**	**1**	**0**	**48**	**50.3**
08:00 - 08:15	0	0	56	15	2	0	2	**75**	**78.0**	0	0	14	3	1	0	0	**18**	**18.5**
08:15 - 08:30	0	0	73	8	0	0	1	**82**	**83.0**	1	0	26	3	0	0	0	**30**	**29.2**
08:30 - 08:45	0	0	67	7	0	0	1	**75**	**76.0**	0	0	23	2	0	0	0	**25**	**25.0**
08:45 - 09:00	0	1	55	3	3	0	1	**63**	**64.9**	0	0	20	6	0	0	0	**26**	**26.0**
Hourly Total	**0**	**1**	**251**	**33**	**5**	**0**	**5**	**295**	**301.9**	**1**	**0**	**83**	**14**	**1**	**0**	**0**	**99**	**98.7**
09:00 - 09:15	1	0	47	4	1	0	2	**55**	**56.7**	0	0	15	4	0	0	0	**19**	**19.0**
09:15 - 09:30	1	0	48	9	0	0	0	**58**	**57.2**	0	0	10	3	0	0	1	**14**	**15.0**
09:30 - 09:45	0	0	32	7	0	0	1	**40**	**41.0**	0	0	11	3	1	0	0	**15**	**15.5**
09:45 - 10:00	1	0	35	5	2	0	1	**44**	**45.2**	0	0	13	2	2	0	0	**17**	**18.0**
Hourly Total	**3**	**0**	**162**	**25**	**3**	**0**	**4**	**197**	**200.1**	**0**	**0**	**49**	**12**	**3**	**0**	**1**	**65**	**67.5**
TOTAL	**4**	**2**	**532**	**99**	**16**	**0**	**12**	**665**	**680.6**	**1**	**0**	**164**	**39**	**6**	**1**	**1**	**212**	**216.5**
16:00 - 16:15	0	0	78	20	2	0	1	**101**	**103.0**	0	0	20	5	0	0	0	**25**	**25.0**
16:15 - 16:30	0	0	33	7	0	0	1	**41**	**42.0**	0	0	13	1	0	0	0	**14**	**14.0**
16:30 - 16:45	0	0	54	10	3	0	0	**67**	**68.5**	1	0	14	7	0	0	0	**22**	**21.2**
16:45 - 17:00	0	1	51	14	0	0	0	**66**	**65.4**	0	0	31	7	0	0	0	**38**	**38.0**
Hourly Total	**0**	**1**	**216**	**51**	**5**	**0**	**2**	**275**	**278.9**	**1**	**0**	**78**	**20**	**0**	**0**	**0**	**99**	**98.2**
17:00 - 17:15	0	0	69	17	0	0	0	**86**	**86.0**	0	0	24	5	0	0	0	**29**	**29.0**
17:15 - 17:30	0	1	55	6	0	0	0	**62**	**61.4**	0	0	26	2	0	0	0	**28**	**28.0**
17:30 - 17:45	0	0	70	13	0	0	0	**83**	**83.0**	0	0	20	8	0	0	0	**28**	**28.0**
17:45 - 18:00	0	2	59	7	0	0	1	**69**	**68.8**	0	0	23	3	0	0	0	**26**	**26.0**
Hourly Total	**0**	**3**	**253**	**43**	**0**	**0**	**1**	**300**	**299.2**	**0**	**0**	**93**	**18**	**0**	**0**	**0**	**111**	**111.0**
18:00 - 18:15	1	0	55	6	1	0	0	**63**	**62.7**	0	0	20	1	0	0	0	**21**	**21.0**
18:15 - 18:30	1	0	47	2	0	0	0	**50**	**49.2**	0	0	25	2	0	0	0	**27**	**27.0**
18:30 - 18:45	0	0	53	2	0	0	2	**57**	**59.0**	0	0	26	2	0	0	0	**28**	**28.0**
18:45 - 19:00	0	0	39	6	0	0	0	**45**	**45.0**	0	0	12	3	0	0	0	**15**	**15.0**
Hourly Total	**2**	**0**	**194**	**16**	**1**	**0**	**2**	**215**	**215.9**	**0**	**0**	**83**	**8**	**0**	**0**	**0**	**91**	**91.0**
TOTAL	**2**	**4**	**663**	**110**	**6**	**0**	**5**	**790**	**794.0**	**1**	**0**	**254**	**46**	**0**	**0**	**0**	**301**	**300.2**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

From: 1) 07:00

To: 1) 10:00

Class: All Vehicles

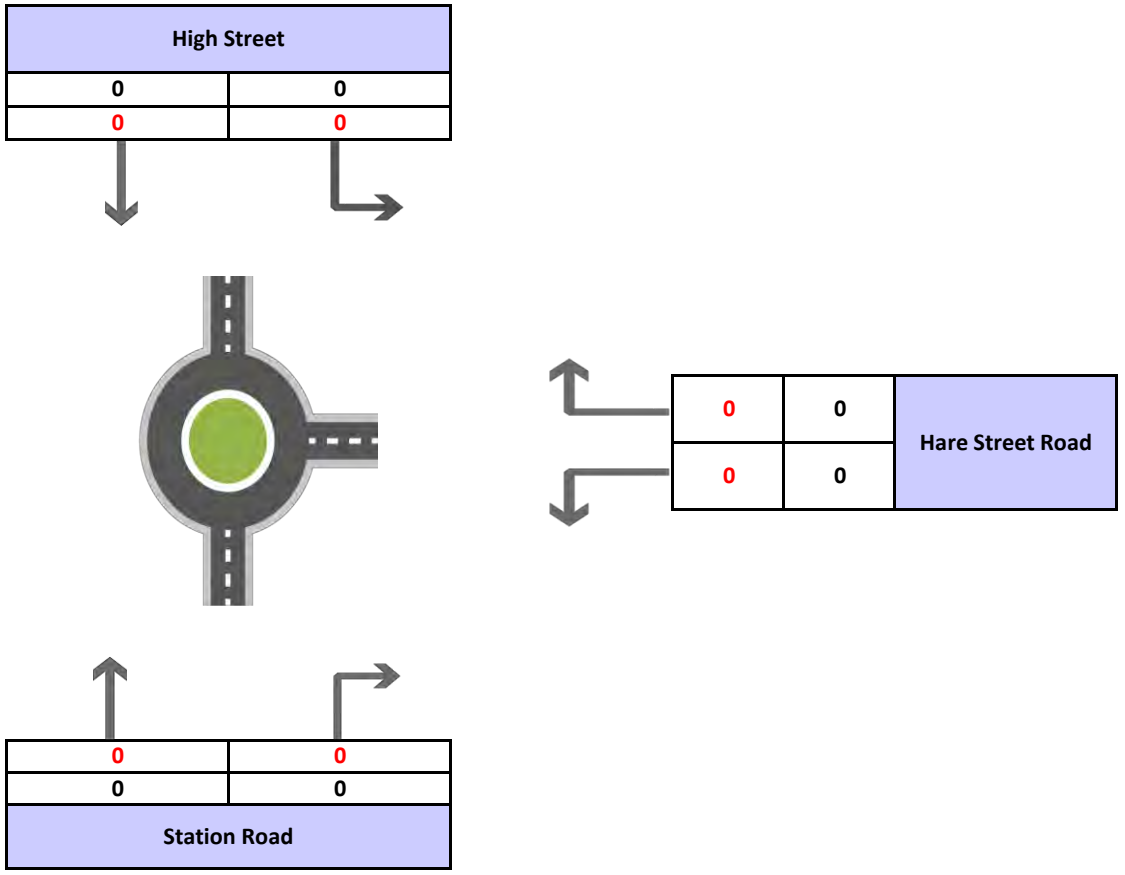
Show Peak Hour: ☐

Show PCUs: ☑

Show Session 2

Tuesday 3rd October 2023

PCUs



Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 6
Approach: London Road North

	Left to London Road (E)									Ahead to A10 (S)									Right to A10 (W)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	1	71	22	4	1	0	99	101.7	0	0	20	3	1	1	0	25	26.8
07:15 - 07:30	0	0	2	0	0	0	0	2	2.0	0	1	76	12	5	0	0	94	95.9	0	0	14	2	1	0	0	17	17.5
07:30 - 07:45	0	0	1	0	0	0	0	1	1.0	0	0	109	19	0	0	0	128	128.0	0	0	11	7	1	1	0	20	21.8
07:45 - 08:00	0	0	1	0	0	0	0	1	1.0	0	0	82	15	2	1	1	101	104.3	0	0	8	9	1	0	0	18	18.5
Hourly Total	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**4**	**4.0**	**0**	**2**	**338**	**68**	**11**	**2**	**1**	**422**	**429.9**	**0**	**0**	**53**	**21**	**4**	**2**	**0**	**80**	**84.6**
08:00 - 08:15	0	0	1	1	0	0	0	2	2.0	0	0	84	12	3	0	0	99	100.5	0	0	10	2	0	0	0	12	12.0
08:15 - 08:30	0	0	2	0	0	0	0	2	2.0	0	0	103	9	1	0	1	114	115.5	0	0	23	3	3	1	0	30	32.8
08:30 - 08:45	0	0	4	0	0	0	0	4	4.0	0	0	83	8	2	1	0	94	96.3	0	0	17	6	1	2	0	26	29.1
08:45 - 09:00	0	0	1	0	1	0	0	2	2.5	0	0	63	14	0	3	0	80	83.9	0	1	11	2	0	1	0	15	15.7
Hourly Total	**0**	**0**	**8**	**1**	**1**	**0**	**0**	**10**	**10.5**	**0**	**0**	**333**	**43**	**6**	**4**	**1**	**387**	**396.2**	**0**	**1**	**61**	**13**	**4**	**4**	**0**	**83**	**89.6**
09:00 - 09:15	0	0	1	0	0	0	0	1	1.0	0	0	53	8	2	3	0	66	70.9	0	0	12	5	1	0	0	18	18.5
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	1	43	11	1	1	0	57	58.2	0	0	8	3	0	0	0	11	11.0
09:30 - 09:45	0	0	3	0	0	0	0	3	3.0	0	0	34	6	1	1	0	42	43.8	0	0	9	1	0	0	0	10	10.0
09:45 - 10:00	0	0	4	0	0	0	0	4	4.0	0	0	38	5	1	2	0	46	49.1	0	0	6	3	1	0	0	10	10.5
Hourly Total	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**8**	**8.0**	**0**	**1**	**168**	**30**	**5**	**7**	**0**	**211**	**222.0**	**0**	**0**	**35**	**12**	**2**	**0**	**0**	**49**	**50.0**
TOTAL	**0**	**0**	**20**	**1**	**1**	**0**	**0**	**22**	**22.5**	**0**	**3**	**839**	**141**	**22**	**13**	**2**	**1020**	**1048.1**	**0**	**1**	**149**	**46**	**10**	**6**	**0**	**212**	**224.2**
16:00 - 16:15	0	0	1	1	0	0	0	2	2.0	0	0	35	12	1	0	0	48	48.5	0	0	7	2	1	0	0	10	10.5
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	0	38	13	1	0	0	52	52.5	0	0	7	4	2	0	0	13	14.0
16:30 - 16:45	0	0	0	0	1	0	0	1	1.5	0	0	36	12	1	0	0	49	49.5	0	0	10	5	0	0	0	15	15.0
16:45 - 17:00	0	0	0	1	0	0	0	1	1.0	0	1	35	15	0	0	0	51	50.4	0	0	12	3	0	0	0	15	15.0
Hourly Total	**0**	**0**	**1**	**2**	**1**	**0**	**0**	**4**	**4.5**	**0**	**1**	**144**	**52**	**3**	**0**	**0**	**200**	**200.9**	**0**	**0**	**36**	**14**	**3**	**0**	**0**	**53**	**54.5**
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	1	0	59	5	0	0	3	68	70.2	0	0	9	2	0	0	0	11	11.0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	1	44	9	0	0	0	54	53.4	0	0	14	1	0	0	0	15	15.0
17:30 - 17:45	0	0	3	1	0	0	0	4	4.0	0	0	53	4	0	0	0	57	57.0	0	0	14	1	0	0	0	15	15.0
17:45 - 18:00	0	0	4	0	0	0	0	4	4.0	0	0	49	6	0	0	0	55	55.0	0	0	10	2	0	0	1	13	14.0
Hourly Total	**0**	**0**	**7**	**1**	**0**	**0**	**0**	**8**	**8.0**	**1**	**1**	**205**	**24**	**0**	**0**	**3**	**234**	**235.6**	**0**	**0**	**47**	**6**	**0**	**0**	**1**	**54**	**55.0**
18:00 - 18:15	0	0	2	0	0	0	0	2	2.0	0	0	33	7	1	0	0	41	41.5	0	0	8	1	0	1	0	10	11.3
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	29	5	0	0	0	34	34.0	0	0	8	0	0	0	0	8	8.0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	35	5	0	0	0	40	40.0	0	0	15	3	1	0	0	19	19.5
18:45 - 19:00	0	0	1	0	0	0	0	1	1.0	0	0	29	0	0	0	1	30	31.0	0	0	5	2	1	0	0	8	8.5
Hourly Total	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**	**0**	**0**	**126**	**17**	**1**	**0**	**1**	**145**	**146.5**	**0**	**0**	**36**	**6**	**2**	**1**	**0**	**45**	**47.3**
TOTAL	**0**	**0**	**11**	**3**	**1**	**0**	**0**	**15**	**15.5**	**1**	**2**	**475**	**93**	**4**	**0**	**4**	**579**	**583.0**	**0**	**0**	**119**	**26**	**5**	**1**	**1**	**152**	**156.8**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 6
Approach: London Road East

	Left to A10 (S)									Ahead to A10 (W)									Right to London Road (N)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	2	0	0	0	0	2	2.0	0	0	0	1	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	1	1	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	6	0	1	0	0	7	7.5	0	0	2	0	0	0	0	2	2.0	0	0	4	1	0	0	0	5	5.0
Hourly Total	**0**	**0**	**9**	**1**	**1**	**0**	**0**	**11**	**11.5**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**3**	**3.0**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**6**	**6.0**
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	1	1.0
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	1	1.0
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**2.0**
TOTAL	**0**	**0**	**11**	**1**	**1**	**0**	**0**	**13**	**13.5**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**5**	**5.0**	**0**	**0**	**5**	**3**	**0**	**0**	**0**	**8**	**8.0**
16:00 - 16:15	0	0	2	1	0	0	0	3	3.0	0	0	4	0	0	0	0	4	4.0	0	0	10	0	0	0	0	10	10.0
16:15 - 16:30	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	1	1.0
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**4**	**4.0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**7**	**7.0**	**0**	**0**	**10**	**1**	**0**	**0**	**0**	**11**	**11.0**
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	1	1	0	0	0	2	2.0
17:30 - 17:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	1	1	0	0	0	2	2.0
17:45 - 18:00	0	0	1	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**3**	**3.5**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**4**	**4.0**
18:00 - 18:15	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**
TOTAL	**0**	**0**	**6**	**1**	**1**	**0**	**0**	**8**	**8.5**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**11**	**11.0**	**0**	**0**	**13**	**3**	**0**	**0**	**0**	**16**	**16.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 6
Approach: A10 South

	Left to A10 (W)									Ahead to London Road (N)									Right to London Road (E)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	96	28	8	4	2	138	149.2	0	1	14	5	1	1	1	23	25.2	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	108	38	6	1	0	153	157.3	0	0	18	12	0	0	0	30	30.0	0	0	1	0	0	0	0	1	1.0
07:30 - 07:45	0	1	108	39	7	2	0	157	162.5	0	0	27	13	3	0	0	43	44.5	0	0	1	0	0	0	0	1	1.0
07:45 - 08:00	0	0	116	40	6	5	0	167	176.5	0	0	41	13	4	0	1	59	62.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**1**	**428**	**145**	**27**	**12**	**2**	**615**	**645.5**	**0**	**1**	**100**	**43**	**8**	**1**	**2**	**155**	**161.7**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**
08:00 - 08:15	0	0	111	35	5	3	2	156	164.4	0	0	34	8	3	1	1	47	50.8	0	0	0	1	0	0	0	1	1.0
08:15 - 08:30	0	0	138	33	5	4	0	180	187.7	0	0	39	13	1	1	1	55	57.8	0	0	2	0	0	0	0	2	2.0
08:30 - 08:45	0	1	139	26	4	5	1	176	184.9	0	0	43	8	2	4	0	57	63.2	0	0	5	0	0	0	0	5	5.0
08:45 - 09:00	0	0	101	18	8	7	0	134	147.1	0	1	37	9	1	0	1	49	49.9	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**1**	**489**	**112**	**22**	**19**	**3**	**646**	**684.1**	**0**	**1**	**153**	**38**	**7**	**6**	**3**	**208**	**221.7**	**0**	**0**	**8**	**1**	**0**	**0**	**0**	**9**	**9.0**
09:00 - 09:15	0	0	70	18	12	3	0	103	112.9	0	0	43	11	2	1	1	58	61.3	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	80	18	9	6	0	113	125.3	1	0	31	8	0	1	0	41	41.5	0	0	0	1	0	0	0	1	1.0
09:30 - 09:45	0	1	70	12	9	4	1	97	107.1	0	0	24	8	4	1	1	38	42.3	0	0	1	0	0	0	0	1	1.0
09:45 - 10:00	0	1	65	18	5	3	0	92	97.8	0	0	37	11	0	1	1	50	52.3	0	0	2	0	0	0	0	2	2.0
Hourly Total	**0**	**2**	**285**	**66**	**35**	**16**	**1**	**405**	**443.1**	**1**	**0**	**135**	**38**	**6**	**4**	**3**	**187**	**197.4**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**4**	**4.0**
TOTAL	**0**	**4**	**1202**	**323**	**84**	**47**	**6**	**1666**	**1772.7**	**1**	**2**	**388**	**119**	**21**	**11**	**8**	**550**	**580.8**	**0**	**0**	**13**	**2**	**0**	**0**	**0**	**15**	**15.0**
16:00 - 16:15	0	1	118	45	7	2	0	173	178.5	0	0	67	21	1	1	0	90	91.8	0	0	0	0	0	0	0	0	0.0
16:15 - 16:30	0	1	148	53	2	4	0	208	213.6	0	0	52	10	1	0	1	64	65.5	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	134	49	4	1	0	188	191.3	0	0	85	17	0	0	0	102	102.0	0	0	1	0	0	0	0	1	1.0
16:45 - 17:00	0	2	127	32	1	3	0	165	168.2	0	1	72	17	0	0	0	90	89.4	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**4**	**527**	**179**	**14**	**10**	**0**	**734**	**751.6**	**0**	**1**	**276**	**65**	**2**	**1**	**1**	**346**	**348.7**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**
17:00 - 17:15	0	5	149	48	4	2	0	208	209.6	0	2	77	14	0	0	0	93	91.8	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	2	191	39	6	1	0	239	242.1	0	1	98	12	0	0	0	111	110.4	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	161	31	4	0	1	197	200.0	0	1	94	16	1	0	1	113	113.9	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	161	24	3	2	1	191	196.1	0	0	100	19	1	1	0	121	122.8	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**7**	**662**	**142**	**17**	**5**	**2**	**835**	**847.8**	**0**	**4**	**369**	**61**	**2**	**1**	**1**	**438**	**438.9**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**
18:00 - 18:15	0	0	144	19	0	2	0	165	167.6	0	0	80	7	0	0	0	87	87.0	0	0	1	0	0	0	0	1	1.0
18:15 - 18:30	0	1	122	16	3	1	0	143	145.2	0	0	89	7	1	0	0	97	97.5	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	0	77	12	1	0	1	91	92.5	0	0	66	7	3	0	1	77	79.5	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	82	12	1	0	0	95	95.5	0	0	43	5	1	0	0	49	49.5	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**1**	**425**	**59**	**5**	**3**	**1**	**494**	**500.8**	**0**	**0**	**278**	**26**	**5**	**0**	**1**	**310**	**313.5**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**
TOTAL	**0**	**12**	**1614**	**380**	**36**	**18**	**3**	**2063**	**2100.2**	**0**	**5**	**923**	**152**	**9**	**2**	**3**	**1094**	**1101.1**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**4**	**4.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Buntingford
Tuesday 3rd October 2023
Junction: 6
Approach: A10 West

	Left to London Road (N)									Ahead to London Road (E)									Right to A10 (S)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	2	4	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0	0	0	126	44	7	0	0	177	180.5
07:15 - 07:30	0	0	3	1	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0.0	0	3	155	50	8	2	0	218	222.8
07:30 - 07:45	0	0	8	1	0	0	0	9	9.0	0	0	1	0	0	0	0	1	1.0	0	2	167	52	5	6	1	233	243.1
07:45 - 08:00	0	0	11	4	2	0	0	17	18.0	0	0	0	0	0	0	0	0	0.0	0	1	162	44	7	1	0	215	219.2
Hourly Total	**0**	**0**	**24**	**10**	**3**	**0**	**0**	**37**	**38.5**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**6**	**610**	**190**	**27**	**9**	**1**	**843**	**865.6**
08:00 - 08:15	0	0	7	4	0	0	0	11	11.0	0	0	2	0	0	0	0	2	2.0	0	0	145	47	6	1	0	199	203.3
08:15 - 08:30	0	0	7	0	1	2	0	10	13.1	0	0	0	0	0	0	0	0	0.0	0	0	180	37	12	2	0	231	239.6
08:30 - 08:45	0	0	5	3	1	0	1	10	11.5	0	0	1	1	0	0	0	2	2.0	0	0	147	26	9	4	1	187	197.7
08:45 - 09:00	0	0	12	4	1	1	0	18	19.8	0	0	0	0	0	0	0	0	0.0	0	1	134	30	10	5	0	180	190.9
Hourly Total	**0**	**0**	**31**	**11**	**3**	**3**	**1**	**49**	**55.4**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**4**	**4.0**	**0**	**1**	**606**	**140**	**37**	**12**	**1**	**797**	**831.5**
09:00 - 09:15	0	0	11	0	1	1	0	13	14.8	0	0	0	1	0	0	0	1	1.0	0	0	92	27	10	5	2	136	149.5
09:15 - 09:30	0	0	7	3	1	1	0	12	13.8	0	0	0	1	0	0	0	1	1.0	0	0	86	27	11	9	0	133	150.2
09:30 - 09:45	0	0	3	1	0	0	0	4	4.0	0	0	1	0	0	0	0	1	1.0	0	1	74	17	8	5	0	105	114.9
09:45 - 10:00	0	0	7	2	0	0	0	9	9.0	0	0	3	0	0	0	0	3	3.0	0	0	66	14	10	1	0	91	97.3
Hourly Total	**0**	**0**	**28**	**6**	**2**	**2**	**0**	**38**	**41.6**	**0**	**0**	**4**	**2**	**0**	**0**	**0**	**6**	**6.0**	**0**	**1**	**318**	**85**	**39**	**20**	**2**	**465**	**511.9**
TOTAL	**0**	**0**	**83**	**27**	**8**	**5**	**1**	**124**	**135.5**	**0**	**0**	**8**	**3**	**0**	**0**	**0**	**11**	**11.0**	**0**	**8**	**1534**	**415**	**103**	**41**	**4**	**2105**	**2209.0**
16:00 - 16:15	0	0	9	0	0	0	0	9	9.0	0	0	0	0	0	0	0	0	0.0	0	1	85	26	8	1	0	121	125.7
16:15 - 16:30	0	0	5	3	0	0	0	8	8.0	0	0	0	0	0	0	0	0	0.0	0	1	108	21	4	0	0	134	135.4
16:30 - 16:45	0	0	8	2	1	0	0	11	11.5	0	0	0	0	0	0	0	0	0.0	0	1	110	26	5	2	0	144	148.5
16:45 - 17:00	0	0	13	6	0	0	0	19	19.0	0	0	0	0	0	0	0	0	0.0	0	1	88	18	0	1	0	108	108.7
Hourly Total	**0**	**0**	**35**	**11**	**1**	**0**	**0**	**47**	**47.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**4**	**391**	**91**	**17**	**4**	**0**	**507**	**518.3**
17:00 - 17:15	0	0	15	1	0	0	0	16	16.0	0	0	0	0	0	0	0	0	0.0	0	1	127	17	0	2	0	147	149.0
17:15 - 17:30	0	0	14	4	0	0	0	18	18.0	0	0	1	1	0	0	0	2	2.0	0	1	119	24	0	0	0	144	143.4
17:30 - 17:45	0	0	7	3	0	0	0	10	10.0	0	0	0	0	0	0	0	0	0.0	0	1	131	28	3	1	0	164	166.2
17:45 - 18:00	0	0	19	1	0	0	0	20	20.0	0	0	0	0	0	0	0	0	0.0	0	0	129	6	0	1	0	136	137.3
Hourly Total	**0**	**0**	**55**	**9**	**0**	**0**	**0**	**64**	**64.0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**2.0**	**0**	**3**	**506**	**75**	**3**	**4**	**0**	**591**	**595.9**
18:00 - 18:15	0	0	9	1	0	1	0	11	12.3	0	0	0	0	0	0	0	0	0.0	0	1	95	13	1	2	0	112	114.5
18:15 - 18:30	0	0	4	1	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0	0	1	97	14	0	1	0	113	113.7
18:30 - 18:45	0	0	6	2	0	0	0	8	8.0	0	0	0	0	0	0	0	0	0.0	0	0	81	10	0	1	0	92	93.3
18:45 - 19:00	0	0	5	2	2	0	0	9	10.0	0	0	0	0	0	0	0	0	0.0	0	0	70	7	1	1	0	79	80.8
Hourly Total	**0**	**0**	**24**	**6**	**2**	**1**	**0**	**33**	**35.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**2**	**343**	**44**	**2**	**5**	**0**	**396**	**402.3**
TOTAL	**0**	**0**	**114**	**26**	**3**	**1**	**0**	**144**	**146.8**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**2.0**	**0**	**9**	**1240**	**210**	**22**	**13**	**0**	**1494**	**1516.5**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

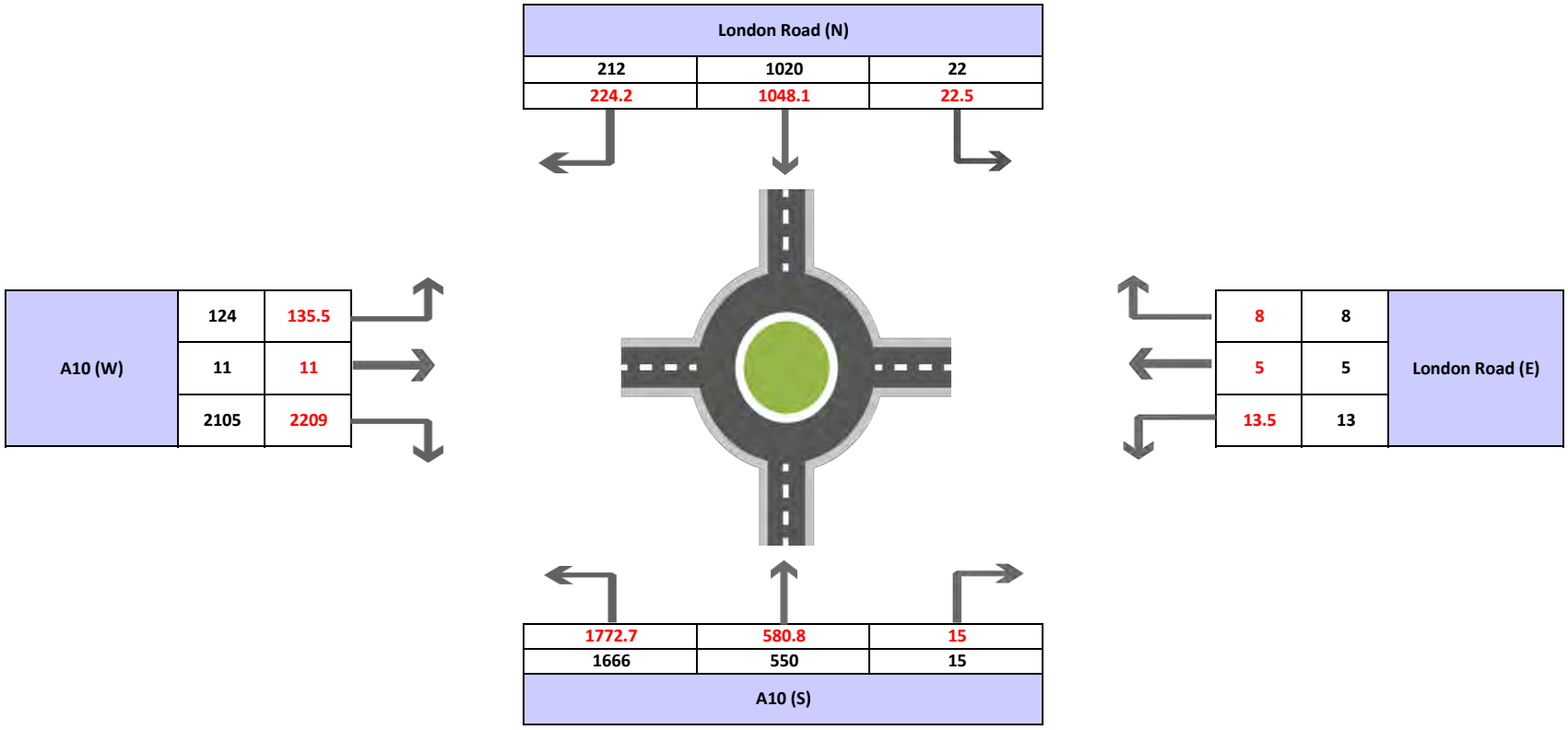
From: 1) 07:00 Show Peak Hour: ☐

To: 1) 10:00 Show PCUs: ☑

Class: All Vehicles Show Session 2

Tuesday 3rd October 2023

PCUs



Appendix C: Land Use Components Plan

- Site Boundary
- Other Land in Applicant's Control
- Employment
- Informal Open Space
- Proposed Structural Planting
- Infrastructure
- Existing Vegetation
- 'Buntingford Park'
- SuDS (Indicative)
- Indicative Structural Streets
- Access
- Potential Foul Water Pumping Station

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Client: Hallam Land Management

Land West of Buntingford

Land Use Components Plan (South of Baldock Road)

Scale@ A3 :	Drawn:	Designed:	Approved:
1:2,500	ADW	SJP	SJP

0m — 100m

Drawing Number:	Revision:	Date:
HLM082/019	E	10.06.24

50 North Thirteenth Street, Central Milton Keynes, MK9 3BP
01908 666276 mail@davidlock.com **davidlock.com**

DAVID LOCK ASSOCIATES

Appendix D: Proposed Site Access Layout

Southern Access Arrangements (1:1000)



Village Gateway Feature

Dragon's Teeth Arrangement at the Entrance

Zebra Crossing

Bus Lay-by

Bus Lay-by

Parallel Crossing

Raised Crossing

Dragon's Teeth Arrangement at the Entrance from the Roundabout

Toucan Crossings

Dragon's Teeth Arrangement at the Entrance from the Roundabout

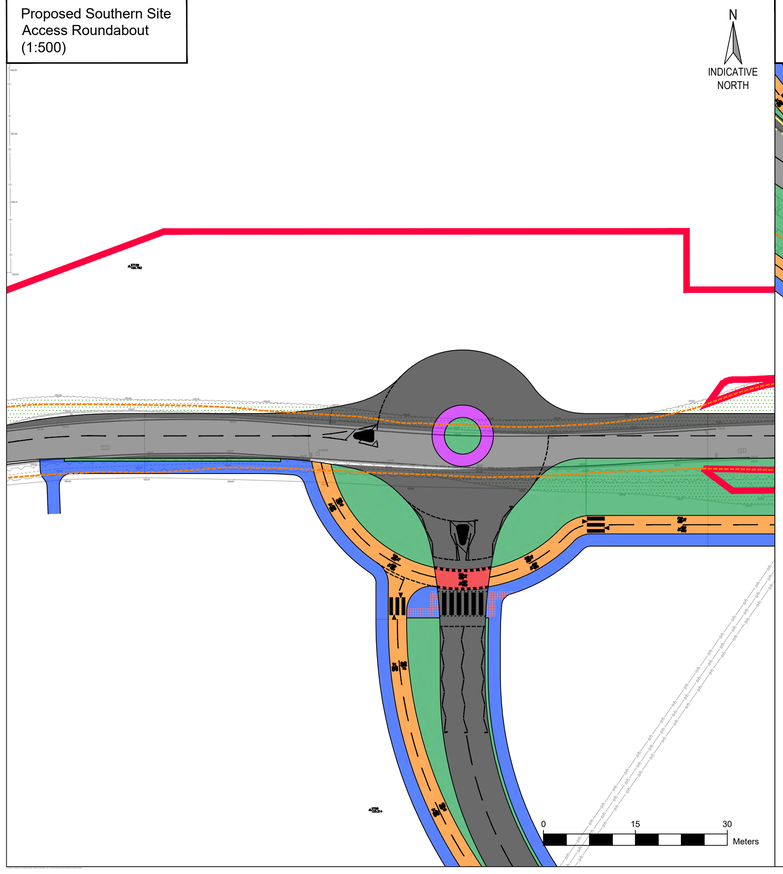
N
INDICATIVE NORTH

0 30 60 Meters

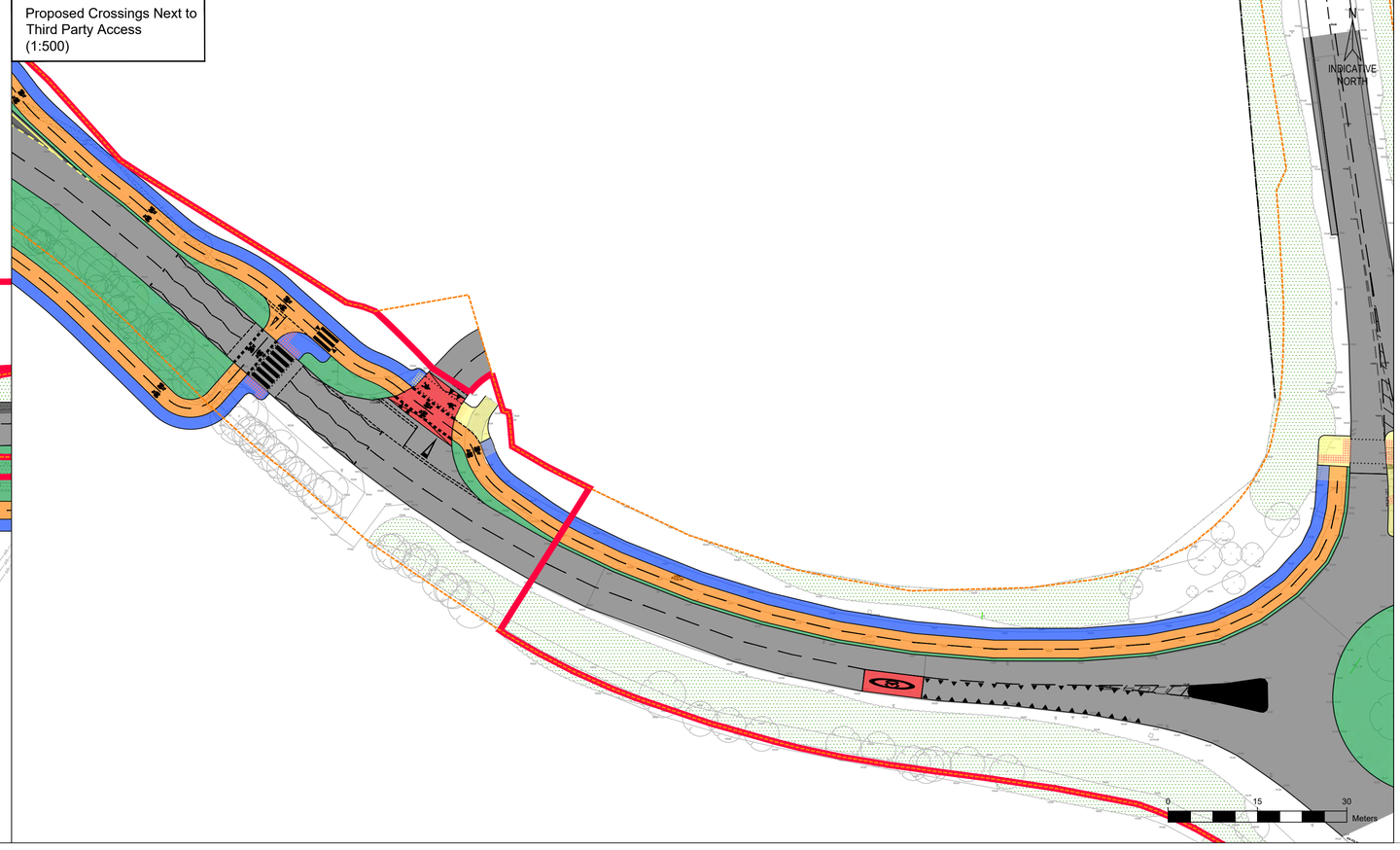
LEGEND

- Site Boundary
- Highway Boundary
- Proposed Carriageway
- Existing Carriageway
- Proposed Cycleway
- Proposed Pedestrian Path / Footway
- Proposed Shared Pedestrian and Cyclist Path
- Existing Shared Pedestrian and Cyclist Path
- Verge
- Coloured Surface Treatment
- Overrun Area

Proposed Southern Site Access Roundabout (1:500)



Proposed Crossings Next to Third Party Access (1:500)



Rev	Date	Description	By	Apvd
P2	12.06.24	Updated RLB	BT	RM
P1	21.02.24	Preliminary issue	JF	JD

PROJECT:
BUNTINGFORD

TITLE:
PROPOSED SITE ACCESS ARRANGEMENTS

CLIENT:
HALLAM LAND MANAGEMENT LTD

SCALE@A1:
Please Refer to the Drawing

PROJECT REF: 23161
STATUS: N/A
DRAWING No: 0010
REV: P2

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

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Appendix E: Proposed Highway Improvements for Combined Employment Led and Residential Led Applications

Southern Access Arrangements (1:1000)



Village Gateway Feature

Zebra Crossing

Zebra Crossing

Zebra Crossing

Parallel Crossing

Bus Lay-by

Bus Lay-by

Parallel Crossing

Raised Crossing

Dragon's Teeth Arrangement at the Entrance

Dragon's Teeth Arrangement at the Entrance from the Roundabout

Dragon's Teeth Arrangement at the Entrance from the Roundabout

Toucan Crossings

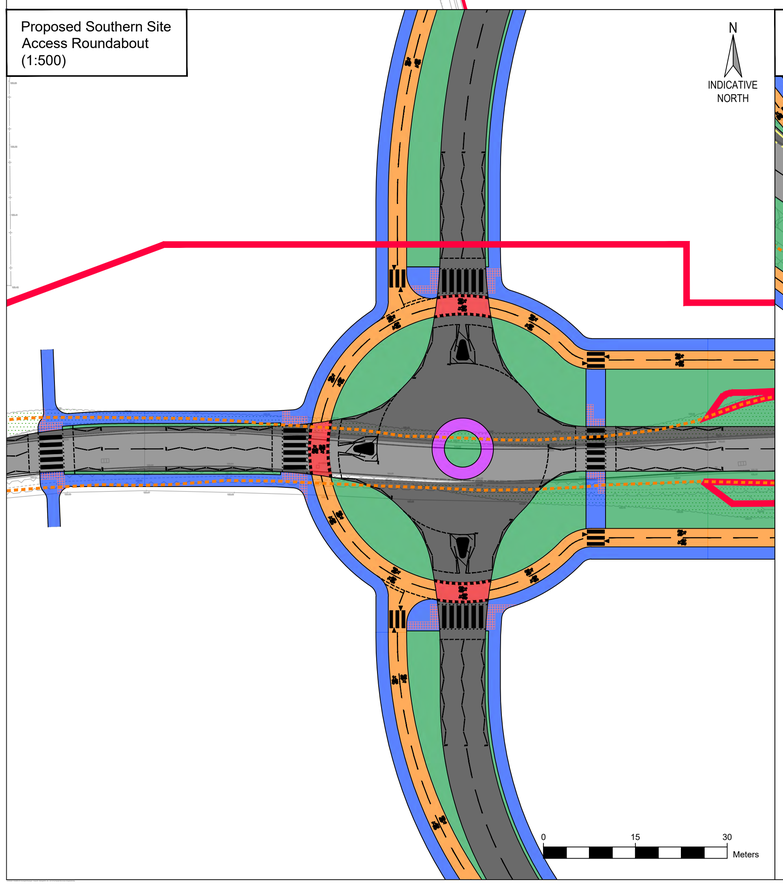
N
INDICATIVE NORTH

0 30 60 Meters

LEGEND

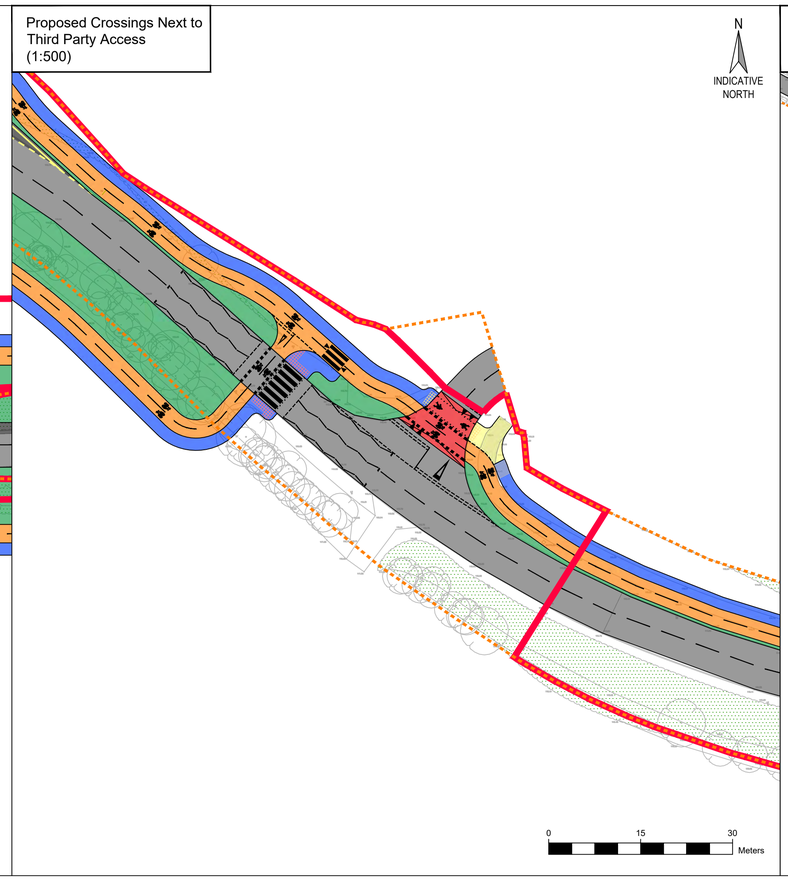
- Site Boundary
- Highway Boundary
- Proposed Carriageway
- Existing Carriageway
- Proposed Cycleway
- Proposed Pedestrian Path / Footway
- Proposed Shared Pedestrian and Cyclist Path
- Existing Shared Pedestrian and Cyclist Path
- Verge
- Coloured Surface Treatment
- Overrun Area

Proposed Southern Site Access Roundabout (1:500)



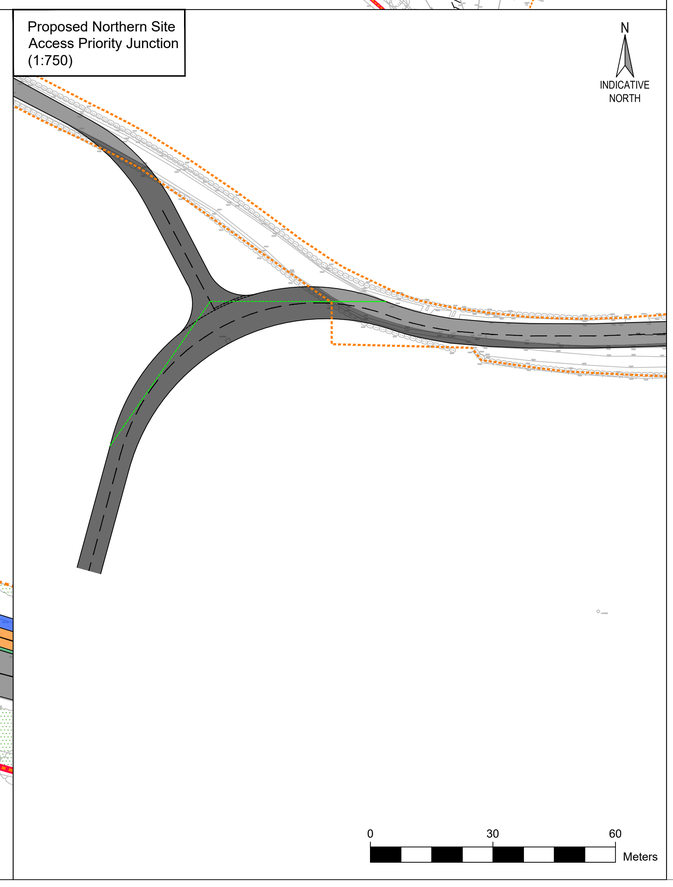
0 15 30 Meters

Proposed Crossings Next to Third Party Access (1:500)



0 15 30 Meters

Proposed Northern Site Access Priority Junction (1:750)



0 30 60 Meters

Rev	Date	Description	By	Apvd
P14	12.06.24	RLB Amendments	BT	RM
P13	14.05.24	RLB Amendments	AB	RM
P12	08.04.24	RLB Amendments	BT	RM
P11	25.03.24	RLB Amendments	BT	RM
P10	26.02.24	RLB Amendments	JF	MG
P9	21.02.24	RLB Amendments	JF	MG
P8	19.02.24	RLB Amendments	JF	MG
P7	17.02.24	RLB Amendments	JF	MG
P6	14.02.24	Amendments	MK	MG
P5	09.02.24	Amendments	MK	MG
P4	30.01.24	Amendments	MK	MG
P3	11.07.23	Added 3rd Site Access	MK	MG
P2	14.04.23	Minor Amendments	MK	MG
P1	27.03.23	Preliminary issue	MK	MG

PROJECT:
BUNTINGFORD

TITLE:
PROPOSED SITE ACCESS ARRANGEMENTS

CLIENT:
HALLAM LAND MANAGEMENT LTD

SCALE@A1:
Please Refer to the Drawing

PROJECT REF: 23161
STATUS: N/A
DRAWING No: 0001
REV: P14

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

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Appendix F: Proposed Off-Site Highway Improvements (B1038 Baldock Road)





KEY

- Highway Boundary
- Proposed Carriageway
- Existing Carriageway
- Proposed Coloured Surface Treatment
- Proposed Shared Pedestrian and Cyclist Path Extension
- Existing Footway
- Proposed Cycle Path
- Proposed Footway
- Verge

Rev	Date	Description	By	Apvd
P1	17.07.23	Preliminary issue	MK	MG

PROJECT:
BUNTINGFORD

TITLE:
ACTIVE TRAVEL CONNECTION TO BUNTINGFORD VILLAGE CENTRE

CLIENT:
HALLAM LAND MANAGEMENT

SCALE@A1:
Refer to the Drawing

PROJECT REF:
23161

DRAWING No:
003

REV:
P1

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

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Appendix G: Full TRICS Outputs

Calculation Reference: AUDIT-829401-231027-1046

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : B - BUSINESS PARK
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	2 days
03	SOUTH WEST		
	DV	DEVON	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
10	WALES		
	CF	CARDIFF	3 days
11	SCOTLAND		
	AD	ABERDEEN CITY	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 132084 (units: sqm)
Range Selected by User:	975 to 132084 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/15 to 13/12/19

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	3 days
Thursday	2 days
Friday	4 days

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

Selected survey types:

Manual count	11 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	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:

Industrial Zone	5
Commercial Zone	2
Development Zone	1
Out of Town	1
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	6 days - Selected
Servicing vehicles Excluded	5 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	11 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	2 days
10,001 to 15,000	5 days
15,001 to 20,000	3 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	6 days
250,001 to 500,000	3 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	5 days
1.1 to 1.5	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	1 days
No	10 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	11 days

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

LIST OF SITES relevant to selection parameters

1 AD-02-B-02 BUSINESS PARK ABERDEEN CITY
CRAIGSHAW DRIVE
ABERDEEN
EAST TULLOS IND. ESTATE
Edge of Town
Industrial Zone
Total Gross floor area: 7925 sqm
Survey date: THURSDAY 21/11/19 Survey Type: MANUAL

2 CA-02-B-03 SCIENCE PARK CAMBRIDGESHIRE
MILTON ROAD
CAMBRIDGE

Edge of Town
No Sub Category
Total Gross floor area: 142687 sqm
Survey date: FRIDAY 06/10/17 Survey Type: MANUAL

3 CF-02-B-04 BUSINESS PARK CARDIFF
RHYMNEY RIVER BRIDGE RD
CARDIFF

Edge of Town
Development Zone
Total Gross floor area: 5300 sqm
Survey date: FRIDAY 05/05/17 Survey Type: MANUAL

4 CF-02-B-06 BUSINESS PARK CARDIFF
MALTHOUSE AVENUE
CARDIFF
PONTPRENNAU
Edge of Town
No Sub Category
Total Gross floor area: 1642 sqm
Survey date: MONDAY 12/03/18 Survey Type: MANUAL

5 CF-02-B-07 BUSINESS PARK CARDIFF
MALTHOUSE AVENUE
CARDIFF
PONTPRENNAU
Edge of Town
Commercial Zone
Total Gross floor area: 15930 sqm
Survey date: TUESDAY 13/03/18 Survey Type: MANUAL

6 DV-02-B-01 BUSINESS PARK DEVON
MANATON CLOSE
EXETER
MATFORD BUSINESS PARK
Edge of Town
Commercial Zone
Total Gross floor area: 1500 sqm
Survey date: WEDNESDAY 05/07/17 Survey Type: MANUAL

7 EX-02-B-01 BUSINESS PARK ESSEX
BRUNEL COURT
COLCHESTER
SEVERALLS INDUSTRIAL PK
Edge of Town
Industrial Zone
Total Gross floor area: 2900 sqm
Survey date: FRIDAY 18/05/18 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	EX-02-B-02 WYNCOLLS ROAD COLCHESTER SEVERALLS INDUSTRIAL PK Edge of Town Industrial Zone	BUSINESS PARK		ESSEX
	Total Gross floor area:		4083 sqm	
	Survey date: FRIDAY		*18/05/18*	*Survey Type: MANUAL*
9	LN-02-B-02 CARDINAL CLOSE LINCOLN Edge of Town Industrial Zone	BUSINESS PARK		LINCOLNSHIRE
	Total Gross floor area:		5000 sqm	
	Survey date: THURSDAY		*25/06/15*	*Survey Type: MANUAL*
10	ST-02-B-04 STONE ROAD STAFFORD Edge of Town Industrial Zone	BUSINESS PARK		STAFFORDSHIRE
	Total Gross floor area:		20760 sqm	
	Survey date: WEDNESDAY		*22/11/17*	*Survey Type: MANUAL*
11	WK-02-B-01 GALLOWS HILL WARWICK Edge of Town Out of Town	BUSINESS/TECH. PARK		WARWICKSHIRE
	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): 1.57

	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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	11	22925	0.315	11	22925	0.033	11	22925	0.348
07:30 - 08:00	11	22925	0.556	11	22925	0.061	11	22925	0.617
08:00 - 08:30	11	22925	0.671	11	22925	0.069	11	22925	0.740
08:30 - 09:00	11	22925	0.527	11	22925	0.070	11	22925	0.597
09:00 - 09:30	11	22925	0.319	11	22925	0.069	11	22925	0.388
09:30 - 10:00	11	22925	0.186	11	22925	0.062	11	22925	0.248
10:00 - 10:30	11	22925	0.087	11	22925	0.055	11	22925	0.142
10:30 - 11:00	11	22925	0.075	11	22925	0.052	11	22925	0.127
11:00 - 11:30	11	22925	0.069	11	22925	0.067	11	22925	0.136
11:30 - 12:00	11	22925	0.081	11	22925	0.084	11	22925	0.165
12:00 - 12:30	11	22925	0.092	11	22925	0.133	11	22925	0.225
12:30 - 13:00	11	22925	0.113	11	22925	0.118	11	22925	0.231
13:00 - 13:30	11	22925	0.126	11	22925	0.087	11	22925	0.213
13:30 - 14:00	11	22925	0.095	11	22925	0.081	11	22925	0.176
14:00 - 14:30	11	22925	0.069	11	22925	0.085	11	22925	0.154
14:30 - 15:00	11	22925	0.052	11	22925	0.121	11	22925	0.173
15:00 - 15:30	11	22925	0.048	11	22925	0.185	11	22925	0.233
15:30 - 16:00	11	22925	0.051	11	22925	0.231	11	22925	0.282
16:00 - 16:30	11	22925	0.046	11	22925	0.356	11	22925	0.402
16:30 - 17:00	11	22925	0.050	11	22925	0.369	11	22925	0.419
17:00 - 17:30	11	22925	0.049	11	22925	0.458	11	22925	0.507
17:30 - 18:00	11	22925	0.033	11	22925	0.414	11	22925	0.447
18:00 - 18:30	11	22925	0.032	11	22925	0.347	11	22925	0.379
18:30 - 19:00	11	22925	0.026	11	22925	0.263	11	22925	0.289
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			3.768			3.870			7.638

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 - 132084 (units: sqm)
Survey date date range:	01/01/15 - 13/12/19
Number of weekdays (Monday-Friday):	11
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 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	11	22925	0.017	11	22925	0.002	11	22925	0.019
07:30 - 08:00	11	22925	0.039	11	22925	0.006	11	22925	0.045
08:00 - 08:30	11	22925	0.064	11	22925	0.008	11	22925	0.072
08:30 - 09:00	11	22925	0.065	11	22925	0.006	11	22925	0.071
09:00 - 09:30	11	22925	0.046	11	22925	0.006	11	22925	0.052
09:30 - 10:00	11	22925	0.036	11	22925	0.008	11	22925	0.044
10:00 - 10:30	11	22925	0.016	11	22925	0.008	11	22925	0.024
10:30 - 11:00	11	22925	0.018	11	22925	0.006	11	22925	0.024
11:00 - 11:30	11	22925	0.009	11	22925	0.005	11	22925	0.014
11:30 - 12:00	11	22925	0.010	11	22925	0.008	11	22925	0.018
12:00 - 12:30	11	22925	0.012	11	22925	0.013	11	22925	0.025
12:30 - 13:00	11	22925	0.011	11	22925	0.013	11	22925	0.024
13:00 - 13:30	11	22925	0.014	11	22925	0.013	11	22925	0.027
13:30 - 14:00	11	22925	0.011	11	22925	0.009	11	22925	0.020
14:00 - 14:30	11	22925	0.008	11	22925	0.009	11	22925	0.017
14:30 - 15:00	11	22925	0.007	11	22925	0.012	11	22925	0.019
15:00 - 15:30	11	22925	0.012	11	22925	0.020	11	22925	0.032
15:30 - 16:00	11	22925	0.008	11	22925	0.017	11	22925	0.025
16:00 - 16:30	11	22925	0.009	11	22925	0.031	11	22925	0.040
16:30 - 17:00	11	22925	0.011	11	22925	0.042	11	22925	0.053
17:00 - 17:30	11	22925	0.010	11	22925	0.058	11	22925	0.068
17:30 - 18:00	11	22925	0.008	11	22925	0.046	11	22925	0.054
18:00 - 18:30	11	22925	0.010	11	22925	0.038	11	22925	0.048
18:30 - 19:00	11	22925	0.006	11	22925	0.025	11	22925	0.031
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.457			0.409			0.866

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 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	11	22925	0.349	11	22925	0.034	11	22925	0.383
07:30 - 08:00	11	22925	0.627	11	22925	0.073	11	22925	0.700
08:00 - 08:30	11	22925	0.746	11	22925	0.084	11	22925	0.830
08:30 - 09:00	11	22925	0.602	11	22925	0.086	11	22925	0.688
09:00 - 09:30	11	22925	0.380	11	22925	0.084	11	22925	0.464
09:30 - 10:00	11	22925	0.222	11	22925	0.079	11	22925	0.301
10:00 - 10:30	11	22925	0.116	11	22925	0.069	11	22925	0.185
10:30 - 11:00	11	22925	0.103	11	22925	0.064	11	22925	0.167
11:00 - 11:30	11	22925	0.098	11	22925	0.085	11	22925	0.183
11:30 - 12:00	11	22925	0.112	11	22925	0.105	11	22925	0.217
12:00 - 12:30	11	22925	0.123	11	22925	0.171	11	22925	0.294
12:30 - 13:00	11	22925	0.136	11	22925	0.149	11	22925	0.285
13:00 - 13:30	11	22925	0.157	11	22925	0.108	11	22925	0.265
13:30 - 14:00	11	22925	0.123	11	22925	0.107	11	22925	0.230
14:00 - 14:30	11	22925	0.090	11	22925	0.111	11	22925	0.201
14:30 - 15:00	11	22925	0.075	11	22925	0.157	11	22925	0.232
15:00 - 15:30	11	22925	0.067	11	22925	0.218	11	22925	0.285
15:30 - 16:00	11	22925	0.077	11	22925	0.274	11	22925	0.351
16:00 - 16:30	11	22925	0.062	11	22925	0.418	11	22925	0.480
16:30 - 17:00	11	22925	0.072	11	22925	0.449	11	22925	0.521
17:00 - 17:30	11	22925	0.068	11	22925	0.535	11	22925	0.603
17:30 - 18:00	11	22925	0.041	11	22925	0.477	11	22925	0.518
18:00 - 18:30	11	22925	0.042	11	22925	0.402	11	22925	0.444
18:30 - 19:00	11	22925	0.035	11	22925	0.301	11	22925	0.336
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			4.523			4.640			9.163

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	11	22925	0.019	11	22925	0.004	11	22925	0.023
07:30 - 08:00	11	22925	0.038	11	22925	0.006	11	22925	0.044
08:00 - 08:30	11	22925	0.065	11	22925	0.016	11	22925	0.081
08:30 - 09:00	11	22925	0.045	11	22925	0.010	11	22925	0.055
09:00 - 09:30	11	22925	0.034	11	22925	0.011	11	22925	0.045
09:30 - 10:00	11	22925	0.029	11	22925	0.011	11	22925	0.040
10:00 - 10:30	11	22925	0.021	11	22925	0.014	11	22925	0.035
10:30 - 11:00	11	22925	0.016	11	22925	0.012	11	22925	0.028
11:00 - 11:30	11	22925	0.014	11	22925	0.009	11	22925	0.023
11:30 - 12:00	11	22925	0.014	11	22925	0.021	11	22925	0.035
12:00 - 12:30	11	22925	0.040	11	22925	0.082	11	22925	0.122
12:30 - 13:00	11	22925	0.091	11	22925	0.077	11	22925	0.168
13:00 - 13:30	11	22925	0.065	11	22925	0.071	11	22925	0.136
13:30 - 14:00	11	22925	0.058	11	22925	0.037	11	22925	0.095
14:00 - 14:30	11	22925	0.032	11	22925	0.018	11	22925	0.050
14:30 - 15:00	11	22925	0.011	11	22925	0.015	11	22925	0.026
15:00 - 15:30	11	22925	0.014	11	22925	0.018	11	22925	0.032
15:30 - 16:00	11	22925	0.013	11	22925	0.019	11	22925	0.032
16:00 - 16:30	11	22925	0.017	11	22925	0.041	11	22925	0.058
16:30 - 17:00	11	22925	0.014	11	22925	0.039	11	22925	0.053
17:00 - 17:30	11	22925	0.017	11	22925	0.062	11	22925	0.079
17:30 - 18:00	11	22925	0.011	11	22925	0.055	11	22925	0.066
18:00 - 18:30	11	22925	0.008	11	22925	0.029	11	22925	0.037
18:30 - 19:00	11	22925	0.002	11	22925	0.018	11	22925	0.020
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.688			0.695			1.383

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 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	11	22925	0.010	11	22925	0.001	11	22925	0.011
07:30 - 08:00	11	22925	0.017	11	22925	0.001	11	22925	0.018
08:00 - 08:30	11	22925	0.036	11	22925	0.029	11	22925	0.065
08:30 - 09:00	11	22925	0.037	11	22925	0.007	11	22925	0.044
09:00 - 09:30	11	22925	0.023	11	22925	0.004	11	22925	0.027
09:30 - 10:00	11	22925	0.013	11	22925	0.002	11	22925	0.015
10:00 - 10:30	11	22925	0.005	11	22925	0.002	11	22925	0.007
10:30 - 11:00	11	22925	0.006	11	22925	0.002	11	22925	0.008
11:00 - 11:30	11	22925	0.006	11	22925	0.004	11	22925	0.010
11:30 - 12:00	11	22925	0.003	11	22925	0.011	11	22925	0.014
12:00 - 12:30	11	22925	0.006	11	22925	0.006	11	22925	0.012
12:30 - 13:00	11	22925	0.009	11	22925	0.004	11	22925	0.013
13:00 - 13:30	11	22925	0.006	11	22925	0.006	11	22925	0.012
13:30 - 14:00	11	22925	0.019	11	22925	0.006	11	22925	0.025
14:00 - 14:30	11	22925	0.003	11	22925	0.004	11	22925	0.007
14:30 - 15:00	11	22925	0.008	11	22925	0.007	11	22925	0.015
15:00 - 15:30	11	22925	0.001	11	22925	0.011	11	22925	0.012
15:30 - 16:00	11	22925	0.003	11	22925	0.005	11	22925	0.008
16:00 - 16:30	11	22925	0.002	11	22925	0.016	11	22925	0.018
16:30 - 17:00	11	22925	0.002	11	22925	0.019	11	22925	0.021
17:00 - 17:30	11	22925	0.003	11	22925	0.026	11	22925	0.029
17:30 - 18:00	11	22925	0.002	11	22925	0.032	11	22925	0.034
18:00 - 18:30	11	22925	0.002	11	22925	0.010	11	22925	0.012
18:30 - 19:00	11	22925	0.002	11	22925	0.010	11	22925	0.012
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.224			0.225			0.449

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/B - BUSINESS PARK
MULTI-MODAL COACH 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	11	22925	0.000	11	22925	0.000	11	22925	0.000
07:30 - 08:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
08:00 - 08:30	11	22925	0.000	11	22925	0.000	11	22925	0.000
08:30 - 09:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
09:00 - 09:30	11	22925	0.000	11	22925	0.000	11	22925	0.000
09:30 - 10:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
10:00 - 10:30	11	22925	0.000	11	22925	0.000	11	22925	0.000
10:30 - 11:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
11:00 - 11:30	11	22925	0.000	11	22925	0.000	11	22925	0.000
11:30 - 12:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
12:00 - 12:30	11	22925	0.000	11	22925	0.000	11	22925	0.000
12:30 - 13:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
13:00 - 13:30	11	22925	0.000	11	22925	0.000	11	22925	0.000
13:30 - 14:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
14:00 - 14:30	11	22925	0.000	11	22925	0.000	11	22925	0.000
14:30 - 15:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
15:00 - 15:30	11	22925	0.000	11	22925	0.000	11	22925	0.000
15:30 - 16:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
16:00 - 16:30	11	22925	0.000	11	22925	0.000	11	22925	0.000
16:30 - 17:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
17:00 - 17:30	11	22925	0.001	11	22925	0.000	11	22925	0.001
17:30 - 18:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
18:00 - 18:30	11	22925	0.000	11	22925	0.000	11	22925	0.000
18:30 - 19:00	11	22925	0.000	11	22925	0.000	11	22925	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.001			0.000			0.001

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

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

TRIP RATE for Land Use 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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	11	22925	0.012	11	22925	0.001	11	22925	0.013
07:30 - 08:00	11	22925	0.025	11	22925	0.001	11	22925	0.026
08:00 - 08:30	11	22925	0.048	11	22925	0.029	11	22925	0.077
08:30 - 09:00	11	22925	0.051	11	22925	0.007	11	22925	0.058
09:00 - 09:30	11	22925	0.033	11	22925	0.004	11	22925	0.037
09:30 - 10:00	11	22925	0.019	11	22925	0.002	11	22925	0.021
10:00 - 10:30	11	22925	0.008	11	22925	0.002	11	22925	0.010
10:30 - 11:00	11	22925	0.008	11	22925	0.002	11	22925	0.010
11:00 - 11:30	11	22925	0.006	11	22925	0.004	11	22925	0.010
11:30 - 12:00	11	22925	0.003	11	22925	0.011	11	22925	0.014
12:00 - 12:30	11	22925	0.008	11	22925	0.007	11	22925	0.015
12:30 - 13:00	11	22925	0.010	11	22925	0.006	11	22925	0.016
13:00 - 13:30	11	22925	0.006	11	22925	0.008	11	22925	0.014
13:30 - 14:00	11	22925	0.019	11	22925	0.006	11	22925	0.025
14:00 - 14:30	11	22925	0.003	11	22925	0.006	11	22925	0.009
14:30 - 15:00	11	22925	0.009	11	22925	0.008	11	22925	0.017
15:00 - 15:30	11	22925	0.001	11	22925	0.013	11	22925	0.014
15:30 - 16:00	11	22925	0.004	11	22925	0.007	11	22925	0.011
16:00 - 16:30	11	22925	0.003	11	22925	0.022	11	22925	0.025
16:30 - 17:00	11	22925	0.002	11	22925	0.029	11	22925	0.031
17:00 - 17:30	11	22925	0.004	11	22925	0.035	11	22925	0.039
17:30 - 18:00	11	22925	0.002	11	22925	0.040	11	22925	0.042
18:00 - 18:30	11	22925	0.002	11	22925	0.013	11	22925	0.015
18:30 - 19:00	11	22925	0.002	11	22925	0.011	11	22925	0.013
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.288			0.274			0.562

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.*

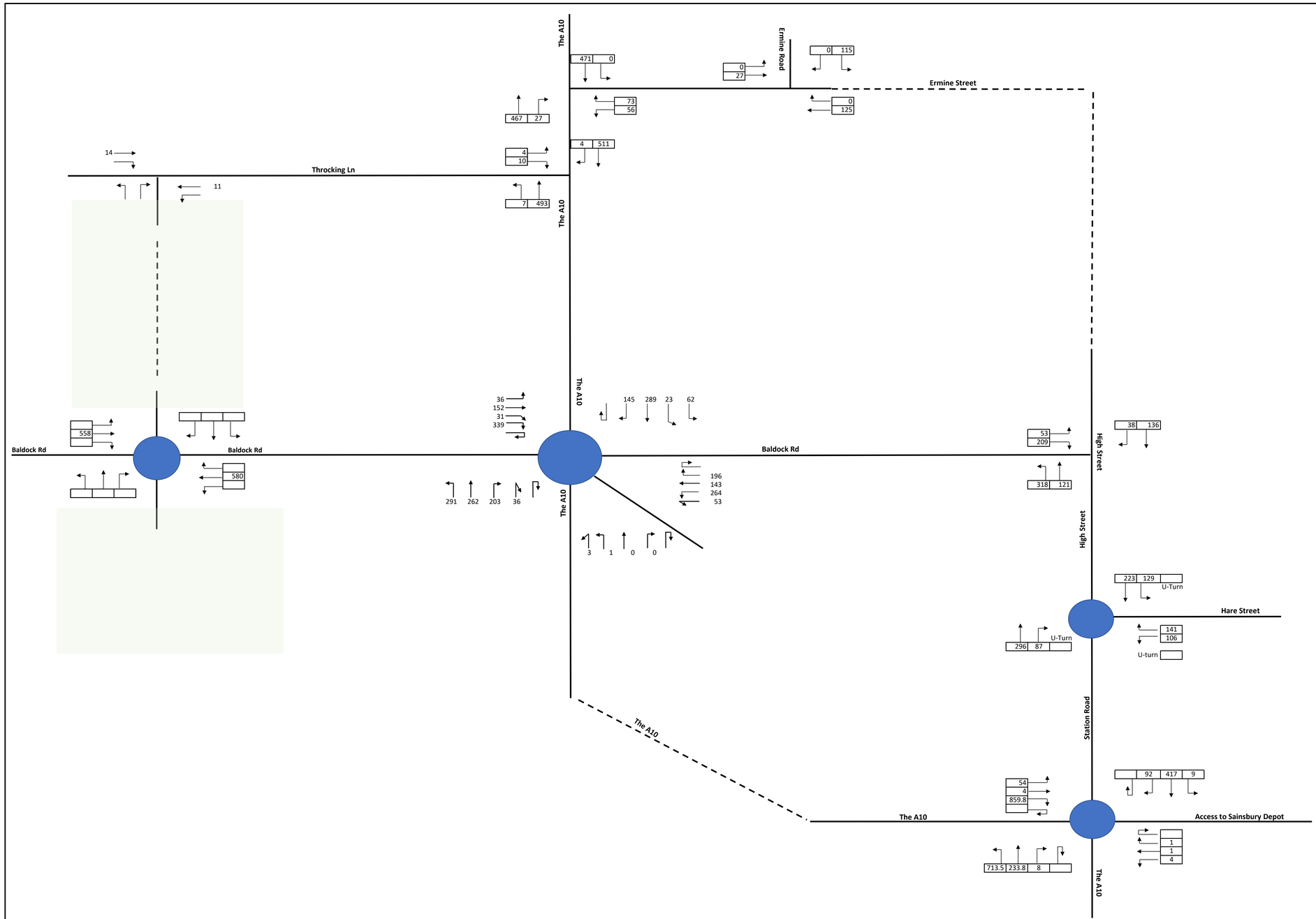
TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.57

	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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	11	22925	0.396	11	22925	0.042	11	22925	0.438
07:30 - 08:00	11	22925	0.730	11	22925	0.086	11	22925	0.816
08:00 - 08:30	11	22925	0.923	11	22925	0.136	11	22925	1.059
08:30 - 09:00	11	22925	0.763	11	22925	0.108	11	22925	0.871
09:00 - 09:30	11	22925	0.493	11	22925	0.105	11	22925	0.598
09:30 - 10:00	11	22925	0.306	11	22925	0.102	11	22925	0.408
10:00 - 10:30	11	22925	0.161	11	22925	0.093	11	22925	0.254
10:30 - 11:00	11	22925	0.145	11	22925	0.084	11	22925	0.229
11:00 - 11:30	11	22925	0.127	11	22925	0.103	11	22925	0.230
11:30 - 12:00	11	22925	0.139	11	22925	0.145	11	22925	0.284
12:00 - 12:30	11	22925	0.183	11	22925	0.272	11	22925	0.455
12:30 - 13:00	11	22925	0.248	11	22925	0.245	11	22925	0.493
13:00 - 13:30	11	22925	0.243	11	22925	0.200	11	22925	0.443
13:30 - 14:00	11	22925	0.211	11	22925	0.160	11	22925	0.371
14:00 - 14:30	11	22925	0.132	11	22925	0.144	11	22925	0.276
14:30 - 15:00	11	22925	0.102	11	22925	0.192	11	22925	0.294
15:00 - 15:30	11	22925	0.094	11	22925	0.268	11	22925	0.362
15:30 - 16:00	11	22925	0.102	11	22925	0.318	11	22925	0.420
16:00 - 16:30	11	22925	0.091	11	22925	0.513	11	22925	0.604
16:30 - 17:00	11	22925	0.100	11	22925	0.559	11	22925	0.659
17:00 - 17:30	11	22925	0.100	11	22925	0.690	11	22925	0.790
17:30 - 18:00	11	22925	0.061	11	22925	0.618	11	22925	0.679
18:00 - 18:30	11	22925	0.061	11	22925	0.481	11	22925	0.542
18:30 - 19:00	11	22925	0.045	11	22925	0.355	11	22925	0.400
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			5.956			6.019			11.975

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.

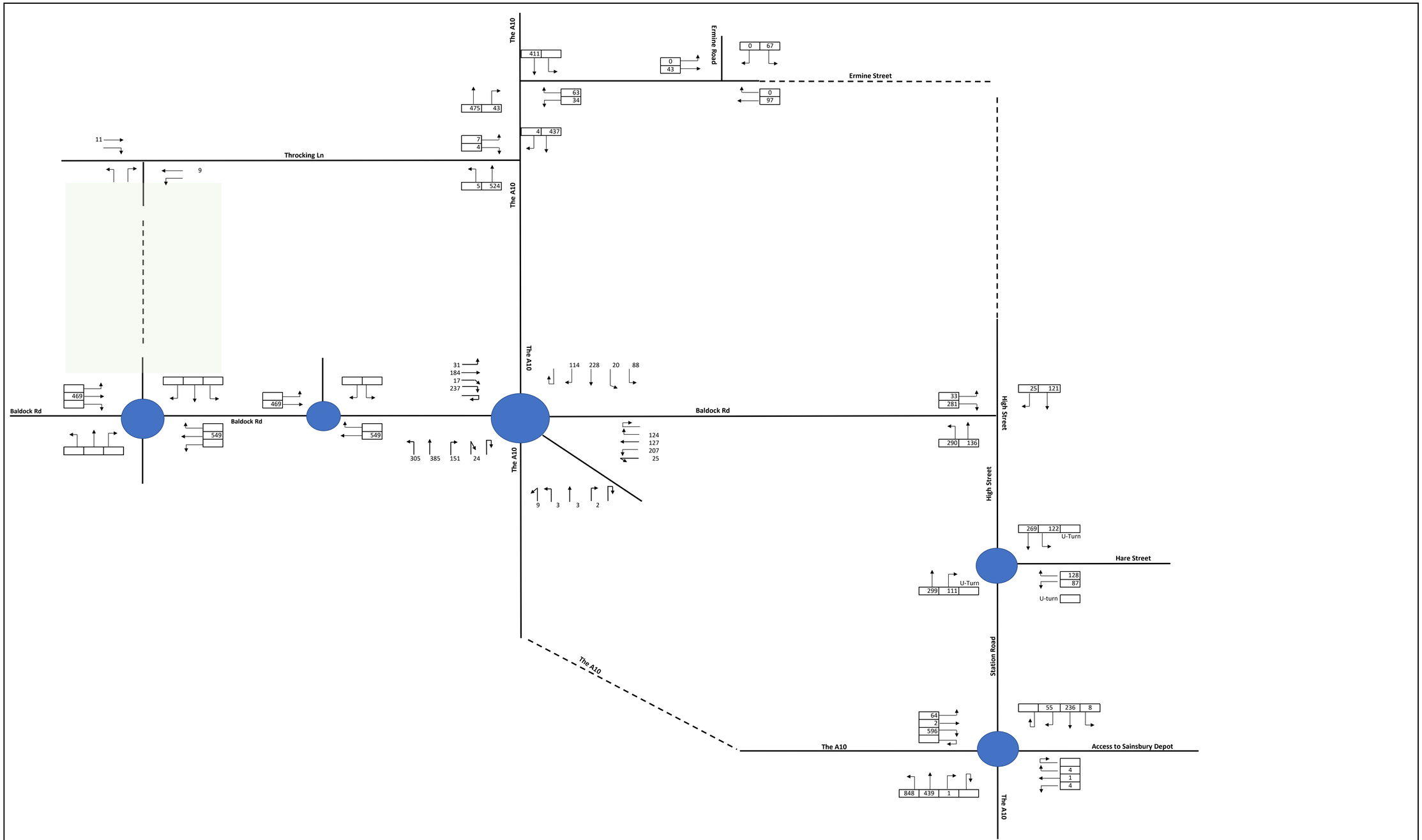
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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: Vehicle Traffic Diagrams



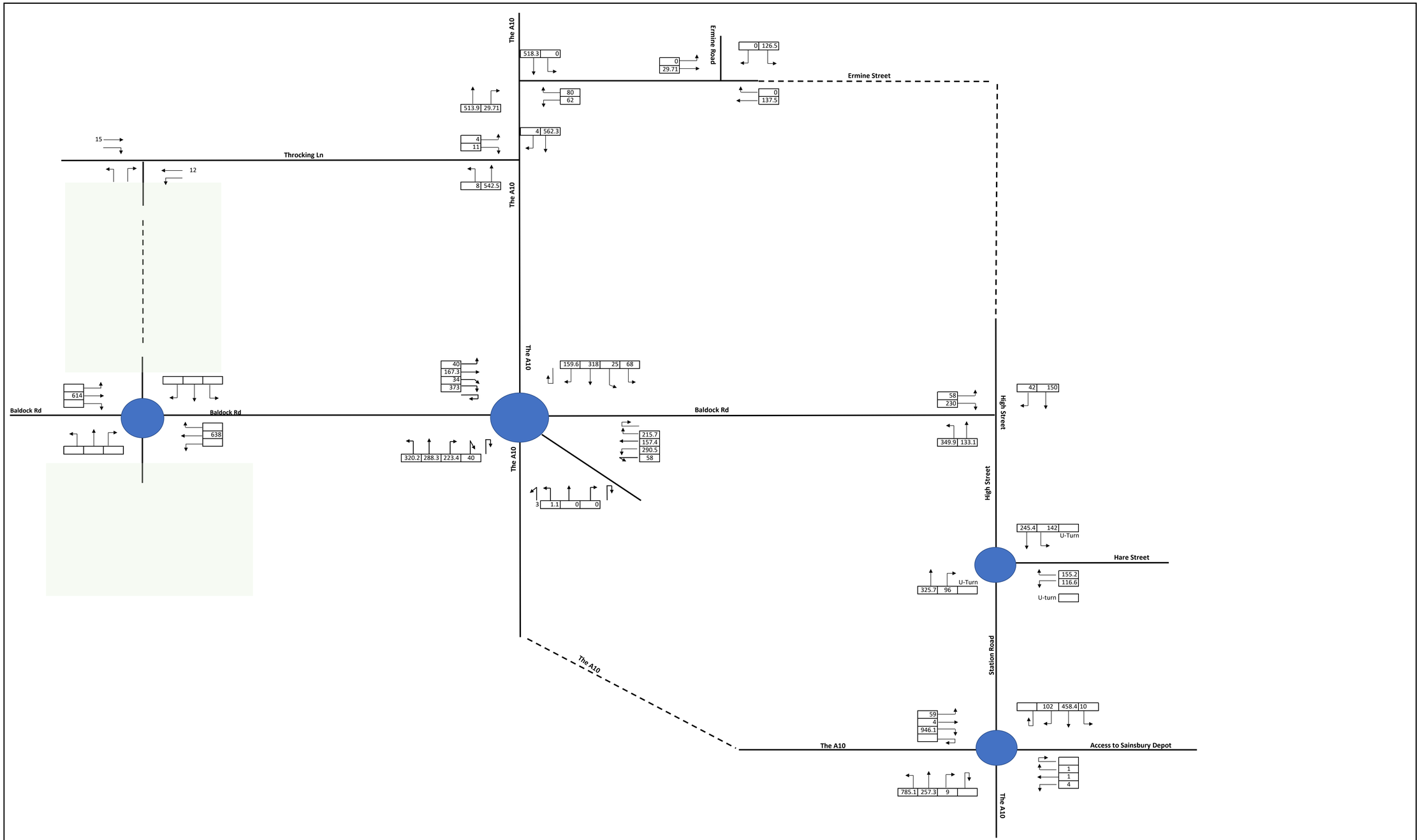
Notes:				Client	Hallam Land Management
Project No.	File name			Project	23161 - Buntingford
23161	Traffic Diagram_2035.xlsx				
Date	Drawn	Checked	Approved	Title	Year 2023 Baseline AM Peak 07:45 - 08:45
Oct 2023	SR	RM	MG		

Jubb
Alexander House
Excelsior Road
Western Avenue
Cardiff
CF14 3AT



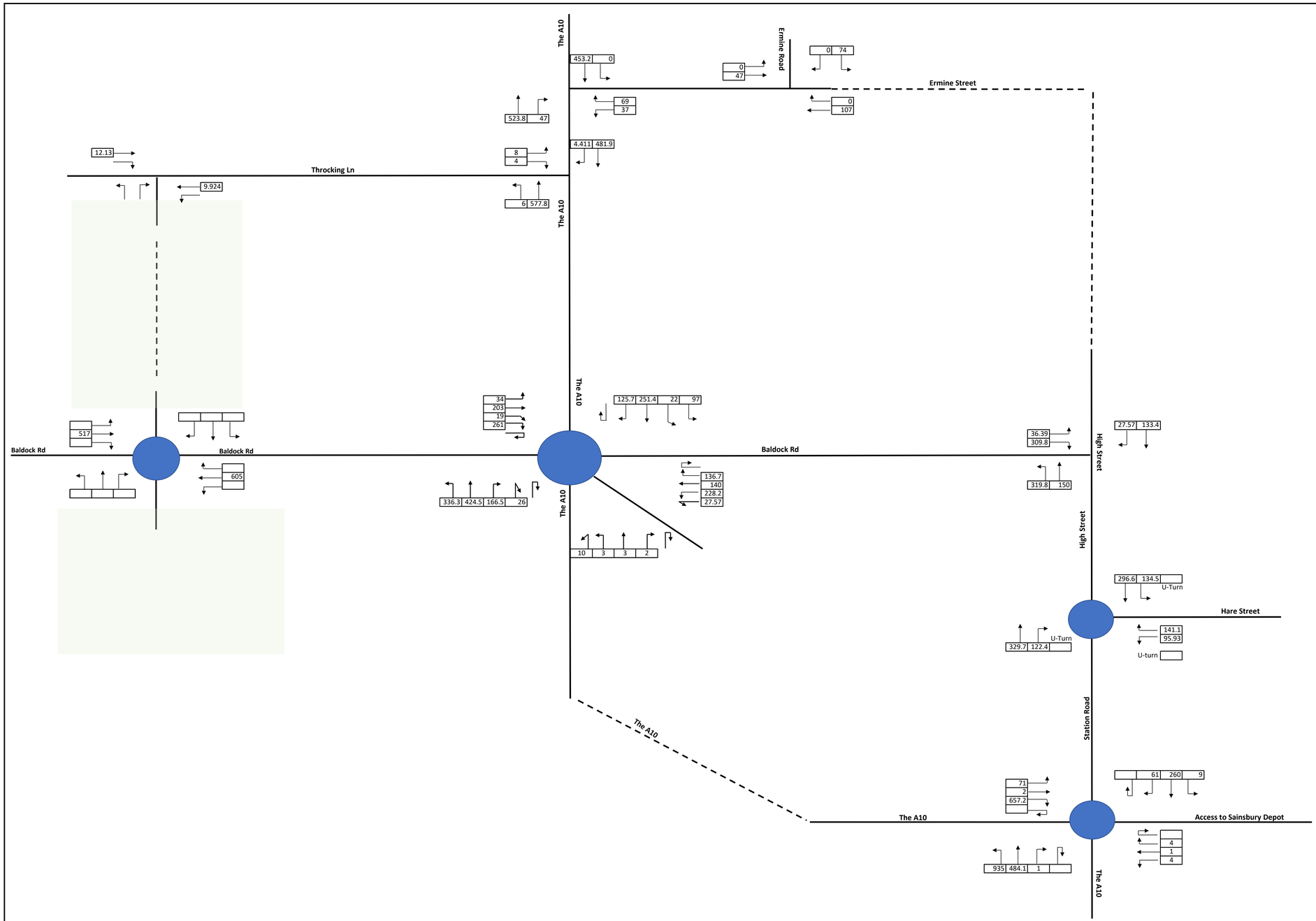
Notes:				Client	Hallam Land Management
Project No.	File name			Project	23161 - Buntingford
23161	Traffic Diagram_2035.xlsx				
Date	Drawn	Checked	Approved	Title	Year 2023 Baseline AM Peak 17:00 - 18:00
Oct 2023	SR	RM	MG		

Jubb
Alexander House
Excelsior Road
Western Avenue
Cardiff
CF14 3AT



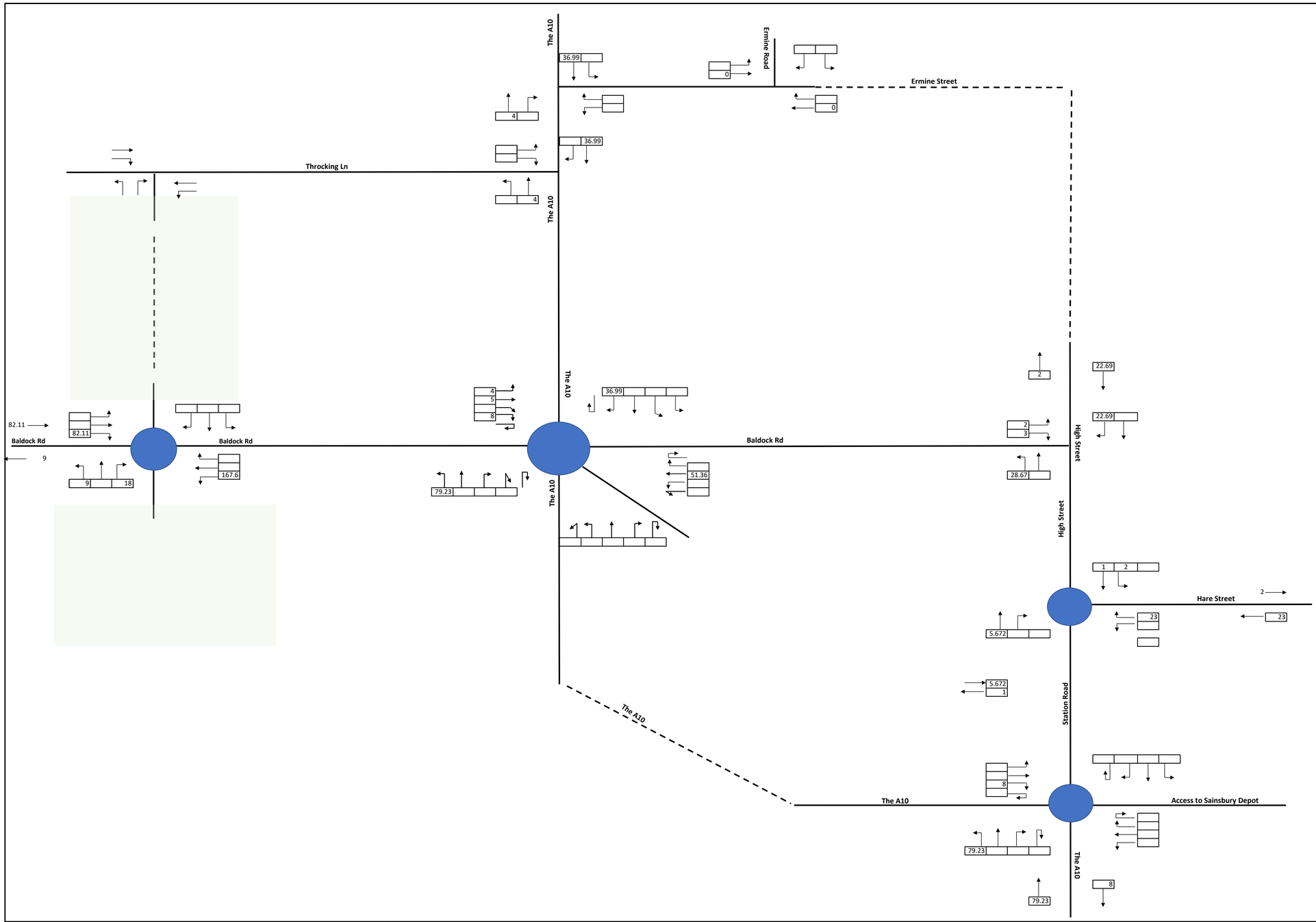
Notes: Growth Factor 1.10				Client Hallam Land Management
Project No. 23161	File name Traffic Diagram_2035.xlsx			Project 23161 - Buntingford
Date Oct 2023	Drawn SR	Checked RM	Approved MG	Title Year 2035 Background Growth AM Peak 07:45 - 08:45

Jubb
Alexander House
Excelsior Road
Western Avenue
Cardiff
CF14 3AT



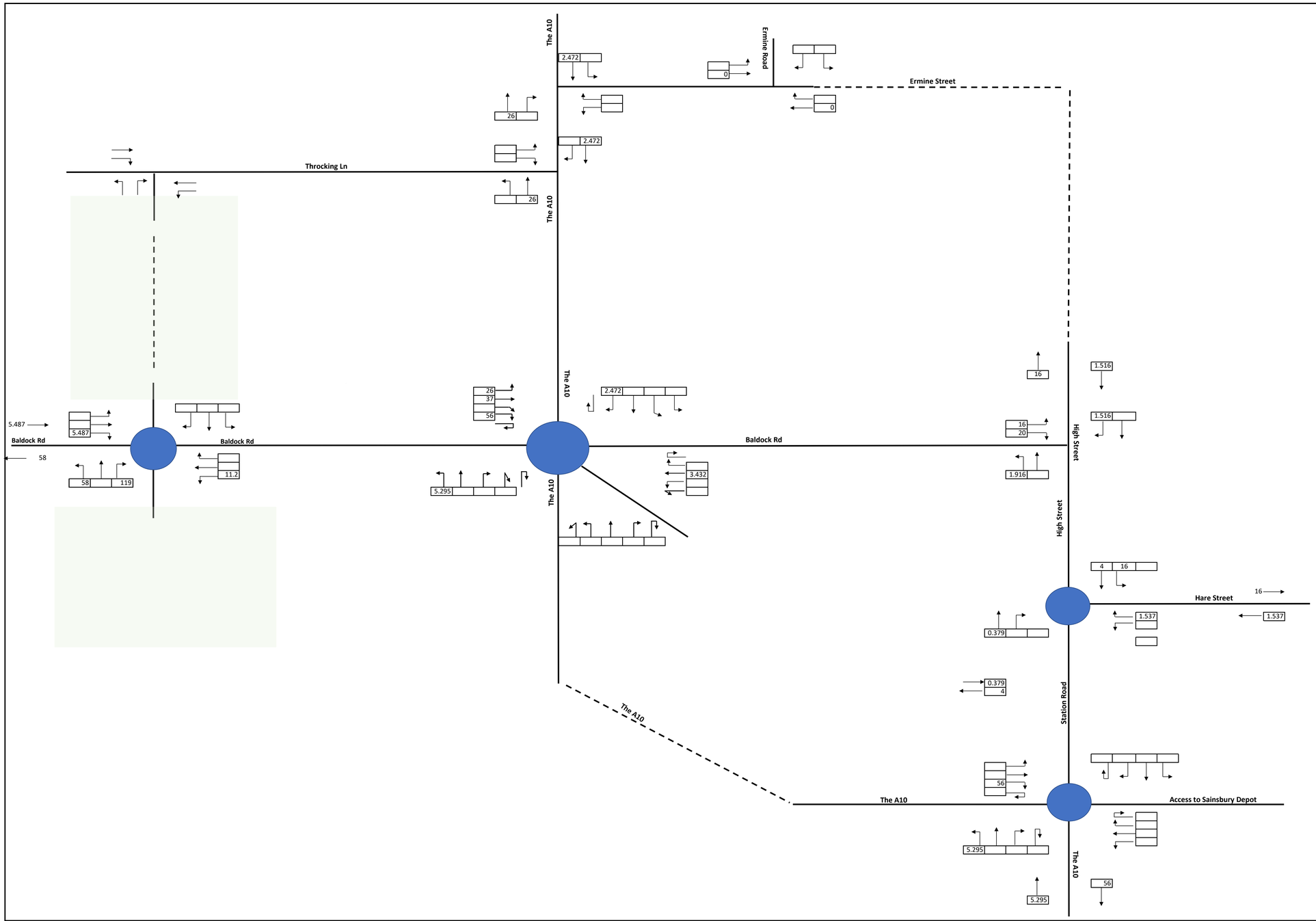
Notes: Growth Factor 1.10				Client	Hallam Land Management
Project No. 23161	File name Traffic Diagram_2035.xlsx			Project	23161 - Buntingford
Date Oct 2023	Drawn SR	Checked RM	Approved MG	Title	Year 2035 Background Growth PM Peak 17:00 - 18:00

Jubb
Alexander House
Excelsior Road
Western Avenue
Cardiff
CF14 3AT



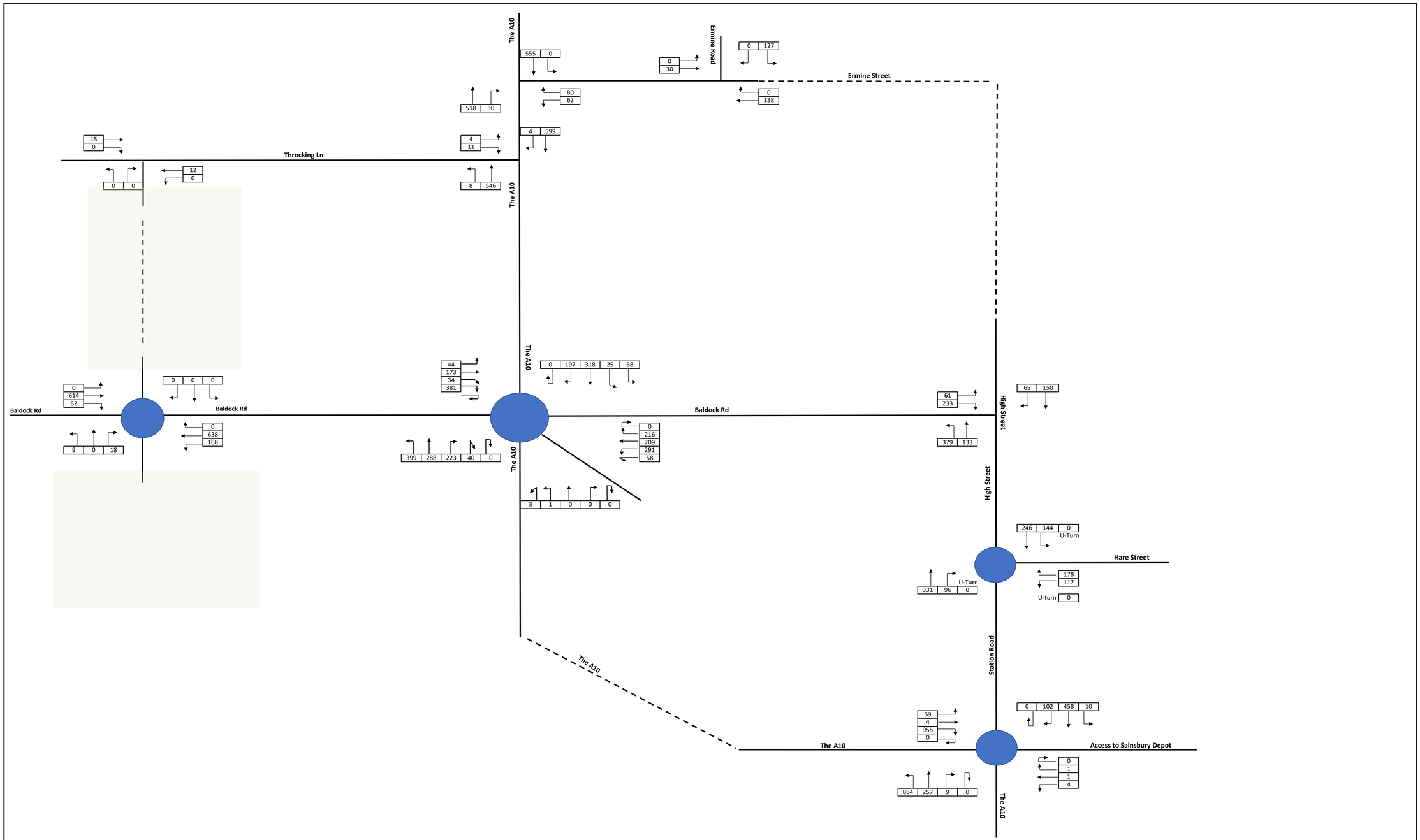
Notes: IN 250 OUT 26				Client	Hallam Land Management
Project No.	File name			Project	23161 - Buntingford
23161	Traffic Diagram_2035.xlsx				
Date	Drawn	Checked	Approved	Title	Employment Traffic AM Peak
Oct 2023	SR	RM	MG		

Jubb
Alexander House
Excelsior Road
Western Avenue
Cardiff
CF14 3AT



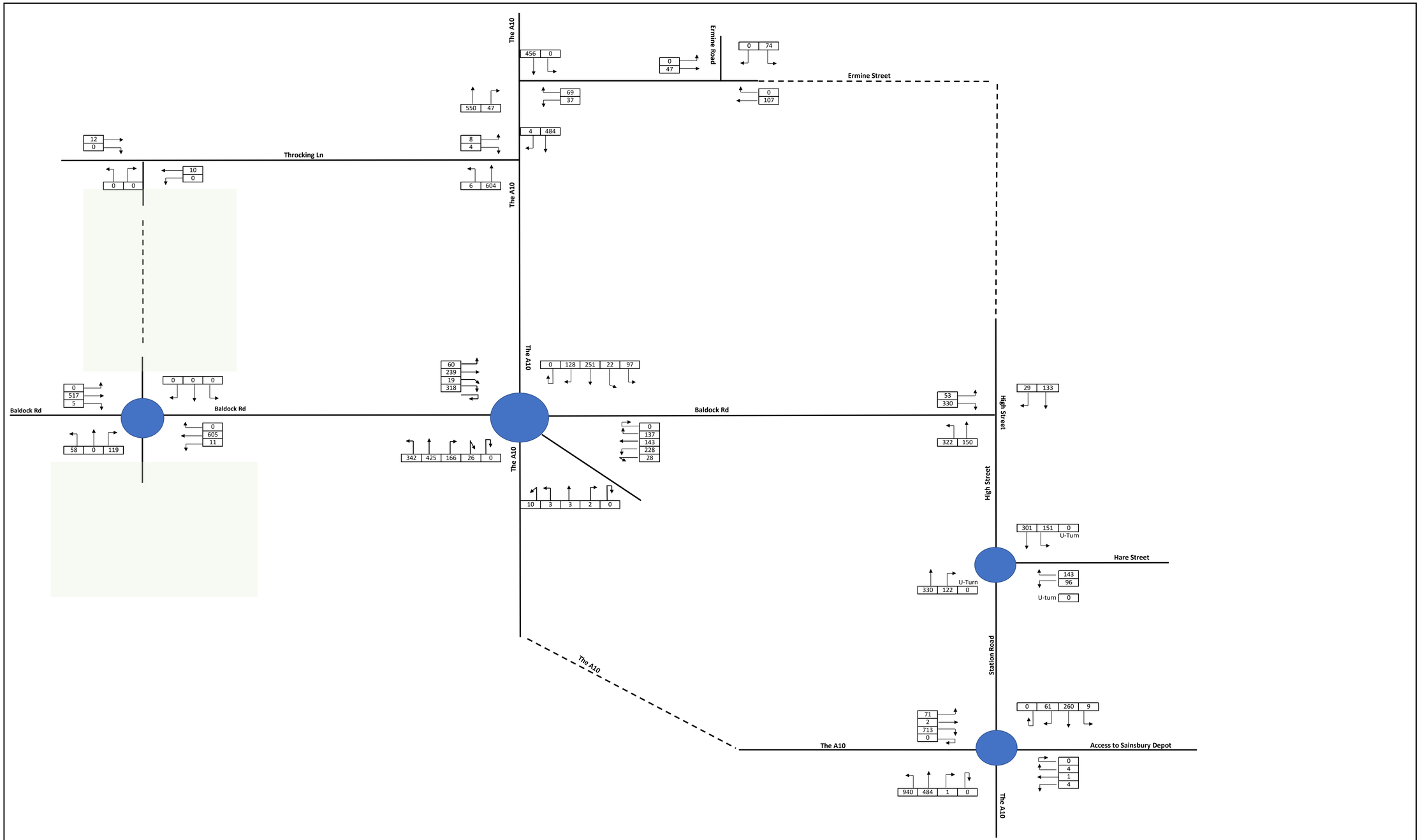
Notes: IN 17 OUT 177				Client	Hallam Land Management
Project No.	File name			Project	23161 - Buntingford
23161	Traffic Diagram_2035.xlsx				
Date	Drawn	Checked	Approved	Title	Employment Traffic PM Peak
Oct 2023	SR	RM	MG		

Jubb
Alexander House
Excelsior Road
Western Avenue
Cardiff
CF14 3AT



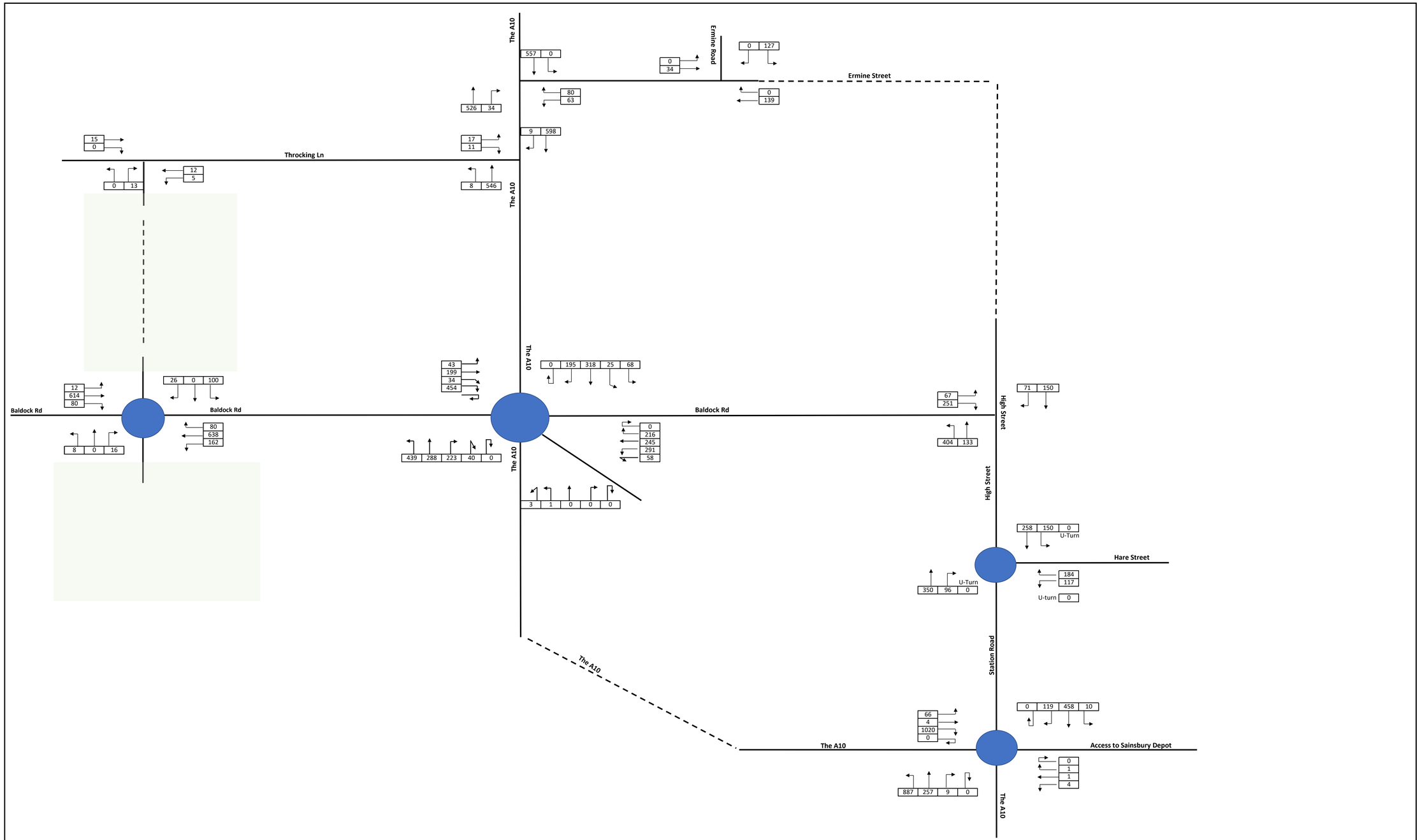
Notes:				Client	Hallam Land Management
Project No.	File name			Project	23161 - Buntingford
23161	Traffic Diagram_2035.xlsx				
Date	Drawn	Checked	Approved	Title	Year 2035 Baseline + Employment Traffic AM Peak 07:45 - 08:45
Oct 2023	SR	RM	MG		

Jubb
Alexander House
Excelsior Road
Western Avenue
Cardiff
CF14 3AT



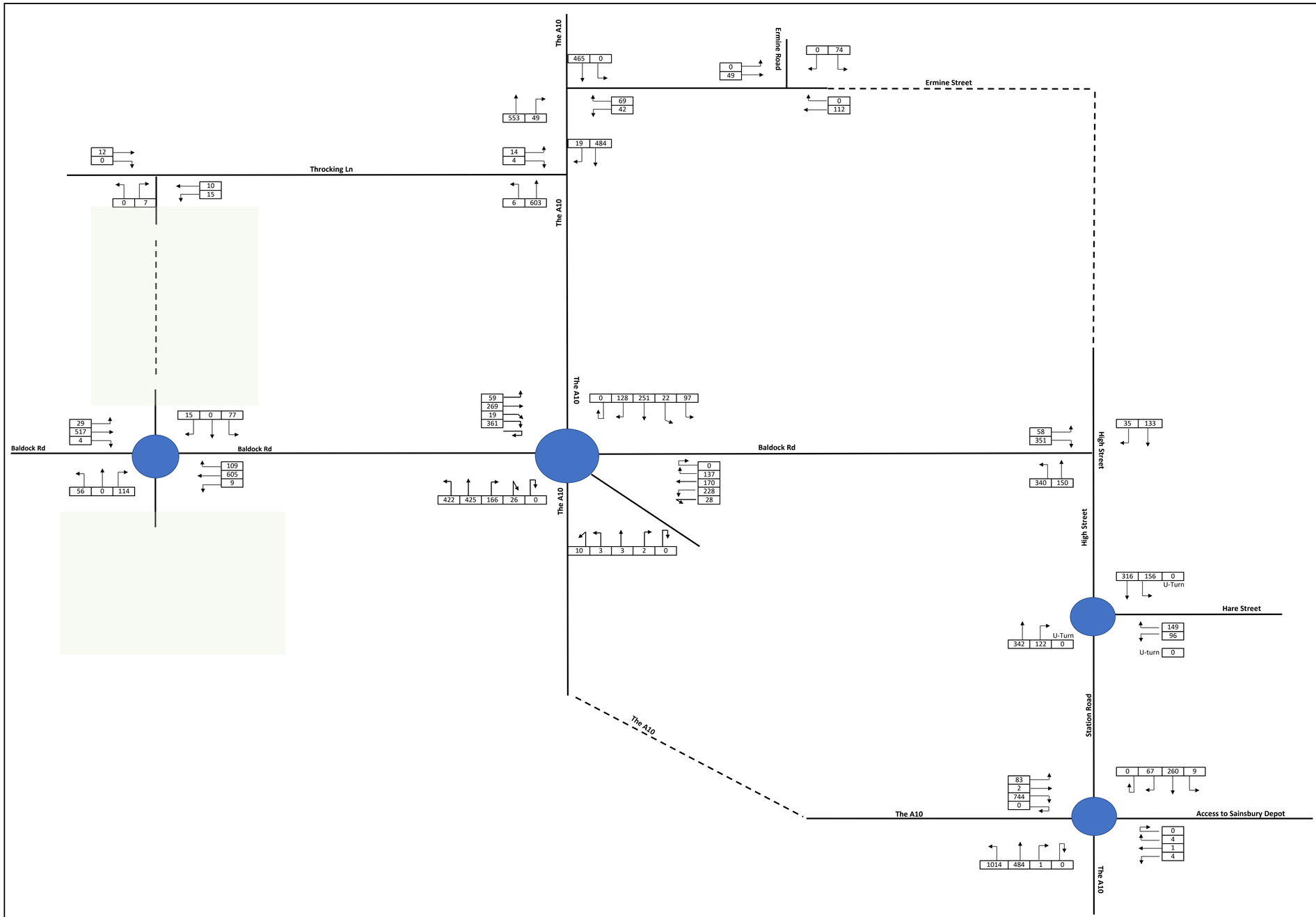
Notes:				Client: Hallam Land Management
Project No.: 23161	File name: Traffic Diagram_2035.xlsx			Project: 23161 - Buntingford
Date: Oct 2023	Drawn: SR	Checked: RM	Approved: MG	Title: Year 2035 Baseline + Employment Traffic PM Peak 17:00 - 18:00

Jubb
Alexander House
Excelsior Road
Western Avenue
Cardiff
CF14 3AT



Notes:				Client	Hallam Land Management
Project No.	File name			Project	23161 - Buntingford
23161	Traffic Diagram_2035.xlsx				
Date	Drawn	Checked	Approved	Title	Year 2035 Baseline + Combined Dev Traffic AM Peak 07:45 - 08:45
Oct 2023	SR	RM	MG		

Jubb
Alexander House
Excelsior Road
Western Avenue
Cardiff
CF14 3AT



Notes:				Client	Jubb Alexander House Excelsior Road Western Avenue Cardiff CF14 3AT
				Hallam Land Management	
Project No.	File name			Project	
23161	Traffic Diagram_2035.xlsx			23161 - Buntingford	
Date	Drawn	Checked	Approved	Title	
Oct 2023	SR	RM	MG	Year 2035 Baseline + Combined Dev Traffic PM Peak 17:00 - 18:00	

Appendix I: Modelling Outputs

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.4.1693
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+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

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Filename: A10 - Ermine St.j10
Path: Y:\PROJECT FOLDER\23161 Buntingford\Calculations\4. Transport\4. PICADY\TA Assessment 060224
Report generation date: 06/02/2024 12:14:39

»Year 2023 Baseline, AM
»Year 2023 Baseline, PM
»Year 2035 Baseline, AM
»Year 2035 Baseline, PM
»Year 2035 + Northern Site, AM
»Year 2035 + Northern Site, PM
»Year 2035 + Southern Site, AM
»Year 2035 + Southern Site, PM
»Year 2035 + Dev Both Sites, AM
»Year 2035 + Dev Both Sites, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Year 2023 Baseline					
Stream B-AC	0.5	14.10	0.33	0.3	12.59	0.25
Stream C-AB	0.1	6.73	0.05	0.1	6.73	0.07
	Year 2035 Baseline					
Stream B-AC	0.6	15.99	0.38	0.4	13.91	0.29
Stream C-AB	0.1	6.93	0.05	0.1	6.93	0.08
	Year 2035 + Northern Site					
Stream B-AC	0.6	16.24	0.38	0.4	14.10	0.30
Stream C-AB	0.1	7.00	0.06	0.1	7.01	0.09
	Year 2035 + Southern Site					
Stream B-AC	0.7	16.71	0.39	0.4	14.14	0.29
Stream C-AB	0.1	7.07	0.06	0.1	6.94	0.08
	Year 2035 + Dev Both Sites					
Stream B-AC	0.7	16.93	0.39	0.4	14.28	0.30
Stream C-AB	0.1	7.13	0.06	0.1	7.00	0.09

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	
Location	
Site number	
Date	17/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JUBB\SRadford
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	Year 2023 Baseline	AM	FLAT	07:45	08:45	60	15
D2	Year 2023 Baseline	PM	FLAT	17:00	18:00	60	15
D3	Year 2035 Baseline	AM	FLAT	07:45	08:45	60	15
D4	Year 2035 Baseline	PM	FLAT	17:00	18:00	60	15
D5	Year 2035 + Northern Site	AM	FLAT	07:45	08:45	60	15
D6	Year 2035 + Northern Site	PM	FLAT	17:00	18:00	60	15
D7	Year 2035 + Southern Site	AM	FLAT	07:45	08:45	60	15
D8	Year 2035 + Southern Site	PM	FLAT	17:00	18:00	60	15
D9	Year 2035 + Dev Both Sites	AM	FLAT	07:45	08:45	60	15
D10	Year 2035 + Dev Both Sites	PM	FLAT	17:00	18:00	60	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Year 2023 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.83	A

Arms

Arms

Arm	Name	Description	Arm type
A	A10 North		Major
B	Ermine Rd		Minor
C	A10 South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A10 South	6.00		✓	3.00	100.0	✓	4.50

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 - Ermine Rd	One lane	3.40	27	23

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	518	0.094	0.238	0.150	0.340
B-C	664	0.102	0.257	-	-
C-B	687	0.266	0.266	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	Year 2023 Baseline	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 North		✓	471	100.000
B - Ermine Rd		✓	129	100.000
C - A10 South		✓	494	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	471
	B - Ermine Rd	73	0	56
	C - A10 South	467	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	8
	B - Ermine Rd	4	0	4
	C - A10 South	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.33	14.10	0.5	B
C-AB	0.05	6.73	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	395	0.327	127	0.5	13.899	B
C-AB	27	562	0.048	27	0.1	6.731	A
C-A	467			467			
A-B	0			0			
A-C	471			471			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	394	0.327	129	0.5	14.100	B
C-AB	27	562	0.048	27	0.1	6.733	A
C-A	467			467			
A-B	0			0			
A-C	471			471			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	394	0.327	129	0.5	14.103	B
C-AB	27	562	0.048	27	0.1	6.733	A
C-A	467			467			
A-B	0			0			
A-C	471			471			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	394	0.327	129	0.5	14.103	B
C-AB	27	562	0.048	27	0.1	6.733	A
C-A	467			467			
A-B	0			0			
A-C	471			471			

Year 2023 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.47	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.47	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	Year 2023 Baseline	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 North		✓	411	100.000
B - Ermine Rd		✓	97	100.000
C - A10 South		✓	518	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	411
	B - Ermine Rd	63	0	34
	C - A10 South	475	43	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	2
	B - Ermine Rd	3	0	0
	C - A10 South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.25	12.59	0.3	B
C-AB	0.07	6.73	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	389	0.250	96	0.3	12.474	B
C-AB	43	578	0.074	43	0.1	6.726	A
C-A	475			475			
A-B	0			0			
A-C	411			411			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	388	0.250	97	0.3	12.588	B
C-AB	43	578	0.074	43	0.1	6.734	A
C-A	475			475			
A-B	0			0			
A-C	411			411			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	388	0.250	97	0.3	12.588	B
C-AB	43	578	0.074	43	0.1	6.734	A
C-A	475			475			
A-B	0			0			
A-C	411			411			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	388	0.250	97	0.3	12.588	B
C-AB	43	578	0.074	43	0.1	6.734	A
C-A	475			475			
A-B	0			0			
A-C	411			411			

Year 2035 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.06	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.06	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	Year 2035 Baseline	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 North		✓	518	100.000
B - Ermine Rd		✓	142	100.000
C - A10 South		✓	544	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	518
	B - Ermine Rd	80	0	62
	C - A10 South	514	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	8
	B - Ermine Rd	4	0	4
	C - A10 South	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.38	15.99	0.6	C
C-AB	0.05	6.93	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	376	0.378	140	0.6	15.670	C
C-AB	30	549	0.055	30	0.1	6.929	A
C-A	514			514			
A-B	0			0			
A-C	518			518			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	376	0.378	142	0.6	15.985	C
C-AB	30	549	0.055	30	0.1	6.935	A
C-A	514			514			
A-B	0			0			
A-C	518			518			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	376	0.378	142	0.6	15.990	C
C-AB	30	549	0.055	30	0.1	6.935	A
C-A	514			514			
A-B	0			0			
A-C	518			518			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	376	0.378	142	0.6	15.989	C
C-AB	30	549	0.055	30	0.1	6.935	A
C-A	514			514			
A-B	0			0			
A-C	518			518			

Year 2035 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.59	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.59	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	Year 2035 Baseline	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 North		✓	453	100.000
B - Ermine Rd		✓	106	100.000
C - A10 South		✓	571	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	453
	B - Ermine Rd	69	0	37
	C - A10 South	524	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	2
	B - Ermine Rd	3	0	0
	C - A10 South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.29	13.91	0.4	B
C-AB	0.08	6.93	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	370	0.287	104	0.4	13.742	B
C-AB	47	566	0.083	47	0.1	6.922	A
C-A	524			524			
A-B	0			0			
A-C	453			453			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	370	0.287	106	0.4	13.908	B
C-AB	47	566	0.083	47	0.1	6.931	A
C-A	524			524			
A-B	0			0			
A-C	453			453			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	370	0.287	106	0.4	13.910	B
C-AB	47	566	0.083	47	0.1	6.931	A
C-A	524			524			
A-B	0			0			
A-C	453			453			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	370	0.287	106	0.4	13.910	B
C-AB	47	566	0.083	47	0.1	6.931	A
C-A	524			524			
A-B	0			0			
A-C	453			453			

Year 2035 + Northern Site, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.10	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.10	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	Year 2035 + Northern Site	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 North		✓	522	100.000
B - Ermine Rd		✓	143	100.000
C - A10 South		✓	557	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	522
	B - Ermine Rd	80	0	63
	C - A10 South	523	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	8
	B - Ermine Rd	4	0	4
	C - A10 South	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.38	16.24	0.6	C
C-AB	0.06	7.00	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	374	0.383	140	0.6	15.900	C
C-AB	34	548	0.062	34	0.1	6.997	A
C-A	523			523			
A-B	0			0			
A-C	522			522			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	374	0.383	143	0.6	16.232	C
C-AB	34	548	0.062	34	0.1	7.003	A
C-A	523			523			
A-B	0			0			
A-C	522			522			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	374	0.383	143	0.6	16.236	C
C-AB	34	548	0.062	34	0.1	7.003	A
C-A	523			523			
A-B	0			0			
A-C	522			522			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	374	0.383	143	0.6	16.238	C
C-AB	34	548	0.062	34	0.1	7.003	A
C-A	523			523			
A-B	0			0			
A-C	522			522			

Year 2035 + Northern Site, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.66	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.66	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	Year 2035 + Northern Site	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 North		✓	464	100.000
B - Ermine Rd		✓	111	100.000
C - A10 South		✓	578	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	464
	B - Ermine Rd	69	0	42
	C - A10 South	528	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	2
	B - Ermine Rd	3	0	0
	C - A10 South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.30	14.10	0.4	B
C-AB	0.09	7.01	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	371	0.299	109	0.4	13.917	B
C-AB	50	563	0.089	50	0.1	7.002	A
C-A	528			528			
A-B	0			0			
A-C	464			464			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	371	0.299	111	0.4	14.097	B
C-AB	50	563	0.089	50	0.1	7.011	A
C-A	528			528			
A-B	0			0			
A-C	464			464			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	371	0.299	111	0.4	14.100	B
C-AB	50	563	0.089	50	0.1	7.011	A
C-A	528			528			
A-B	0			0			
A-C	464			464			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	371	0.299	111	0.4	14.100	B
C-AB	50	563	0.089	50	0.1	7.011	A
C-A	528			528			
A-B	0			0			
A-C	464			464			

Year 2035 + Southern Site, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.08	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	Year 2035 + Southern Site	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 North		✓	555	100.000
B - Ermine Rd		✓	142	100.000
C - A10 South		✓	548	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	555
	B - Ermine Rd	80	0	62
	C - A10 South	518	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	8
	B - Ermine Rd	4	0	4
	C - A10 South	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.39	16.71	0.7	C
C-AB	0.06	7.07	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	366	0.388	139	0.6	16.345	C
C-AB	30	539	0.056	30	0.1	7.063	A
C-A	518			518			
A-B	0			0			
A-C	555			555			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	366	0.388	142	0.6	16.703	C
C-AB	30	539	0.056	30	0.1	7.069	A
C-A	518			518			
A-B	0			0			
A-C	555			555			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	366	0.388	142	0.7	16.708	C
C-AB	30	539	0.056	30	0.1	7.069	A
C-A	518			518			
A-B	0			0			
A-C	555			555			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	366	0.388	142	0.7	16.709	C
C-AB	30	539	0.056	30	0.1	7.069	A
C-A	518			518			
A-B	0			0			
A-C	555			555			

Year 2035 + Southern Site, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.57	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.57	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	Year 2035 + Southern Site	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 North		✓	456	100.000
B - Ermine Rd		✓	106	100.000
C - A10 South		✓	597	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	456
	B - Ermine Rd	69	0	37
	C - A10 South	550	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	2
	B - Ermine Rd	3	0	0
	C - A10 South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.29	14.14	0.4	B
C-AB	0.08	6.94	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	366	0.290	104	0.4	13.962	B
C-AB	47	566	0.083	47	0.1	6.933	A
C-A	550			550			
A-B	0			0			
A-C	456			456			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	366	0.290	106	0.4	14.137	B
C-AB	47	566	0.083	47	0.1	6.941	A
C-A	550			550			
A-B	0			0			
A-C	456			456			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	366	0.290	106	0.4	14.139	B
C-AB	47	566	0.083	47	0.1	6.941	A
C-A	550			550			
A-B	0			0			
A-C	456			456			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	366	0.290	106	0.4	14.139	B
C-AB	47	566	0.083	47	0.1	6.941	A
C-A	550			550			
A-B	0			0			
A-C	456			456			

Year 2035 + Dev Both Sites, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.11	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.11	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D9	Year 2035 + Dev Both Sites	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 North		✓	557	100.000
B - Ermine Rd		✓	143	100.000
C - A10 South		✓	560	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	557
	B - Ermine Rd	80	0	63
	C - A10 South	526	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	8
	B - Ermine Rd	4	0	4
	C - A10 South	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.39	16.93	0.7	C
C-AB	0.06	7.13	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	364	0.393	140	0.7	16.551	C
C-AB	34	539	0.063	34	0.1	7.127	A
C-A	526			526			
A-B	0			0			
A-C	557			557			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	364	0.393	143	0.7	16.924	C
C-AB	34	539	0.063	34	0.1	7.132	A
C-A	526			526			
A-B	0			0			
A-C	557			557			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	364	0.393	143	0.7	16.930	C
C-AB	34	539	0.063	34	0.1	7.132	A
C-A	526			526			
A-B	0			0			
A-C	557			557			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	364	0.393	143	0.7	16.932	C
C-AB	34	539	0.063	34	0.1	7.132	A
C-A	526			526			
A-B	0			0			
A-C	557			557			

Year 2035 + Dev Both Sites, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.64	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.64	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D10	Year 2035 + Dev Both Sites	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 North		✓	465	100.000
B - Ermine Rd		✓	111	100.000
C - A10 South		✓	602	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	465
	B - Ermine Rd	69	0	42
	C - A10 South	553	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 North	B - Ermine Rd	C - A10 South
From	A - A10 North	0	0	2
	B - Ermine Rd	3	0	0
	C - A10 South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.30	14.28	0.4	B
C-AB	0.09	7.00	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	368	0.302	109	0.4	14.090	B
C-AB	49	563	0.087	49	0.1	6.992	A
C-A	553			553			
A-B	0			0			
A-C	465			465			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	368	0.302	111	0.4	14.277	B
C-AB	49	563	0.087	49	0.1	7.001	A
C-A	553			553			
A-B	0			0			
A-C	465			465			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	368	0.302	111	0.4	14.280	B
C-AB	49	563	0.087	49	0.1	7.001	A
C-A	553			553			
A-B	0			0			
A-C	465			465			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	111	368	0.302	111	0.4	14.280	B
C-AB	49	563	0.087	49	0.1	7.001	A
C-A	553			553			
A-B	0			0			
A-C	465			465			

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.4.1693
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Filename: Thricking Rd - A10.j10
Path: Y:\PROJECT FOLDER\23161 Buntingford\Calculations\4. Transport\4. PICADY\TA Assessment 060224
Report generation date: 06/02/2024 11:54:18

»Year 2023 Baseline, AM
»Year 2023 Baseline, PM
»Year 2035 Baseline, AM
»Year 2035 Baseline, PM
»Year 2035 + Northern Site, AM
»Year 2035 + Northern Site, PM
»Year 2035 + Southern Site, AM
»Year 2035 + Southern Site, PM
»Year 2035 + Total Both Sites, AM
»Year 2035 + Total Both Sites, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Year 2023 Baseline					
Stream B-C	0.0	6.74	0.01	0.0	6.68	0.01
Stream B-A	0.0	11.94	0.03	0.0	10.57	0.01
Stream C-AB	0.0	6.51	0.01	0.0	6.59	0.01
	Year 2035 Baseline					
Stream B-C	0.0	6.94	0.01	0.0	6.85	0.01
Stream B-A	0.0	12.71	0.03	0.0	11.32	0.01
Stream C-AB	0.0	6.66	0.01	0.0	6.77	0.01
	Year 2035 + Northern Site					
Stream B-C	0.0	6.93	0.03	0.0	6.85	0.03
Stream B-A	0.0	12.92	0.03	0.0	11.90	0.01
Stream C-AB	0.0	6.74	0.02	0.0	6.98	0.04
	Year 2035 + Southern Site					
Stream B-C	0.0	6.96	0.01	0.0	6.94	0.02
Stream B-A	0.0	12.98	0.03	0.0	11.55	0.01
Stream C-AB	0.0	6.67	0.01	0.0	6.86	0.01
	Year 2035 + Total Both Sites					
Stream B-C	0.0	6.95	0.03	0.0	6.94	0.03
Stream B-A	0.0	13.14	0.03	0.0	12.09	0.01
Stream C-AB	0.0	6.74	0.02	0.0	7.06	0.04

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	
Location	
Site number	
Date	17/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JUBB\SRadford
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	Year 2023 Baseline	AM	FLAT	07:45	08:45	60	15
D2	Year 2023 Baseline	PM	FLAT	17:00	18:00	60	15
D3	Year 2035 Baseline	AM	FLAT	07:45	08:45	60	15
D4	Year 2035 Baseline	PM	FLAT	17:00	18:00	60	15
D5	Year 2035 + Northern Site	AM	FLAT	07:45	08:45	60	15
D6	Year 2035 + Northern Site	PM	FLAT	17:00	18:00	60	15
D7	Year 2035 + Southern Site	AM	FLAT	07:45	08:45	60	15
D8	Year 2035 + Southern Site	PM	FLAT	17:00	18:00	60	15
D9	Year 2035 + Total Both Sites	AM	FLAT	07:45	08:45	60	15
D10	Year 2035 + Total Both Sites	PM	FLAT	17:00	18:00	60	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Year 2023 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Throcking Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.17	A

Arms

Arms

Arm	Name	Description	Arm type
A	A10 South		Major
B	Throcking Rd		Minor
C	A10 North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A10 North	6.60		✓	3.00	100.0	✓	10.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Throcking Rd	One lane plus flare	10.00	5.36	3.17	3.00	3.00		1.00	54	41

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	546	0.097	0.245	0.154	0.350
B-C	667	0.100	0.252	-	-
C-B	687	0.259	0.259	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	Year 2023 Baseline	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 South		✓	500	100.000
B - Throcking Rd		✓	14	100.000
C - A10 North		✓	515	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	7	493
	B - Throcking Rd	10	0	4
	C - A10 North	511	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	0	5
	B - Throcking Rd	11	0	0
	C - A10 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.74	0.0	A
B-A	0.03	11.94	0.0	B
C-AB	0.01	6.51	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	538	0.007	4	0.0	6.736	A
B-A	10	345	0.029	10	0.0	11.934	B
C-AB	4	557	0.007	4	0.0	6.505	A
C-A	511			511			
A-B	7			7			
A-C	493			493			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	538	0.007	4	0.0	6.739	A
B-A	10	345	0.029	10	0.0	11.936	B
C-AB	4	557	0.007	4	0.0	6.505	A
C-A	511			511			
A-B	7			7			
A-C	493			493			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	538	0.007	4	0.0	6.739	A
B-A	10	345	0.029	10	0.0	11.936	B
C-AB	4	557	0.007	4	0.0	6.505	A
C-A	511			511			
A-B	7			7			
A-C	493			493			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	538	0.007	4	0.0	6.739	A
B-A	10	345	0.029	10	0.0	11.936	B
C-AB	4	557	0.007	4	0.0	6.505	A
C-A	511			511			
A-B	7			7			
A-C	493			493			

Year 2023 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Throcking Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.12	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.12	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	Year 2023 Baseline	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 South		✓	529	100.000
B - Throcking Rd		✓	11	100.000
C - A10 North		✓	441	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	5	524
	B - Throcking Rd	4	0	7
	C - A10 North	437	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	0	2
	B - Throcking Rd	0	0	0
	C - A10 North	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.68	0.0	A
B-A	0.01	10.57	0.0	B
C-AB	0.01	6.59	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	546	0.013	7	0.0	6.676	A
B-A	4	345	0.012	4	0.0	10.567	B
C-AB	4	550	0.007	4	0.0	6.595	A
C-A	437			437			
A-B	5			5			
A-C	524			524			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	546	0.013	7	0.0	6.677	A
B-A	4	345	0.012	4	0.0	10.566	B
C-AB	4	550	0.007	4	0.0	6.595	A
C-A	437			437			
A-B	5			5			
A-C	524			524			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	546	0.013	7	0.0	6.677	A
B-A	4	345	0.012	4	0.0	10.566	B
C-AB	4	550	0.007	4	0.0	6.595	A
C-A	437			437			
A-B	5			5			
A-C	524			524			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	546	0.013	7	0.0	6.677	A
B-A	4	345	0.012	4	0.0	10.568	B
C-AB	4	550	0.007	4	0.0	6.595	A
C-A	437			437			
A-B	5			5			
A-C	524			524			

Year 2035 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Throcking Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.17	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	Year 2035 Baseline	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 South		✓	550	100.000
B - Throcking Rd		✓	15	100.000
C - A10 North		✓	566	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	8	542
	B - Throcking Rd	11	0	4
	C - A10 North	562	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	0	5
	B - Throcking Rd	11	0	0
	C - A10 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.94	0.0	A
B-A	0.03	12.71	0.0	B
C-AB	0.01	6.66	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	523	0.008	4	0.0	6.939	A
B-A	11	325	0.034	11	0.0	12.699	B
C-AB	4	544	0.007	4	0.0	6.661	A
C-A	562			562			
A-B	8			8			
A-C	542			542			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	522	0.008	4	0.0	6.942	A
B-A	11	325	0.034	11	0.0	12.708	B
C-AB	4	544	0.007	4	0.0	6.661	A
C-A	562			562			
A-B	8			8			
A-C	542			542			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	522	0.008	4	0.0	6.942	A
B-A	11	325	0.034	11	0.0	12.708	B
C-AB	4	544	0.007	4	0.0	6.661	A
C-A	562			562			
A-B	8			8			
A-C	542			542			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	522	0.008	4	0.0	6.942	A
B-A	11	325	0.034	11	0.0	12.708	B
C-AB	4	544	0.007	4	0.0	6.661	A
C-A	562			562			
A-B	8			8			
A-C	542			542			

Year 2035 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Throcking Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.12	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.12	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	Year 2035 Baseline	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 South		✓	584	100.000
B - Throcking Rd		✓	12	100.000
C - A10 North		✓	486	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	6	578
	B - Throcking Rd	4	0	8
	C - A10 North	482	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	0	2
	B - Throcking Rd	0	0	0
	C - A10 North	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.85	0.0	A
B-A	0.01	11.32	0.0	B
C-AB	0.01	6.77	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	534	0.015	8	0.0	6.847	A
B-A	4	322	0.012	4	0.0	11.315	B
C-AB	4	536	0.007	4	0.0	6.772	A
C-A	482			482			
A-B	6			6			
A-C	578			578			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	534	0.015	8	0.0	6.848	A
B-A	4	322	0.012	4	0.0	11.315	B
C-AB	4	536	0.007	4	0.0	6.772	A
C-A	482			482			
A-B	6			6			
A-C	578			578			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	534	0.015	8	0.0	6.848	A
B-A	4	322	0.012	4	0.0	11.315	B
C-AB	4	536	0.007	4	0.0	6.772	A
C-A	482			482			
A-B	6			6			
A-C	578			578			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	534	0.015	8	0.0	6.848	A
B-A	4	322	0.012	4	0.0	11.317	B
C-AB	4	536	0.007	4	0.0	6.772	A
C-A	482			482			
A-B	6			6			
A-C	578			578			

Year 2035 + Northern Site, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Throcking Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.29	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	Year 2035 + Northern Site	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 South		✓	550	100.000
B - Throcking Rd		✓	29	100.000
C - A10 North		✓	572	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	8	542
	B - Throcking Rd	11	0	18
	C - A10 North	562	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	0	5
	B - Throcking Rd	11	0	0
	C - A10 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	6.93	0.0	A
B-A	0.03	12.92	0.0	B
C-AB	0.02	6.74	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	537	0.034	18	0.0	6.930	A
B-A	11	320	0.034	11	0.0	12.914	B
C-AB	10	544	0.018	10	0.0	6.736	A
C-A	562			562			
A-B	8			8			
A-C	542			542			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	537	0.034	18	0.0	6.934	A
B-A	11	320	0.034	11	0.0	12.922	B
C-AB	10	544	0.018	10	0.0	6.736	A
C-A	562			562			
A-B	8			8			
A-C	542			542			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	537	0.034	18	0.0	6.934	A
B-A	11	320	0.034	11	0.0	12.922	B
C-AB	10	544	0.018	10	0.0	6.736	A
C-A	562			562			
A-B	8			8			
A-C	542			542			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	537	0.034	18	0.0	6.934	A
B-A	11	320	0.034	11	0.0	12.922	B
C-AB	10	544	0.018	10	0.0	6.736	A
C-A	562			562			
A-B	8			8			
A-C	542			542			

Year 2035 + Northern Site, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Throcking Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.26	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.26	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	Year 2035 + Northern Site	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 South		✓	584	100.000
B - Throcking Rd		✓	19	100.000
C - A10 North		✓	502	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	6	578
	B - Throcking Rd	4	0	15
	C - A10 North	482	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	0	2
	B - Throcking Rd	0	0	0
	C - A10 North	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	6.85	0.0	A
B-A	0.01	11.90	0.0	B
C-AB	0.04	6.98	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	540	0.028	15	0.0	6.850	A
B-A	4	307	0.013	4	0.0	11.896	B
C-AB	20	536	0.037	20	0.0	6.979	A
C-A	482			482			
A-B	6			6			
A-C	578			578			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	540	0.028	15	0.0	6.854	A
B-A	4	307	0.013	4	0.0	11.898	B
C-AB	20	536	0.037	20	0.0	6.982	A
C-A	482			482			
A-B	6			6			
A-C	578			578			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	540	0.028	15	0.0	6.854	A
B-A	4	307	0.013	4	0.0	11.898	B
C-AB	20	536	0.037	20	0.0	6.982	A
C-A	482			482			
A-B	6			6			
A-C	578			578			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	540	0.028	15	0.0	6.854	A
B-A	4	307	0.013	4	0.0	11.900	B
C-AB	20	536	0.037	20	0.0	6.982	A
C-A	482			482			
A-B	6			6			
A-C	578			578			

Year 2035 + Southern Site, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Throcking Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.17	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	Year 2035 + Southern Site	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 South		✓	554	100.000
B - Throcking Rd		✓	15	100.000
C - A10 North		✓	603	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	8	546
	B - Throcking Rd	11	0	4
	C - A10 North	599	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	0	5
	B - Throcking Rd	11	0	0
	C - A10 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.96	0.0	A
B-A	0.03	12.98	0.0	B
C-AB	0.01	6.67	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	522	0.008	4	0.0	6.954	A
B-A	11	319	0.035	11	0.0	12.973	B
C-AB	4	543	0.007	4	0.0	6.674	A
C-A	599			599			
A-B	8			8			
A-C	546			546			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	521	0.008	4	0.0	6.957	A
B-A	11	319	0.035	11	0.0	12.985	B
C-AB	4	543	0.007	4	0.0	6.674	A
C-A	599			599			
A-B	8			8			
A-C	546			546			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	521	0.008	4	0.0	6.957	A
B-A	11	319	0.035	11	0.0	12.985	B
C-AB	4	543	0.007	4	0.0	6.674	A
C-A	599			599			
A-B	8			8			
A-C	546			546			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	521	0.008	4	0.0	6.957	A
B-A	11	319	0.035	11	0.0	12.985	B
C-AB	4	543	0.007	4	0.0	6.674	A
C-A	599			599			
A-B	8			8			
A-C	546			546			

Year 2035 + Southern Site, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Throcking Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.12	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.12	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	Year 2035 + Southern Site	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 South		✓	610	100.000
B - Throcking Rd		✓	12	100.000
C - A10 North		✓	488	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	6	604
	B - Throcking Rd	4	0	8
	C - A10 North	484	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	0	2
	B - Throcking Rd	0	0	0
	C - A10 North	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	6.94	0.0	A
B-A	0.01	11.55	0.0	B
C-AB	0.01	6.86	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	527	0.015	8	0.0	6.936	A
B-A	4	316	0.013	4	0.0	11.553	B
C-AB	4	529	0.008	4	0.0	6.859	A
C-A	484			484			
A-B	6			6			
A-C	604			604			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	527	0.015	8	0.0	6.937	A
B-A	4	316	0.013	4	0.0	11.553	B
C-AB	4	529	0.008	4	0.0	6.859	A
C-A	484			484			
A-B	6			6			
A-C	604			604			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	527	0.015	8	0.0	6.937	A
B-A	4	316	0.013	4	0.0	11.552	B
C-AB	4	529	0.008	4	0.0	6.859	A
C-A	484			484			
A-B	6			6			
A-C	604			604			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	527	0.015	8	0.0	6.937	A
B-A	4	316	0.013	4	0.0	11.552	B
C-AB	4	529	0.008	4	0.0	6.859	A
C-A	484			484			
A-B	6			6			
A-C	604			604			

Year 2035 + Total Both Sites, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Throcking Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.27	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.27	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D9	Year 2035 + Total Both Sites	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 South		✓	554	100.000
B - Throcking Rd		✓	28	100.000
C - A10 North		✓	607	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	8	546
	B - Throcking Rd	11	0	17
	C - A10 North	598	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	0	5
	B - Throcking Rd	11	0	0
	C - A10 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	6.95	0.0	A
B-A	0.03	13.14	0.0	B
C-AB	0.02	6.74	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	535	0.032	17	0.0	6.941	A
B-A	11	315	0.035	11	0.0	13.128	B
C-AB	9	543	0.017	9	0.0	6.736	A
C-A	598			598			
A-B	8			8			
A-C	546			546			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	535	0.032	17	0.0	6.946	A
B-A	11	315	0.035	11	0.0	13.136	B
C-AB	9	543	0.017	9	0.0	6.736	A
C-A	598			598			
A-B	8			8			
A-C	546			546			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	535	0.032	17	0.0	6.946	A
B-A	11	315	0.035	11	0.0	13.136	B
C-AB	9	543	0.017	9	0.0	6.736	A
C-A	598			598			
A-B	8			8			
A-C	546			546			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	535	0.032	17	0.0	6.946	A
B-A	11	315	0.035	11	0.0	13.136	B
C-AB	9	543	0.017	9	0.0	6.736	A
C-A	598			598			
A-B	8			8			
A-C	546			546			

Year 2035 + Total Both Sites, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Throcking Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.25	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.25	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D10	Year 2035 + Total Both Sites	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A10 South		✓	609	100.000
B - Throcking Rd		✓	18	100.000
C - A10 North		✓	503	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	6	603
	B - Throcking Rd	4	0	14
	C - A10 North	484	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A10 South	B - Throcking Rd	C - A10 North
From	A - A10 South	0	0	2
	B - Throcking Rd	0	0	0
	C - A10 North	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	6.94	0.0	A
B-A	0.01	12.09	0.0	B
C-AB	0.04	7.06	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	533	0.026	14	0.0	6.931	A
B-A	4	302	0.013	4	0.0	12.090	B
C-AB	19	529	0.036	19	0.0	7.054	A
C-A	484			484			
A-B	6			6			
A-C	603			603			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	533	0.026	14	0.0	6.935	A
B-A	4	302	0.013	4	0.0	12.091	B
C-AB	19	529	0.036	19	0.0	7.057	A
C-A	484			484			
A-B	6			6			
A-C	603			603			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	533	0.026	14	0.0	6.935	A
B-A	4	302	0.013	4	0.0	12.091	B
C-AB	19	529	0.036	19	0.0	7.057	A
C-A	484			484			
A-B	6			6			
A-C	603			603			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	533	0.026	14	0.0	6.935	A
B-A	4	302	0.013	4	0.0	12.093	B
C-AB	19	529	0.036	19	0.0	7.057	A
C-A	484			484			
A-B	6			6			
A-C	603			603			

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.0.4.1693
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Filename: A10 - Baldock Road DL (2035).j10
Path: Y:\PROJECT FOLDER\23161 Buntingford\Calculations\4. Transport\1. ARCADY\TA Assessment 060224\06022024 Tests
Report generation date: 08/02/2024 14:50:36

»2023 Baseline Traffic, AM
»2023 Baseline Traffic, PM
»2035 Baseline Traffic, AM
»2035 Baseline Traffic, PM
»2035 + Northern Site, AM
»2035 + Northern Site, PM
»2035 + Southern Site, AM
»2035 + Southern Site, PM
»2035 + Total Dev Sites, AM
»2035 + Total Dev Sites, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2023 Baseline Traffic					
1 - the A10 North	0.7	4.56	0.38	0.5	3.64	0.31
2 - the B1038	1.3	7.10	0.55	0.6	4.39	0.37
3 - Access Road	0.0	13.46	0.01	0.0	10.29	0.05
4 - the A10 South	0.8	3.71	0.43	0.9	3.58	0.46
5 - the A507	0.8	5.39	0.44	0.6	4.47	0.37
	2035 Baseline Traffic					
1 - the A10 North	0.8	5.15	0.43	0.5	3.97	0.35
2 - the B1038	1.8	9.12	0.64	0.7	4.91	0.42
3 - Access Road	0.0	15.76	0.02	0.1	11.31	0.06
4 - the A10 South	1.0	4.17	0.49	1.1	4.03	0.51
5 - the A507	1.1	6.23	0.50	0.7	5.02	0.42
	2035 + Northern Site					
1 - the A10 North	0.9	5.62	0.45	0.6	4.18	0.36
2 - the B1038	2.4	11.46	0.70	0.8	5.32	0.45
3 - Access Road	0.0	18.36	0.02	0.1	12.12	0.06
4 - the A10 South	1.1	4.51	0.52	1.3	4.54	0.56
5 - the A507	1.5	7.49	0.58	0.9	5.65	0.48
	2035 + Southern Site					
1 - the A10 North	0.9	5.48	0.46	0.6	4.24	0.37
2 - the B1038	2.4	11.28	0.70	0.8	5.18	0.43
3 - Access Road	0.0	17.89	0.02	0.1	11.97	0.06
4 - the A10 South	1.3	4.92	0.55	1.1	4.07	0.51
5 - the A507	1.1	6.42	0.51	1.1	6.02	0.51
	2035 + Total Dev Sites					
1 - the A10 North	1.0	5.98	0.48	0.6	4.46	0.38
2 - the B1038	3.3	14.77	0.76	0.9	5.60	0.46
3 - Access Road	0.0	21.07	0.02	0.1	12.80	0.06
4 - the A10 South	1.5	5.36	0.58	1.3	4.56	0.56
5 - the A507	1.5	7.66	0.59	1.3	6.85	0.57

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	A40/ A507 Roundabout
Location	Buntingford
Site number	
Date	16/10/2023
Version	A
Status	(new file)
Identifier	
Client	
Jobnumber	23161
Enumerator	JUBB\SRadford
Description	Geometric Input from OS/Satelite mapping

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2023 Baseline Traffic	AM	FLAT	07:45	08:45	60	15	✓
D2	2023 Baseline Traffic	PM	FLAT	17:00	18:00	60	15	✓
D3	2035 Baseline Traffic	AM	FLAT	07:45	08:45	60	15	✓
D4	2035 Baseline Traffic	PM	FLAT	17:00	18:00	60	15	✓
D5	2035 + Northern Site	AM	FLAT	07:45	08:45	60	15	✓
D6	2035 + Northern Site	PM	FLAT	17:00	18:00	60	15	✓
D7	2035 + Southern Site	AM	FLAT	07:45	08:45	60	15	✓
D8	2035 + Southern Site	PM	FLAT	17:00	18:00	60	15	✓
D9	2035 + Total Dev Sites	AM	FLAT	07:45	08:45	60	15	✓
D10	2035 + Total Dev Sites	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

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

2023 Baseline Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A10 / B1038 Roundabout	Standard Roundabout		1, 2, 3, 4, 5	5.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.15	A

Arms

Arms

Arm	Name	Description	No give-way line
1	the A10 North		
2	the B1038		
3	Access Road		
4	the A10 South		
5	the A507		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - the A10 North	4.20	7.60	13.7	18.5	55.0	31.0		
2 - the B1038	3.60	7.60	11.2	65.0	55.0	34.0		
3 - Access Road	3.70	3.70	0.0	3.4	55.0	80.0		
4 - the A10 South	4.40	8.20	19.6	63.4	55.0	24.0		
5 - the A507	3.50	7.70	13.7	37.5	55.0	42.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - the A10 North	0.606	1833
2 - the B1038	0.588	1689
3 - Access Road	0.282	659
4 - the A10 South	0.682	2155
5 - the A507	0.574	1671

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 period length (min)	Time segment length (min)	Run automatically
D1	2023 Baseline Traffic	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - the A10 North		FLAT	✓	519	100.000
2 - the B1038		FLAT	✓	656	100.000
3 - Access Road		FLAT	✓	4	100.000
4 - the A10 South		FLAT	✓	792	100.000
5 - the A507		FLAT	✓	558	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	62	23	289	145
	2 - the B1038	196	0	53	264	143
	3 - Access Road	0	0	0	3	1
	4 - the A10 South	262	203	36	0	291
	5 - the A507	36	152	31	339	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	13	14	6	9
	2 - the B1038	2	0	6	3	7
	3 - Access Road	0	0	0	0	0
	4 - the A10 South	7	4	3	0	8
	5 - the A507	3	8	13	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - the A10 North	0.38	4.56	0.7	A	519	519
2 - the B1038	0.55	7.10	1.3	A	656	656
3 - Access Road	0.01	13.46	0.0	B	4	4
4 - the A10 South	0.43	3.71	0.8	A	792	792
5 - the A507	0.44	5.39	0.8	A	558	558

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	519	130	757	1374	0.378	516	491	0.0	0.7	4.518	A
2 - the B1038	656	164	858	1185	0.554	651	415	0.0	1.3	6.934	A
3 - Access Road	4	1	1367	274	0.015	4	142	0.0	0.0	13.331	B
4 - the A10 South	792	198	482	1826	0.434	789	889	0.0	0.8	3.681	A
5 - the A507	558	140	693	1273	0.438	555	577	0.0	0.8	5.324	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	519	130	761	1372	0.378	519	494	0.7	0.7	4.558	A
2 - the B1038	656	164	863	1182	0.555	656	417	1.3	1.3	7.097	A
3 - Access Road	4	1	1376	271	0.015	4	143	0.0	0.0	13.459	B
4 - the A10 South	792	198	485	1824	0.434	792	895	0.8	0.8	3.710	A
5 - the A507	558	140	697	1271	0.439	558	580	0.8	0.8	5.387	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	519	130	761	1372	0.378	519	494	0.7	0.7	4.558	A
2 - the B1038	656	164	863	1182	0.555	656	417	1.3	1.3	7.100	A
3 - Access Road	4	1	1376	271	0.015	4	143	0.0	0.0	13.460	B
4 - the A10 South	792	198	485	1824	0.434	792	895	0.8	0.8	3.710	A
5 - the A507	558	140	697	1271	0.439	558	580	0.8	0.8	5.388	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	519	130	761	1372	0.378	519	494	0.7	0.7	4.558	A
2 - the B1038	656	164	863	1182	0.555	656	417	1.3	1.3	7.100	A
3 - Access Road	4	1	1376	271	0.015	4	143	0.0	0.0	13.460	B
4 - the A10 South	792	198	485	1824	0.434	792	895	0.8	0.8	3.710	A
5 - the A507	558	140	697	1271	0.439	558	580	0.8	0.8	5.388	A

2023 Baseline Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A10 / B1038 Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.00	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2023 Baseline Traffic	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - the A10 North		FLAT	✓	450	100.000
2 - the B1038		FLAT	✓	483	100.000
3 - Access Road		FLAT	✓	17	100.000
4 - the A10 South		FLAT	✓	865	100.000
5 - the A507		FLAT	✓	469	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	88	20	228	114
	2 - the B1038	124	0	25	207	127
	3 - Access Road	3	2	0	9	3
	4 - the A10 South	385	151	24	0	305
	5 - the A507	31	184	17	237	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	4	0	2	1
	2 - the B1038	2	0	0	0	3
	3 - Access Road	0	0	0	0	0
	4 - the A10 South	2	4	0	0	4
	5 - the A507	3	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - the A10 North	0.31	3.64	0.5	A	450	450
2 - the B1038	0.37	4.39	0.6	A	483	483
3 - Access Road	0.05	10.29	0.0	B	17	17
4 - the A10 South	0.46	3.58	0.9	A	865	865
5 - the A507	0.37	4.47	0.6	A	469	469

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	450	113	612	1462	0.308	448	541	0.0	0.5	3.618	A
2 - the B1038	483	121	637	1315	0.367	481	423	0.0	0.6	4.358	A
3 - Access Road	17	4	1032	368	0.046	17	86	0.0	0.0	10.238	B
4 - the A10 South	865	216	371	1902	0.455	862	678	0.0	0.9	3.553	A
5 - the A507	469	117	686	1277	0.367	467	547	0.0	0.6	4.438	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	450	113	615	1460	0.308	450	543	0.5	0.5	3.635	A
2 - the B1038	483	121	640	1313	0.368	483	425	0.6	0.6	4.391	A
3 - Access Road	17	4	1037	367	0.046	17	86	0.0	0.0	10.287	B
4 - the A10 South	865	216	373	1900	0.455	865	681	0.9	0.9	3.579	A
5 - the A507	469	117	689	1275	0.368	469	549	0.6	0.6	4.472	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	450	113	615	1460	0.308	450	543	0.5	0.5	3.635	A
2 - the B1038	483	121	640	1313	0.368	483	425	0.6	0.6	4.391	A
3 - Access Road	17	4	1037	367	0.046	17	86	0.0	0.0	10.288	B
4 - the A10 South	865	216	373	1900	0.455	865	681	0.9	0.9	3.579	A
5 - the A507	469	117	689	1275	0.368	469	549	0.6	0.6	4.472	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	450	113	615	1460	0.308	450	543	0.5	0.5	3.635	A
2 - the B1038	483	121	640	1313	0.368	483	425	0.6	0.6	4.391	A
3 - Access Road	17	4	1037	367	0.046	17	86	0.0	0.0	10.288	B
4 - the A10 South	865	216	373	1900	0.455	865	681	0.9	0.9	3.580	A
5 - the A507	469	117	689	1275	0.368	469	549	0.6	0.6	4.472	A

2035 Baseline Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A10 / B1038 Roundabout	Standard Roundabout		1, 2, 3, 4, 5	6.13	A

Junction Network

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2035 Baseline Traffic	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - the A10 North		FLAT	✓	571	100.000
2 - the B1038		FLAT	✓	722	100.000
3 - Access Road		FLAT	✓	4	100.000
4 - the A10 South		FLAT	✓	872	100.000
5 - the A507		FLAT	✓	614	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	68	25	318	160
	2 - the B1038	216	0	58	291	157
	3 - Access Road	0	0	0	3	1
	4 - the A10 South	288	223	40	0	320
	5 - the A507	40	167	34	373	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	13	14	6	9
	2 - the B1038	2	0	6	3	7
	3 - Access Road	0	0	0	0	0
	4 - the A10 South	7	4	3	0	8
	5 - the A507	3	8	13	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - the A10 North	0.43	5.15	0.8	A	571	571
2 - the B1038	0.64	9.12	1.8	A	722	722
3 - Access Road	0.02	15.76	0.0	C	4	4
4 - the A10 South	0.49	4.17	1.0	A	872	872
5 - the A507	0.50	6.23	1.1	A	614	614

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	571	143	833	1328	0.430	567	540	0.0	0.8	5.087	A
2 - the B1038	722	180	944	1135	0.636	714	456	0.0	1.8	8.753	A
3 - Access Road	4	1	1502	236	0.017	4	156	0.0	0.0	15.525	C
4 - the A10 South	872	218	529	1794	0.486	868	977	0.0	1.0	4.119	A
5 - the A507	614	154	763	1233	0.498	610	634	0.0	1.0	6.126	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	571	143	838	1325	0.431	571	544	0.8	0.8	5.150	A
2 - the B1038	722	180	950	1131	0.638	721	459	1.8	1.8	9.110	A
3 - Access Road	4	1	1514	233	0.018	4	157	0.0	0.0	15.756	C
4 - the A10 South	872	218	534	1791	0.487	872	984	1.0	1.0	4.167	A
5 - the A507	614	154	767	1231	0.499	614	638	1.0	1.1	6.232	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	571	143	838	1325	0.431	571	544	0.8	0.8	5.150	A
2 - the B1038	722	180	950	1131	0.638	722	459	1.8	1.8	9.116	A
3 - Access Road	4	1	1514	233	0.018	4	157	0.0	0.0	15.758	C
4 - the A10 South	872	218	534	1791	0.487	872	985	1.0	1.0	4.167	A
5 - the A507	614	154	767	1230	0.499	614	638	1.1	1.1	6.233	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	571	143	838	1325	0.431	571	544	0.8	0.8	5.150	A
2 - the B1038	722	180	950	1131	0.638	722	459	1.8	1.8	9.117	A
3 - Access Road	4	1	1514	233	0.018	4	157	0.0	0.0	15.759	C
4 - the A10 South	872	218	534	1791	0.487	872	985	1.0	1.0	4.167	A
5 - the A507	614	154	767	1230	0.499	614	638	1.1	1.1	6.233	A

2035 Baseline Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A10 / B1038 Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.46	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.46	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2035 Baseline Traffic	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - the A10 North		FLAT	✓	496	100.000
2 - the B1038		FLAT	✓	533	100.000
3 - Access Road		FLAT	✓	19	100.000
4 - the A10 South		FLAT	✓	953	100.000
5 - the A507		FLAT	✓	517	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	97	22	251	126
	2 - the B1038	137	0	28	228	140
	3 - Access Road	3	2	0	10	3
	4 - the A10 South	425	166	26	0	336
	5 - the A507	34	203	19	261	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	4	0	2	1
	2 - the B1038	2	0	0	0	3
	3 - Access Road	0	0	0	0	0
	4 - the A10 South	2	4	0	0	4
	5 - the A507	3	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - the A10 North	0.35	3.97	0.5	A	496	496
2 - the B1038	0.42	4.91	0.7	A	533	533
3 - Access Road	0.06	11.31	0.1	B	19	19
4 - the A10 South	0.51	4.03	1.1	A	953	953
5 - the A507	0.42	5.02	0.7	A	517	517

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	496	124	674	1424	0.348	494	596	0.0	0.5	3.941	A
2 - the B1038	533	133	702	1277	0.417	530	466	0.0	0.7	4.865	A
3 - Access Road	19	5	1138	339	0.055	19	95	0.0	0.1	11.240	B
4 - the A10 South	953	238	409	1876	0.508	949	747	0.0	1.1	3.983	A
5 - the A507	517	129	756	1237	0.418	514	603	0.0	0.7	4.972	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	496	124	678	1422	0.349	496	599	0.5	0.5	3.967	A
2 - the B1038	533	133	705	1275	0.418	533	469	0.7	0.7	4.915	A
3 - Access Road	19	5	1143	337	0.056	19	95	0.1	0.1	11.313	B
4 - the A10 South	953	238	411	1874	0.509	953	751	1.1	1.1	4.025	A
5 - the A507	517	129	759	1235	0.419	517	605	0.7	0.7	5.023	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	496	124	678	1422	0.349	496	599	0.5	0.5	3.967	A
2 - the B1038	533	133	705	1275	0.418	533	469	0.7	0.7	4.915	A
3 - Access Road	19	5	1143	337	0.056	19	95	0.1	0.1	11.313	B
4 - the A10 South	953	238	411	1874	0.509	953	751	1.1	1.1	4.025	A
5 - the A507	517	129	759	1235	0.419	517	605	0.7	0.7	5.023	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	496	124	678	1422	0.349	496	599	0.5	0.5	3.967	A
2 - the B1038	533	133	705	1275	0.418	533	469	0.7	0.7	4.915	A
3 - Access Road	19	5	1143	337	0.056	19	95	0.1	0.1	11.313	B
4 - the A10 South	953	238	411	1874	0.509	953	751	1.1	1.1	4.025	A
5 - the A507	517	129	759	1235	0.419	517	605	0.7	0.7	5.023	A

2035 + Northern Site, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A10 / B1038 Roundabout	Standard Roundabout		1, 2, 3, 4, 5	7.24	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.24	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2035 + Northern Site	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - the A10 North		FLAT	✓	571	100.000
2 - the B1038		FLAT	✓	760	100.000
3 - Access Road		FLAT	✓	4	100.000
4 - the A10 South		FLAT	✓	915	100.000
5 - the A507		FLAT	✓	718	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	68	25	318	160
	2 - the B1038	216	0	58	291	196
	3 - Access Road	0	0	0	3	1
	4 - the A10 South	288	223	40	0	364
	5 - the A507	40	194	34	450	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	13	14	6	9
	2 - the B1038	2	0	6	3	7
	3 - Access Road	0	0	0	0	0
	4 - the A10 South	7	4	3	0	8
	5 - the A507	3	8	13	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - the A10 North	0.45	5.62	0.9	A	571	571
2 - the B1038	0.70	11.46	2.4	B	760	760
3 - Access Road	0.02	18.36	0.0	C	4	4
4 - the A10 South	0.52	4.51	1.1	A	915	915
5 - the A507	0.58	7.49	1.5	A	718	718

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	571	143	935	1266	0.451	567	540	0.0	0.9	5.532	A
2 - the B1038	760	190	1019	1090	0.697	751	483	0.0	2.3	10.745	B
3 - Access Road	4	1	1614	204	0.020	4	156	0.0	0.0	17.952	C
4 - the A10 South	915	229	566	1769	0.517	911	1052	0.0	1.1	4.444	A
5 - the A507	718	180	762	1234	0.582	712	715	0.0	1.5	7.289	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	571	143	941	1262	0.452	571	544	0.9	0.9	5.619	A
2 - the B1038	760	190	1026	1086	0.700	760	486	2.3	2.4	11.433	B
3 - Access Road	4	1	1629	200	0.020	4	157	0.0	0.0	18.353	C
4 - the A10 South	915	229	572	1765	0.519	915	1061	1.1	1.1	4.511	A
5 - the A507	718	180	767	1231	0.584	718	720	1.5	1.5	7.490	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	571	143	941	1262	0.452	571	544	0.9	0.9	5.619	A
2 - the B1038	760	190	1026	1086	0.700	760	486	2.4	2.4	11.453	B
3 - Access Road	4	1	1629	200	0.020	4	157	0.0	0.0	18.359	C
4 - the A10 South	915	229	572	1765	0.519	915	1061	1.1	1.1	4.511	A
5 - the A507	718	180	767	1231	0.584	718	720	1.5	1.5	7.493	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	571	143	941	1262	0.452	571	544	0.9	0.9	5.619	A
2 - the B1038	760	190	1026	1086	0.700	760	486	2.4	2.4	11.457	B
3 - Access Road	4	1	1629	200	0.020	4	157	0.0	0.0	18.360	C
4 - the A10 South	915	229	572	1765	0.519	915	1061	1.1	1.1	4.511	A
5 - the A507	718	180	767	1230	0.584	718	720	1.5	1.5	7.493	A

2035 + Northern Site, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A10 / B1038 Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.93	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.93	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2035 + Northern Site	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - the A10 North		FLAT	✓	496	100.000
2 - the B1038		FLAT	✓	561	100.000
3 - Access Road		FLAT	✓	19	100.000
4 - the A10 South		FLAT	✓	1038	100.000
5 - the A507		FLAT	✓	597	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	97	22	251	126
	2 - the B1038	137	0	28	228	168
	3 - Access Road	3	2	0	10	3
	4 - the A10 South	425	166	26	0	421
	5 - the A507	34	235	19	309	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	4	0	2	1
	2 - the B1038	2	0	0	0	3
	3 - Access Road	0	0	0	0	0
	4 - the A10 South	2	4	0	0	4
	5 - the A507	3	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - the A10 North	0.36	4.18	0.6	A	496	496
2 - the B1038	0.45	5.32	0.8	A	561	561
3 - Access Road	0.06	12.12	0.1	B	19	19
4 - the A10 South	0.56	4.54	1.3	A	1038	1038
5 - the A507	0.48	5.65	0.9	A	597	597

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	496	124	753	1377	0.360	494	595	0.0	0.6	4.150	A
2 - the B1038	561	140	749	1249	0.449	558	498	0.0	0.8	5.254	A
3 - Access Road	19	5	1212	318	0.059	18	94	0.0	0.1	12.027	B
4 - the A10 South	1038	260	437	1857	0.559	1033	794	0.0	1.3	4.476	A
5 - the A507	597	149	755	1237	0.482	593	714	0.0	0.9	5.564	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	496	124	757	1374	0.361	496	599	0.6	0.6	4.184	A
2 - the B1038	561	140	753	1247	0.450	561	500	0.8	0.8	5.319	A
3 - Access Road	19	5	1219	316	0.059	19	95	0.1	0.1	12.122	B
4 - the A10 South	1038	260	439	1855	0.560	1038	798	1.3	1.3	4.540	A
5 - the A507	597	149	759	1235	0.483	596	718	0.9	0.9	5.645	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	496	124	757	1374	0.361	496	599	0.6	0.6	4.184	A
2 - the B1038	561	140	753	1247	0.450	561	500	0.8	0.8	5.319	A
3 - Access Road	19	5	1219	316	0.059	19	95	0.1	0.1	12.123	B
4 - the A10 South	1038	260	439	1855	0.560	1038	798	1.3	1.3	4.540	A
5 - the A507	597	149	759	1235	0.483	596	718	0.9	0.9	5.645	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	496	124	757	1374	0.361	496	599	0.6	0.6	4.184	A
2 - the B1038	561	140	753	1247	0.450	561	500	0.8	0.8	5.319	A
3 - Access Road	19	5	1219	316	0.059	19	95	0.1	0.1	12.123	B
4 - the A10 South	1038	260	439	1855	0.560	1038	798	1.3	1.3	4.541	A
5 - the A507	597	149	759	1235	0.483	597	718	0.9	0.9	5.645	A

2035 + Southern Site, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A10 / B1038 Roundabout	Standard Roundabout		1, 2, 3, 4, 5	7.03	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.03	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2035 + Southern Site	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - the A10 North		FLAT	✓	608	100.000
2 - the B1038		FLAT	✓	773	100.000
3 - Access Road		FLAT	✓	4	100.000
4 - the A10 South		FLAT	✓	951	100.000
5 - the A507		FLAT	✓	632	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	68	25	318	197
	2 - the B1038	216	0	58	291	209
	3 - Access Road	0	0	0	3	1
	4 - the A10 South	288	223	40	0	399
	5 - the A507	44	173	34	381	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	13	14	6	9
	2 - the B1038	2	0	6	3	7
	3 - Access Road	0	0	0	0	0
	4 - the A10 South	7	4	3	0	8
	5 - the A507	3	8	13	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - the A10 North	0.46	5.48	0.9	A	608	608
2 - the B1038	0.70	11.28	2.4	B	773	773
3 - Access Road	0.02	17.89	0.0	C	4	4
4 - the A10 South	0.55	4.92	1.3	A	951	951
5 - the A507	0.51	6.42	1.1	A	632	632

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	608	152	846	1320	0.460	604	544	0.0	0.9	5.404	A
2 - the B1038	773	193	989	1108	0.697	764	461	0.0	2.3	10.602	B
3 - Access Road	4	1	1597	209	0.020	4	156	0.0	0.0	17.530	C
4 - the A10 South	951	238	616	1735	0.548	946	985	0.0	1.3	4.831	A
5 - the A507	632	158	762	1234	0.512	628	800	0.0	1.1	6.293	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	608	152	851	1317	0.461	608	548	0.9	0.9	5.483	A
2 - the B1038	773	193	995	1105	0.700	773	464	2.3	2.4	11.258	B
3 - Access Road	4	1	1611	205	0.020	4	157	0.0	0.0	17.886	C
4 - the A10 South	951	238	622	1731	0.550	951	993	1.3	1.3	4.918	A
5 - the A507	632	158	767	1231	0.514	632	806	1.1	1.1	6.416	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	608	152	851	1317	0.461	608	548	0.9	0.9	5.483	A
2 - the B1038	773	193	995	1105	0.700	773	464	2.4	2.4	11.275	B
3 - Access Road	4	1	1611	205	0.020	4	157	0.0	0.0	17.891	C
4 - the A10 South	951	238	622	1731	0.550	951	993	1.3	1.3	4.919	A
5 - the A507	632	158	767	1231	0.514	632	806	1.1	1.1	6.417	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	608	152	852	1317	0.461	608	548	0.9	0.9	5.483	A
2 - the B1038	773	193	995	1105	0.700	773	464	2.4	2.4	11.279	B
3 - Access Road	4	1	1611	205	0.020	4	157	0.0	0.0	17.892	C
4 - the A10 South	951	238	622	1731	0.550	951	993	1.3	1.3	4.919	A
5 - the A507	632	158	767	1230	0.514	632	806	1.1	1.1	6.417	A

2035 + Southern Site, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A10 / B1038 Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.85	A

Junction Network

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2035 + Southern Site	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - the A10 North		FLAT	✓	499	100.000
2 - the B1038		FLAT	✓	536	100.000
3 - Access Road		FLAT	✓	19	100.000
4 - the A10 South		FLAT	✓	959	100.000
5 - the A507		FLAT	✓	636	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	97	22	251	128
	2 - the B1038	137	0	28	228	143
	3 - Access Road	3	2	0	10	3
	4 - the A10 South	425	166	26	0	342
	5 - the A507	60	239	19	318	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	4	0	2	1
	2 - the B1038	2	0	0	0	3
	3 - Access Road	0	0	0	0	0
	4 - the A10 South	2	4	0	0	4
	5 - the A507	3	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - the A10 North	0.37	4.24	0.6	A	499	499
2 - the B1038	0.43	5.18	0.8	A	536	536
3 - Access Road	0.06	11.97	0.1	B	19	19
4 - the A10 South	0.51	4.07	1.1	A	959	959
5 - the A507	0.51	6.02	1.1	A	636	636

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	499	125	766	1368	0.364	496	621	0.0	0.6	4.200	A
2 - the B1038	536	134	760	1243	0.432	533	502	0.0	0.8	5.120	A
3 - Access Road	19	5	1199	321	0.058	19	94	0.0	0.1	11.879	B
4 - the A10 South	959	240	415	1872	0.512	954	803	0.0	1.1	4.023	A
5 - the A507	636	159	756	1237	0.514	632	614	0.0	1.0	5.924	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	499	125	771	1366	0.365	499	625	0.6	0.6	4.235	A
2 - the B1038	536	134	764	1240	0.433	536	505	0.8	0.8	5.181	A
3 - Access Road	19	5	1206	319	0.059	19	95	0.1	0.1	11.972	B
4 - the A10 South	959	240	417	1870	0.513	959	807	1.1	1.1	4.066	A
5 - the A507	636	159	759	1235	0.515	636	617	1.0	1.1	6.024	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	499	125	771	1366	0.365	499	625	0.6	0.6	4.235	A
2 - the B1038	536	134	764	1240	0.433	536	505	0.8	0.8	5.181	A
3 - Access Road	19	5	1206	319	0.059	19	95	0.1	0.1	11.972	B
4 - the A10 South	959	240	417	1870	0.513	959	807	1.1	1.1	4.066	A
5 - the A507	636	159	759	1235	0.515	636	617	1.1	1.1	6.024	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	499	125	771	1366	0.365	499	625	0.6	0.6	4.235	A
2 - the B1038	536	134	764	1240	0.433	536	505	0.8	0.8	5.181	A
3 - Access Road	19	5	1206	319	0.059	19	95	0.1	0.1	11.972	B
4 - the A10 South	959	240	417	1870	0.513	959	807	1.1	1.1	4.066	A
5 - the A507	636	159	759	1235	0.515	636	617	1.1	1.1	6.024	A

2035 + Total Dev Sites, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A10 / B1038 Roundabout	Standard Roundabout		1, 2, 3, 4, 5	8.46	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.46	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	2035 + Total Dev Sites	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - the A10 North		FLAT	✓	606	100.000
2 - the B1038		FLAT	✓	809	100.000
3 - Access Road		FLAT	✓	4	100.000
4 - the A10 South		FLAT	✓	991	100.000
5 - the A507		FLAT	✓	730	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	68	25	318	195
	2 - the B1038	216	0	58	291	245
	3 - Access Road	0	0	0	3	1
	4 - the A10 South	288	223	40	0	439
	5 - the A507	43	199	34	454	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	13	14	6	9
	2 - the B1038	2	0	6	3	7
	3 - Access Road	0	0	0	0	0
	4 - the A10 South	7	4	3	0	8
	5 - the A507	3	8	13	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - the A10 North	0.48	5.98	1.0	A	606	606
2 - the B1038	0.76	14.77	3.3	B	809	809
3 - Access Road	0.02	21.07	0.0	C	4	4
4 - the A10 South	0.58	5.36	1.5	A	991	991
5 - the A507	0.59	7.66	1.5	A	730	730

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	606	152	943	1261	0.481	602	542	0.0	1.0	5.867	A
2 - the B1038	809	202	1059	1067	0.758	797	487	0.0	3.1	13.334	B
3 - Access Road	4	1	1700	180	0.023	4	155	0.0	0.0	20.429	C
4 - the A10 South	991	248	649	1712	0.579	985	1055	0.0	1.4	5.237	A
5 - the A507	730	182	761	1234	0.591	723	873	0.0	1.5	7.434	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	606	152	950	1257	0.482	606	547	1.0	1.0	5.976	A
2 - the B1038	809	202	1066	1063	0.762	809	490	3.1	3.2	14.696	B
3 - Access Road	4	1	1718	175	0.023	4	157	0.0	0.0	21.052	C
4 - the A10 South	991	248	657	1707	0.581	991	1065	1.4	1.5	5.359	A
5 - the A507	730	182	767	1231	0.593	729	881	1.5	1.5	7.659	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	606	152	950	1257	0.482	606	547	1.0	1.0	5.976	A
2 - the B1038	809	202	1066	1063	0.762	809	490	3.2	3.2	14.751	B
3 - Access Road	4	1	1719	175	0.023	4	157	0.0	0.0	21.067	C
4 - the A10 South	991	248	657	1707	0.581	991	1065	1.5	1.5	5.360	A
5 - the A507	730	182	767	1231	0.593	729	881	1.5	1.5	7.663	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	606	152	950	1257	0.482	606	547	1.0	1.0	5.976	A
2 - the B1038	809	202	1066	1063	0.762	809	490	3.2	3.3	14.769	B
3 - Access Road	4	1	1719	175	0.023	4	157	0.0	0.0	21.070	C
4 - the A10 South	991	248	657	1707	0.581	991	1065	1.5	1.5	5.360	A
5 - the A507	730	182	767	1231	0.593	729	881	1.5	1.5	7.663	A

2035 + Total Dev Sites, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A10 / B1038 Roundabout	Standard Roundabout		1, 2, 3, 4, 5	5.38	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.38	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2035 + Total Dev Sites	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - the A10 North		FLAT	✓	498	100.000
2 - the B1038		FLAT	✓	563	100.000
3 - Access Road		FLAT	✓	19	100.000
4 - the A10 South		FLAT	✓	1039	100.000
5 - the A507		FLAT	✓	708	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	97	22	251	128
	2 - the B1038	137	0	28	228	170
	3 - Access Road	3	2	0	10	3
	4 - the A10 South	425	166	26	0	422
	5 - the A507	59	269	19	361	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - the A10 North	2 - the B1038	3 - Access Road	4 - the A10 South	5 - the A507
From	1 - the A10 North	0	4	0	2	1
	2 - the B1038	2	0	0	0	3
	3 - Access Road	0	0	0	0	0
	4 - the A10 South	2	4	0	0	4
	5 - the A507	3	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - the A10 North	0.38	4.46	0.6	A	498	498
2 - the B1038	0.46	5.60	0.9	A	563	563
3 - Access Road	0.06	12.80	0.1	B	19	19
4 - the A10 South	0.56	4.56	1.3	A	1039	1039
5 - the A507	0.57	6.85	1.3	A	708	708

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	498	125	838	1325	0.376	496	620	0.0	0.6	4.417	A
2 - the B1038	563	141	802	1218	0.462	559	531	0.0	0.9	5.514	A
3 - Access Road	19	5	1267	302	0.062	18	94	0.0	0.1	12.681	B
4 - the A10 South	1039	260	440	1854	0.560	1034	845	0.0	1.3	4.494	A
5 - the A507	708	177	755	1237	0.572	703	719	0.0	1.3	6.686	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	498	125	844	1321	0.377	498	624	0.6	0.6	4.461	A
2 - the B1038	563	141	807	1215	0.463	563	535	0.9	0.9	5.595	A
3 - Access Road	19	5	1275	300	0.063	19	95	0.1	0.1	12.802	B
4 - the A10 South	1039	260	443	1853	0.561	1039	851	1.3	1.3	4.559	A
5 - the A507	708	177	759	1235	0.573	708	723	1.3	1.3	6.843	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	498	125	844	1321	0.377	498	624	0.6	0.6	4.461	A
2 - the B1038	563	141	807	1215	0.463	563	535	0.9	0.9	5.595	A
3 - Access Road	19	5	1275	300	0.063	19	95	0.1	0.1	12.803	B
4 - the A10 South	1039	260	443	1853	0.561	1039	851	1.3	1.3	4.559	A
5 - the A507	708	177	759	1235	0.573	708	723	1.3	1.3	6.846	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - the A10 North	498	125	844	1321	0.377	498	624	0.6	0.6	4.461	A
2 - the B1038	563	141	807	1215	0.463	563	535	0.9	0.9	5.595	A
3 - Access Road	19	5	1275	300	0.063	19	95	0.1	0.1	12.803	B
4 - the A10 South	1039	260	443	1853	0.561	1039	851	1.3	1.3	4.559	A
5 - the A507	708	177	759	1235	0.573	708	723	1.3	1.3	6.846	A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.4.1693
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Filename: High St - B1038 DL (2035).j10
Path: Y:\PROJECT FOLDER\23161 Buntingford\Calculations\4. Transport\1. ARCADY\TA Assessment 060224\06022024 Tests
Report generation date: 06/02/2024 10:59:51

»Year 2023 Baseline, AM
»Year 2023 Baseline , PM
»Year 2035 Baseline, AM
»Year 2035 Baseline, PM
»Year 2035 + Northern Site, AM
»Year 2035 + Northern Site, PM
»Year 2035 + Southern Site, AM
»Year 2035 + Southern Site, PM
»Year 2035 + Dev Total Sites, AM
»Year 2035 + Dev Total Sites, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Year 2023 Baseline					
Stream B-AC	0.6	11.64	0.36	0.4	10.66	0.30
Stream C-AB	0.9	8.74	0.36	1.1	9.73	0.40
	Year 2035 Baseline					
Stream B-AC	0.7	12.76	0.40	0.5	11.57	0.34
Stream C-AB	1.2	9.21	0.41	1.4	10.53	0.46
	Year 2035 + Northern Site					
Stream B-AC	0.8	13.82	0.43	0.6	12.42	0.37
Stream C-AB	1.3	9.22	0.42	1.5	10.65	0.48
	Year 2035 + Southern Site					
Stream B-AC	0.9	15.42	0.48	0.5	11.91	0.35
Stream C-AB	1.2	9.09	0.41	1.4	10.83	0.47
	Year 2035 + Dev Total Sites					
Stream B-AC	1.0	16.69	0.50	0.6	12.81	0.37
Stream C-AB	1.4	9.11	0.43	1.6	10.96	0.49

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	Baldock Rd/High St Junction
Location	Buntingford
Site number	
Date	16/10/2023
Version	A
Status	(new file)
Identifier	
Client	
Jobnumber	23161
Enumerator	JUBB\SRadford
Description	Geometric Input from OS/Satelite mapping

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Year 2023 Baseline	AM	FLAT	07:45	08:45	60	15	✓
D2	Year 2023 Baseline	PM	FLAT	17:00	18:00	60	15	✓
D3	Year 2035 Baseline	AM	FLAT	07:45	08:45	60	15	✓
D4	Year 2035 Baseline	PM	FLAT	17:00	18:00	60	15	✓
D5	Year 2035 + Northern Site	AM	FLAT	07:45	08:45	60	15	✓
D6	Year 2035 + Northern Site	PM	FLAT	17:00	18:00	60	15	✓
D7	Year 2035 + Southern Site	AM	FLAT	07:45	08:45	60	15	✓
D8	Year 2035 + Southern Site	PM	FLAT	17:00	18:00	60	15	✓
D9	Year 2035 + Dev Total Sites	AM	FLAT	07:45	08:45	60	15	✓
D10	Year 2035 + Dev Total Sites	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

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

Year 2023 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.66	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.66	A

Arms

Arms

Arm	Name	Description	Arm type
A	Baldock Rd		Major
B	High St		Minor
C	B1038		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - B1038	6.15			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - High St	One lane	2.50	50	18

Slope / Intercept / Capacity

Custom Intercept Adjustments

Custom stream intercept adjustment	Stream	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
1	C-B	✓	Queue	-100

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	477	0.088	0.222	0.139	0.317
B-C	603	0.090	0.229	-	-
C-B	474	0.221	0.221	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Year 2023 Baseline	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Baldock Rd		FLAT	✓	262	100.000
B - High St		FLAT	✓	174	100.000
C - B1038		FLAT	✓	439	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	53	209
	B - High St	38	0	136
	C - B1038	318	121	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	10	6
	B - High St	5	0	0
	C - B1038	3	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.36	11.64	0.6	B	174	174
C-AB	0.36	8.74	0.9	A	235	235
C-A					204	204
A-B					53	53
A-C					209	209

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	44	487	0.357	172	0.0	0.6	11.472	B
C-AB	233	58	661	0.353	230	0.0	0.9	8.591	A
C-A	206	51			206				
A-B	53	13			53				
A-C	209	52			209				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	44	486	0.358	174	0.6	0.6	11.640	B
C-AB	235	59	662	0.355	235	0.9	0.9	8.740	A
C-A	204	51			204				
A-B	53	13			53				
A-C	209	52			209				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	44	486	0.358	174	0.6	0.6	11.642	B
C-AB	235	59	662	0.355	235	0.9	0.9	8.744	A
C-A	204	51			204				
A-B	53	13			53				
A-C	209	52			209				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	44	486	0.358	174	0.6	0.6	11.642	B
C-AB	235	59	662	0.355	235	0.9	0.9	8.743	A
C-A	204	51			204				
A-B	53	13			53				
A-C	209	52			209				

Year 2023 Baseline , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.54	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.54	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	Year 2023 Baseline	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Baldock Rd		FLAT	✓	314	100.000
B - High St		FLAT	✓	146	100.000
C - B1038		FLAT	✓	426	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	33	281
	B - High St	25	0	121
	C - B1038	290	136	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	0	6
	B - High St	0	0	0
	C - B1038	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.30	10.66	0.4	B	146	146
C-AB	0.40	9.73	1.1	A	254	254
C-A					172	172
A-B					33	33
A-C					281	281

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	146	37	484	0.302	144	0.0	0.4	10.549	B
C-AB	252	63	629	0.401	248	0.0	1.0	9.509	A
C-A	174	43			174				
A-B	33	8			33				
A-C	281	70			281				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	146	37	484	0.302	146	0.4	0.4	10.664	B
C-AB	254	64	631	0.403	254	1.0	1.0	9.720	A
C-A	172	43			172				
A-B	33	8			33				
A-C	281	70			281				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	146	37	484	0.302	146	0.4	0.4	10.664	B
C-AB	254	64	631	0.403	254	1.0	1.0	9.726	A
C-A	172	43			172				
A-B	33	8			33				
A-C	281	70			281				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	146	37	484	0.302	146	0.4	0.4	10.665	B
C-AB	254	64	631	0.403	254	1.0	1.1	9.725	A
C-A	172	43			172				
A-B	33	8			33				
A-C	281	70			281				

Year 2035 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.18	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.18	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	Year 2035 Baseline	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Baldock Rd		FLAT	✓	288	100.000
B - High St		FLAT	✓	192	100.000
C - B1038		FLAT	✓	483	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	58	230
	B - High St	42	0	150
	C - B1038	350	133	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	10	6
	B - High St	5	0	0
	C - B1038	3	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.40	12.76	0.7	B	192	192
C-AB	0.41	9.21	1.2	A	276	276
C-A					207	207
A-B					58	58
A-C					230	230

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	192	48	478	0.402	189	0.0	0.7	12.512	B
C-AB	274	68	681	0.402	269	0.0	1.1	8.998	A
C-A	209	52			209				
A-B	58	15			58				
A-C	230	58			230				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	192	48	477	0.402	192	0.7	0.7	12.754	B
C-AB	276	69	682	0.405	276	1.1	1.1	9.208	A
C-A	207	52			207				
A-B	58	15			58				
A-C	230	58			230				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	192	48	477	0.402	192	0.7	0.7	12.757	B
C-AB	276	69	682	0.405	276	1.1	1.2	9.210	A
C-A	207	52			207				
A-B	58	15			58				
A-C	230	58			230				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	192	48	477	0.402	192	0.7	0.7	12.759	B
C-AB	276	69	682	0.405	276	1.2	1.2	9.214	A
C-A	207	52			207				
A-B	58	15			58				
A-C	230	58			230				

Year 2035 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.13	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	Year 2035 Baseline	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Baldock Rd		FLAT	✓	346	100.000
B - High St		FLAT	✓	161	100.000
C - B1038		FLAT	✓	470	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	36	310
	B - High St	28	0	133
	C - B1038	320	150	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	0	6
	B - High St	0	0	0
	C - B1038	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.34	11.57	0.5	B	161	161
C-AB	0.46	10.53	1.4	B	299	299
C-A					171	171
A-B					36	36
A-C					310	310

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	161	40	473	0.341	159	0.0	0.5	11.405	B
C-AB	297	74	647	0.459	292	0.0	1.3	10.197	B
C-A	173	43			173				
A-B	36	9			36				
A-C	310	78			310				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	161	40	472	0.341	161	0.5	0.5	11.565	B
C-AB	300	75	649	0.462	300	1.3	1.4	10.517	B
C-A	170	43			170				
A-B	36	9			36				
A-C	310	78			310				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	161	40	472	0.341	161	0.5	0.5	11.568	B
C-AB	300	75	649	0.462	300	1.4	1.4	10.526	B
C-A	170	43			170				
A-B	36	9			36				
A-C	310	78			310				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	161	40	472	0.341	161	0.5	0.5	11.568	B
C-AB	300	75	649	0.462	300	1.4	1.4	10.527	B
C-A	170	43			170				
A-B	36	9			36				
A-C	310	78			310				

Year 2035 + Northern Site, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.32	A

Junction Network

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	Year 2035 + Northern Site	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Baldock Rd		FLAT	✓	314	100.000
B - High St		FLAT	✓	199	100.000
C - B1038		FLAT	✓	509	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	65	249
	B - High St	49	0	150
	C - B1038	376	133	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	10	6
	B - High St	5	0	0
	C - B1038	3	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.43	13.82	0.8	B	199	199
C-AB	0.42	9.22	1.3	A	291	291
C-A					218	218
A-B					65	65
A-C					249	249

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	199	50	463	0.430	196	0.0	0.7	13.495	B
C-AB	289	72	696	0.416	284	0.0	1.2	8.989	A
C-A	220	55			220				
A-B	65	16			65				
A-C	249	62			249				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	199	50	463	0.430	199	0.7	0.8	13.809	B
C-AB	292	73	698	0.419	292	1.2	1.2	9.217	A
C-A	217	54			217				
A-B	65	16			65				
A-C	249	62			249				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	199	50	463	0.430	199	0.8	0.8	13.815	B
C-AB	292	73	698	0.419	292	1.2	1.3	9.224	A
C-A	217	54			217				
A-B	65	16			65				
A-C	249	62			249				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	199	50	463	0.430	199	0.8	0.8	13.815	B
C-AB	292	73	698	0.419	292	1.3	1.3	9.224	A
C-A	217	54			217				
A-B	65	16			65				
A-C	249	62			249				

Year 2035 + Northern Site, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.25	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.25	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	Year 2035 + Northern Site	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Baldock Rd		FLAT	✓	373	100.000
B - High St		FLAT	✓	167	100.000
C - B1038		FLAT	✓	489	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	42	331
	B - High St	34	0	133
	C - B1038	339	150	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	0	6
	B - High St	0	0	0
	C - B1038	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.37	12.42	0.6	B	167	167
C-AB	0.48	10.65	1.5	B	312	312
C-A					177	177
A-B					42	42
A-C					331	331

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	42	457	0.365	165	0.0	0.6	12.212	B
C-AB	310	77	657	0.472	304	0.0	1.4	10.278	B
C-A	179	45			179				
A-B	42	11			42				
A-C	331	83			331				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	42	457	0.366	167	0.6	0.6	12.418	B
C-AB	313	78	659	0.475	313	1.4	1.5	10.634	B
C-A	176	44			176				
A-B	42	11			42				
A-C	331	83			331				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	42	457	0.366	167	0.6	0.6	12.421	B
C-AB	313	78	659	0.475	313	1.5	1.5	10.642	B
C-A	176	44			176				
A-B	42	11			42				
A-C	331	83			331				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	167	42	457	0.366	167	0.6	0.6	12.421	B
C-AB	313	78	659	0.475	313	1.5	1.5	10.645	B
C-A	176	44			176				
A-B	42	11			42				
A-C	331	83			331				

Year 2035 + Southern Site, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.84	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.84	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	Year 2035 + Southern Site	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Baldock Rd		FLAT	✓	294	100.000
B - High St		FLAT	✓	215	100.000
C - B1038		FLAT	✓	512	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	61	233
	B - High St	65	0	150
	C - B1038	379	133	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	10	6
	B - High St	5	0	0
	C - B1038	3	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.48	15.42	0.9	C	215	215
C-AB	0.41	9.09	1.2	A	291	291
C-A					221	221
A-B					61	61
A-C					233	233

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	215	54	452	0.475	211	0.0	0.9	14.945	B
C-AB	289	72	702	0.412	284	0.0	1.2	8.863	A
C-A	223	56			223				
A-B	61	15			61				
A-C	233	58			233				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	215	54	452	0.476	215	0.9	0.9	15.404	C
C-AB	292	73	704	0.415	292	1.2	1.2	9.084	A
C-A	220	55			220				
A-B	61	15			61				
A-C	233	58			233				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	215	54	452	0.476	215	0.9	0.9	15.414	C
C-AB	292	73	704	0.415	292	1.2	1.2	9.086	A
C-A	220	55			220				
A-B	61	15			61				
A-C	233	58			233				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	215	54	452	0.476	215	0.9	0.9	15.416	C
C-AB	292	73	704	0.415	292	1.2	1.2	9.088	A
C-A	220	55			220				
A-B	61	15			61				
A-C	233	58			233				

Year 2035 + Southern Site, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.13	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	Year 2035 + Southern Site	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Baldock Rd		FLAT	✓	383	100.000
B - High St		FLAT	✓	162	100.000
C - B1038		FLAT	✓	472	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	53	330
	B - High St	29	0	133
	C - B1038	322	150	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	0	6
	B - High St	0	0	0
	C - B1038	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.35	11.91	0.5	B	162	162
C-AB	0.47	10.83	1.4	B	303	303
C-A					169	169
A-B					53	53
A-C					330	330

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	162	41	465	0.349	160	0.0	0.5	11.734	B
C-AB	301	75	642	0.469	296	0.0	1.4	10.465	B
C-A	171	43			171				
A-B	53	13			53				
A-C	330	83			330				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	162	41	464	0.349	162	0.5	0.5	11.910	B
C-AB	304	76	644	0.472	304	1.4	1.4	10.820	B
C-A	168	42			168				
A-B	53	13			53				
A-C	330	83			330				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	162	41	464	0.349	162	0.5	0.5	11.913	B
C-AB	304	76	644	0.472	304	1.4	1.4	10.826	B
C-A	168	42			168				
A-B	53	13			53				
A-C	330	83			330				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	162	41	464	0.349	162	0.5	0.5	11.913	B
C-AB	304	76	644	0.472	304	1.4	1.4	10.832	B
C-A	168	42			168				
A-B	53	13			53				
A-C	330	83			330				

Year 2035 + Dev Total Sites, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.03	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.03	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	Year 2035 + Dev Total Sites	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Baldock Rd		FLAT	✓	318	100.000
B - High St		FLAT	✓	221	100.000
C - B1038		FLAT	✓	537	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	67	251
	B - High St	71	0	150
	C - B1038	404	133	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	10	6
	B - High St	5	0	0
	C - B1038	3	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.50	16.69	1.0	C	221	221
C-AB	0.43	9.11	1.4	A	307	307
C-A					230	230
A-B					67	67
A-C					251	251

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	221	55	441	0.501	217	0.0	1.0	16.081	C
C-AB	305	76	717	0.425	299	0.0	1.3	8.856	A
C-A	232	58			232				
A-B	67	17			67				
A-C	251	63			251				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	221	55	440	0.502	221	1.0	1.0	16.671	C
C-AB	308	77	719	0.428	308	1.3	1.3	9.104	A
C-A	229	57			229				
A-B	67	17			67				
A-C	251	63			251				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	221	55	440	0.502	221	1.0	1.0	16.683	C
C-AB	308	77	719	0.428	308	1.3	1.3	9.109	A
C-A	229	57			229				
A-B	67	17			67				
A-C	251	63			251				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	221	55	440	0.502	221	1.0	1.0	16.687	C
C-AB	308	77	719	0.428	308	1.3	1.4	9.111	A
C-A	229	57			229				
A-B	67	17			67				
A-C	251	63			251				

Year 2035 + Dev Total Sites, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.27	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.27	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	Year 2035 + Dev Total Sites	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Baldock Rd		FLAT	✓	409	100.000
B - High St		FLAT	✓	168	100.000
C - B1038		FLAT	✓	490	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	58	351
	B - High St	35	0	133
	C - B1038	340	150	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Baldock Rd	B - High St	C - B1038
From	A - Baldock Rd	0	0	6
	B - High St	0	0	0
	C - B1038	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.37	12.81	0.6	B	168	168
C-AB	0.49	10.96	1.6	B	317	317
C-A					173	173
A-B					58	58
A-C					351	351

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	168	42	450	0.374	166	0.0	0.6	12.578	B
C-AB	314	78	651	0.482	308	0.0	1.5	10.558	B
C-A	176	44			176				
A-B	58	15			58				
A-C	351	88			351				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	168	42	449	0.374	168	0.6	0.6	12.803	B
C-AB	317	79	654	0.486	317	1.5	1.5	10.947	B
C-A	173	43			173				
A-B	58	15			58				
A-C	351	88			351				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	168	42	449	0.374	168	0.6	0.6	12.810	B
C-AB	317	79	654	0.486	317	1.5	1.5	10.956	B
C-A	173	43			173				
A-B	58	15			58				
A-C	351	88			351				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	168	42	449	0.374	168	0.6	0.6	12.810	B
C-AB	317	79	654	0.486	317	1.5	1.6	10.960	B
C-A	173	43			173				
A-B	58	15			58				
A-C	351	88			351				

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.0.4.1693
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Filename: High St - Hare St - Station Rd DL (2035).j10
Path: Y:\PROJECT FOLDER\23161 Buntingford\Calculations\4. Transport\1. ARCADY\TA Assessment 060224\06022024 Tests
Report generation date: 06/02/2024 11:10:02

»2023 Baseline, AM
»2023 Baseline, PM
»2035 Baseline, AM
»2035 Baseline, PM
»2035 + Dev Northern Site, AM
»2035 + Dev Northern Site, PM
»2035 + Dev Southern Site, AM
»2035 + Dev Southern Site, PM
»2035 + Dev Total Sites, AM
»2035 + Dev Total Sites, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2023 Baseline					
1 - High Street	0.6	6.00	0.36	0.7	6.50	0.41
2 - Hare Street	0.4	6.42	0.30	0.4	6.34	0.27
3 - Station Road	0.8	7.39	0.43	0.8	7.46	0.46
	2035 Baseline					
1 - High Street	0.7	6.42	0.40	0.8	7.10	0.45
2 - Hare Street	0.5	6.88	0.34	0.4	6.80	0.30
3 - Station Road	1.0	8.17	0.48	1.0	8.32	0.51
	2035 + Dev Northern Site					
1 - High Street	0.7	6.64	0.42	0.9	7.39	0.48
2 - Hare Street	0.5	7.08	0.35	0.5	7.02	0.32
3 - Station Road	1.0	8.61	0.51	1.1	8.65	0.53
	2035 + Dev Southern Site					
1 - High Street	0.7	6.46	0.40	0.9	7.39	0.48
2 - Hare Street	0.6	7.19	0.36	0.5	6.86	0.31
3 - Station Road	1.0	8.53	0.50	1.0	8.34	0.51
	2035 + Dev Total Sites					
1 - High Street	0.8	6.66	0.42	1.0	7.70	0.50
2 - Hare Street	0.6	7.39	0.38	0.5	7.06	0.32
3 - Station Road	1.1	9.00	0.52	1.1	8.66	0.53

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	High Street/Hare St/Station Rd
Location	Buntingford
Site number	
Date	16/10/2023
Version	A
Status	(new file)
Identifier	
Client	
Jobnumber	23161
Enumerator	JUBB\SRadford
Description	Geometric Input from Dev 3/22/1551

Units

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

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
JUNCTIONS 9	5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2023 Baseline	AM	FLAT	07:45	08:45	60	15	✓
D2	2023 Baseline	PM	FLAT	17:00	18:00	60	15	✓
D3	2035 Baseline	AM	FLAT	07:45	08:45	60	15	✓
D4	2035 Baseline	PM	FLAT	17:00	18:00	60	15	✓
D5	2035 + Dev Northern Site	AM	FLAT	07:45	08:45	60	15	✓
D6	2035 + Dev Northern Site	PM	FLAT	17:00	18:00	60	15	✓
D7	2035 + Dev Southern Site	AM	FLAT	07:45	08:45	60	15	✓
D8	2035 + Dev Southern Site	PM	FLAT	17:00	18:00	60	15	✓
D9	2035 + Dev Total Sites	AM	FLAT	07:45	08:45	60	15	✓
D10	2035 + Dev Total Sites	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

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

2023 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	6.65	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		6.65	A

Arms

Arms

Arm	Name	Description
1	High Street	
2	Hare Street	
3	Station Road	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - High Street	4.30	3.90	3.90	0.0	8.90	5.70	0.0	
2 - Hare Street	3.10	3.10	4.50	4.0	7.30	4.70	0.0	
3 - Station Road	4.10	3.70	3.70	0.0	12.20	11.80	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - High Street	0.624	1027
2 - Hare Street	0.619	962
3 - Station Road	0.622	972

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 period length (min)	Time segment length (min)	Run automatically
D1	2023 Baseline	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High Street		FLAT	✓	352	100.000
2 - Hare Street		FLAT	✓	247	100.000
3 - Station Road		FLAT	✓	383	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	129	223
	2 - Hare Street	141	0	106
	3 - Station Road	296	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	6	2
	2 - Hare Street	2	0	4
	3 - Station Road	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High Street	0.36	6.00	0.6	A	352	352
2 - Hare Street	0.30	6.42	0.4	A	247	247
3 - Station Road	0.43	7.39	0.8	A	383	383

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	352	88	86	973	0.362	350	434	0.0	0.6	5.955	A
2 - Hare Street	247	62	222	824	0.300	245	214	0.0	0.4	6.374	A
3 - Station Road	383	96	140	885	0.433	380	327	0.0	0.8	7.295	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	352	88	87	972	0.362	352	437	0.6	0.6	6.002	A
2 - Hare Street	247	62	223	823	0.300	247	216	0.4	0.4	6.422	A
3 - Station Road	383	96	141	885	0.433	383	329	0.8	0.8	7.390	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	352	88	87	972	0.362	352	437	0.6	0.6	6.002	A
2 - Hare Street	247	62	223	823	0.300	247	216	0.4	0.4	6.422	A
3 - Station Road	383	96	141	885	0.433	383	329	0.8	0.8	7.390	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	352	88	87	972	0.362	352	437	0.6	0.6	6.002	A
2 - Hare Street	247	62	223	823	0.300	247	216	0.4	0.4	6.422	A
3 - Station Road	383	96	141	885	0.433	383	329	0.8	0.8	7.390	A

2023 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	6.85	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		6.85	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2023 Baseline	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High Street		FLAT	✓	391	100.000
2 - Hare Street		FLAT	✓	215	100.000
3 - Station Road		FLAT	✓	410	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	122	269
	2 - Hare Street	128	0	87
	3 - Station Road	299	111	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	3	2
	2 - Hare Street	3	0	1
	3 - Station Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High Street	0.41	6.50	0.7	A	391	391
2 - Hare Street	0.27	6.34	0.4	A	215	215
3 - Station Road	0.46	7.46	0.8	A	410	410

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	391	98	110	958	0.408	388	424	0.0	0.7	6.435	A
2 - Hare Street	215	54	267	796	0.270	214	231	0.0	0.4	6.296	A
3 - Station Road	410	103	127	893	0.459	407	353	0.0	0.8	7.349	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	391	98	111	957	0.408	391	427	0.7	0.7	6.502	A
2 - Hare Street	215	54	269	795	0.270	215	233	0.4	0.4	6.341	A
3 - Station Road	410	103	128	893	0.459	410	356	0.8	0.8	7.456	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	391	98	111	957	0.408	391	427	0.7	0.7	6.502	A
2 - Hare Street	215	54	269	795	0.270	215	233	0.4	0.4	6.341	A
3 - Station Road	410	103	128	893	0.459	410	356	0.8	0.8	7.456	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	391	98	111	957	0.408	391	427	0.7	0.7	6.502	A
2 - Hare Street	215	54	269	795	0.270	215	233	0.4	0.4	6.341	A
3 - Station Road	410	103	128	893	0.459	410	356	0.8	0.8	7.456	A

2035 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	7.22	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.22	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2035 Baseline	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High Street		FLAT	✓	387	100.000
2 - Hare Street		FLAT	✓	272	100.000
3 - Station Road		FLAT	✓	422	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	142	245
	2 - Hare Street	155	0	117
	3 - Station Road	326	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	6	2
	2 - Hare Street	2	0	4
	3 - Station Road	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High Street	0.40	6.42	0.7	A	387	387
2 - Hare Street	0.34	6.88	0.5	A	272	272
3 - Station Road	0.48	8.17	1.0	A	422	422

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	387	97	95	967	0.400	384	477	0.0	0.7	6.359	A
2 - Hare Street	272	68	243	811	0.335	270	236	0.0	0.5	6.818	A
3 - Station Road	422	106	154	877	0.481	418	359	0.0	0.9	8.026	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	387	97	96	967	0.400	387	481	0.7	0.7	6.422	A
2 - Hare Street	272	68	245	810	0.336	272	238	0.5	0.5	6.883	A
3 - Station Road	422	106	155	876	0.482	422	362	0.9	0.9	8.166	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	387	97	96	967	0.400	387	481	0.7	0.7	6.422	A
2 - Hare Street	272	68	245	810	0.336	272	238	0.5	0.5	6.883	A
3 - Station Road	422	106	155	876	0.482	422	362	0.9	1.0	8.168	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	387	97	96	967	0.400	387	481	0.7	0.7	6.422	A
2 - Hare Street	272	68	245	810	0.336	272	238	0.5	0.5	6.883	A
3 - Station Road	422	106	155	876	0.482	422	362	1.0	1.0	8.168	A

2035 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	7.53	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.53	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2035 Baseline	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High Street		FLAT	✓	432	100.000
2 - Hare Street		FLAT	✓	237	100.000
3 - Station Road		FLAT	✓	452	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	135	297
	2 - Hare Street	141	0	96
	3 - Station Road	330	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	3	2
	2 - Hare Street	3	0	1
	3 - Station Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High Street	0.45	7.10	0.8	A	432	432
2 - Hare Street	0.30	6.80	0.4	A	237	237
3 - Station Road	0.51	8.32	1.0	A	452	452

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	432	108	121	951	0.454	429	467	0.0	0.8	7.005	A
2 - Hare Street	237	59	295	779	0.304	235	255	0.0	0.4	6.742	A
3 - Station Road	452	113	140	885	0.511	448	390	0.0	1.0	8.157	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	432	108	122	950	0.455	432	471	0.8	0.8	7.103	A
2 - Hare Street	237	59	297	778	0.305	237	257	0.4	0.4	6.802	A
3 - Station Road	452	113	141	885	0.511	452	393	1.0	1.0	8.318	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	432	108	122	950	0.455	432	471	0.8	0.8	7.103	A
2 - Hare Street	237	59	297	778	0.305	237	257	0.4	0.4	6.802	A
3 - Station Road	452	113	141	885	0.511	452	393	1.0	1.0	8.320	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	432	108	122	950	0.455	432	471	0.8	0.8	7.103	A
2 - Hare Street	237	59	297	778	0.305	237	257	0.4	0.4	6.802	A
3 - Station Road	452	113	141	885	0.511	452	393	1.0	1.0	8.320	A

2035 + Dev Northern Site, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	7.52	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.52	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2035 + Dev Northern Site	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High Street		FLAT	✓	406	100.000
2 - Hare Street		FLAT	✓	279	100.000
3 - Station Road		FLAT	✓	441	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	148	258
	2 - Hare Street	162	0	117
	3 - Station Road	345	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	6	2
	2 - Hare Street	2	0	4
	3 - Station Road	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High Street	0.42	6.64	0.7	A	406	406
2 - Hare Street	0.35	7.08	0.5	A	279	279
3 - Station Road	0.51	8.61	1.0	A	441	441

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	406	102	95	967	0.420	403	503	0.0	0.7	6.565	A
2 - Hare Street	279	70	256	803	0.347	277	242	0.0	0.5	7.009	A
3 - Station Road	441	110	161	872	0.506	437	372	0.0	1.0	8.437	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	406	102	96	967	0.420	406	507	0.7	0.7	6.639	A
2 - Hare Street	279	70	258	802	0.348	279	244	0.5	0.5	7.079	A
3 - Station Road	441	110	162	872	0.506	441	375	1.0	1.0	8.610	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	406	102	96	967	0.420	406	507	0.7	0.7	6.639	A
2 - Hare Street	279	70	258	802	0.348	279	244	0.5	0.5	7.079	A
3 - Station Road	441	110	162	872	0.506	441	375	1.0	1.0	8.611	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	406	102	96	967	0.420	406	507	0.7	0.7	6.639	A
2 - Hare Street	279	70	258	802	0.348	279	244	0.5	0.5	7.079	A
3 - Station Road	441	110	162	872	0.506	441	375	1.0	1.0	8.611	A

2035 + Dev Northern Site, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	7.81	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.81	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2035 + Dev Northern Site	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High Street		FLAT	✓	452	100.000
2 - Hare Street		FLAT	✓	244	100.000
3 - Station Road		FLAT	✓	464	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	140	312
	2 - Hare Street	148	0	96
	3 - Station Road	342	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	3	2
	2 - Hare Street	3	0	1
	3 - Station Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High Street	0.48	7.39	0.9	A	452	452
2 - Hare Street	0.32	7.02	0.5	A	244	244
3 - Station Road	0.53	8.65	1.1	A	464	464

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	452	113	121	951	0.475	448	486	0.0	0.9	7.273	A
2 - Hare Street	244	61	309	770	0.317	242	260	0.0	0.5	6.948	A
3 - Station Road	464	116	147	881	0.527	460	405	0.0	1.1	8.459	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	452	113	122	950	0.476	452	490	0.9	0.9	7.388	A
2 - Hare Street	244	61	312	768	0.318	244	262	0.5	0.5	7.015	A
3 - Station Road	464	116	148	880	0.527	464	408	1.1	1.1	8.643	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	452	113	122	950	0.476	452	490	0.9	0.9	7.388	A
2 - Hare Street	244	61	312	768	0.318	244	262	0.5	0.5	7.015	A
3 - Station Road	464	116	148	880	0.527	464	408	1.1	1.1	8.645	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	452	113	122	950	0.476	452	490	0.9	0.9	7.388	A
2 - Hare Street	244	61	312	768	0.318	244	262	0.5	0.5	7.015	A
3 - Station Road	464	116	148	880	0.527	464	408	1.1	1.1	8.647	A

2035 + Dev Southern Site, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	7.45	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.45	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2035 + Dev Southern Site	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High Street		FLAT	✓	390	100.000
2 - Hare Street		FLAT	✓	295	100.000
3 - Station Road		FLAT	✓	427	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	144	246
	2 - Hare Street	178	0	117
	3 - Station Road	331	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	6	2
	2 - Hare Street	2	0	4
	3 - Station Road	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High Street	0.40	6.46	0.7	A	390	390
2 - Hare Street	0.36	7.19	0.6	A	295	295
3 - Station Road	0.50	8.53	1.0	A	427	427

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	390	98	95	967	0.403	387	505	0.0	0.7	6.401	A
2 - Hare Street	295	74	244	810	0.364	293	238	0.0	0.6	7.118	A
3 - Station Road	427	107	177	863	0.495	423	360	0.0	1.0	8.366	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	390	98	96	967	0.403	390	509	0.7	0.7	6.456	A
2 - Hare Street	295	74	246	809	0.365	295	240	0.6	0.6	7.194	A
3 - Station Road	427	107	178	862	0.496	427	363	1.0	1.0	8.528	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	390	98	96	967	0.403	390	509	0.7	0.7	6.456	A
2 - Hare Street	295	74	246	809	0.365	295	240	0.6	0.6	7.194	A
3 - Station Road	427	107	178	862	0.496	427	363	1.0	1.0	8.530	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	390	98	96	967	0.403	390	509	0.7	0.7	6.456	A
2 - Hare Street	295	74	246	809	0.365	295	240	0.6	0.6	7.194	A
3 - Station Road	427	107	178	862	0.496	427	363	1.0	1.0	8.530	A

2035 + Dev Southern Site, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	7.66	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.66	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2035 + Dev Southern Site	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High Street		FLAT	✓	452	100.000
2 - Hare Street		FLAT	✓	239	100.000
3 - Station Road		FLAT	✓	452	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	151	301
	2 - Hare Street	143	0	96
	3 - Station Road	330	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	3	2
	2 - Hare Street	3	0	1
	3 - Station Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High Street	0.48	7.39	0.9	A	452	452
2 - Hare Street	0.31	6.86	0.5	A	239	239
3 - Station Road	0.51	8.34	1.0	A	452	452

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	452	113	121	951	0.475	448	469	0.0	0.9	7.275	A
2 - Hare Street	239	60	299	777	0.308	237	271	0.0	0.4	6.798	A
3 - Station Road	452	113	142	884	0.511	448	394	0.0	1.0	8.180	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	452	113	122	950	0.476	452	473	0.9	0.9	7.389	A
2 - Hare Street	239	60	301	775	0.308	239	273	0.4	0.5	6.860	A
3 - Station Road	452	113	143	883	0.512	452	397	1.0	1.0	8.342	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	452	113	122	950	0.476	452	473	0.9	0.9	7.389	A
2 - Hare Street	239	60	301	775	0.308	239	273	0.5	0.5	6.860	A
3 - Station Road	452	113	143	883	0.512	452	397	1.0	1.0	8.344	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	452	113	122	950	0.476	452	473	0.9	0.9	7.389	A
2 - Hare Street	239	60	301	775	0.308	239	273	0.5	0.5	6.860	A
3 - Station Road	452	113	143	883	0.512	452	397	1.0	1.0	8.344	A

2035 + Dev Total Sites, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	7.75	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.75	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	2035 + Dev Total Sites	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High Street		FLAT	✓	408	100.000
2 - Hare Street		FLAT	✓	301	100.000
3 - Station Road		FLAT	✓	446	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	150	258
	2 - Hare Street	184	0	117
	3 - Station Road	350	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	6	2
	2 - Hare Street	2	0	4
	3 - Station Road	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High Street	0.42	6.66	0.8	A	408	408
2 - Hare Street	0.38	7.39	0.6	A	301	301
3 - Station Road	0.52	9.00	1.1	A	446	446

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	408	102	95	967	0.422	405	529	0.0	0.7	6.589	A
2 - Hare Street	301	75	256	803	0.375	299	244	0.0	0.6	7.300	A
3 - Station Road	446	112	183	859	0.519	442	372	0.0	1.1	8.800	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	408	102	96	967	0.422	408	534	0.7	0.8	6.664	A
2 - Hare Street	301	75	258	802	0.375	301	246	0.6	0.6	7.386	A
3 - Station Road	446	112	184	858	0.520	446	375	1.1	1.1	8.997	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	408	102	96	967	0.422	408	534	0.8	0.8	6.664	A
2 - Hare Street	301	75	258	802	0.375	301	246	0.6	0.6	7.386	A
3 - Station Road	446	112	184	858	0.520	446	375	1.1	1.1	8.999	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	408	102	96	967	0.422	408	534	0.8	0.8	6.664	A
2 - Hare Street	301	75	258	802	0.375	301	246	0.6	0.6	7.386	A
3 - Station Road	446	112	184	858	0.520	446	375	1.1	1.1	9.001	A

2035 + Dev Total Sites, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	7.94	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.94	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2035 + Dev Total Sites	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High Street		FLAT	✓	472	100.000
2 - Hare Street		FLAT	✓	245	100.000
3 - Station Road		FLAT	✓	464	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	156	316
	2 - Hare Street	149	0	96
	3 - Station Road	342	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - High Street	2 - Hare Street	3 - Station Road
From	1 - High Street	0	3	2
	2 - Hare Street	3	0	1
	3 - Station Road	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High Street	0.50	7.70	1.0	A	472	472
2 - Hare Street	0.32	7.06	0.5	A	245	245
3 - Station Road	0.53	8.66	1.1	A	464	464

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	472	118	121	951	0.496	468	487	0.0	1.0	7.563	A
2 - Hare Street	245	61	313	768	0.319	243	276	0.0	0.5	6.991	A
3 - Station Road	464	116	148	880	0.527	460	409	0.0	1.1	8.471	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	472	118	122	950	0.497	472	491	1.0	1.0	7.697	A
2 - Hare Street	245	61	316	766	0.320	245	278	0.5	0.5	7.062	A
3 - Station Road	464	116	149	880	0.527	464	412	1.1	1.1	8.656	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	472	118	122	950	0.497	472	491	1.0	1.0	7.699	A
2 - Hare Street	245	61	316	766	0.320	245	278	0.5	0.5	7.062	A
3 - Station Road	464	116	149	880	0.527	464	412	1.1	1.1	8.658	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High Street	472	118	122	950	0.497	472	491	1.0	1.0	7.699	A
2 - Hare Street	245	61	316	766	0.320	245	278	0.5	0.5	7.062	A
3 - Station Road	464	116	149	880	0.527	464	412	1.1	1.1	8.660	A

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.0.4.1693
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Filename: London Rd - A10 - Sainsbury Depot Access DL (2035).j10
Path: Y:\PROJECT FOLDER\23161 Buntingford\Calculations\4. Transport\1. ARCADY\TA Assessment 060224\06022024 Tests
Report generation date: 08/02/2024 14:52:27

»Year 2023 Baseline, AM
»Year 2023 Baseline, PM
»Year 2035 Baseline, AM
»Year 2035 Baseline, PM
»Year 2035 + Dev Northern Site, AM
»Year 2035 + Dev Northern Site, PM
»Year 2035 + Dev Southern Site, AM
»Year 2035 + Dev Southern Site, PM
»Year 2035 + Dev Total , AM
»Year 2035 + Dev Total , PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Year 2023 Baseline					
1 - London Rd	0.6	4.20	0.37	0.2	2.85	0.19
2 - Sainsbury Depot Access	0.0	3.61	0.01	0.0	3.15	0.01
3 - A10 (S)	0.9	3.35	0.46	1.6	4.40	0.61
4 - A10 (N)	1.1	4.38	0.51	0.7	3.65	0.40
	Year 2035 Baseline					
1 - London Rd	0.8	4.77	0.42	0.3	3.01	0.21
2 - Sainsbury Depot Access	0.0	3.93	0.01	0.0	3.29	0.01
3 - A10 (S)	1.1	3.68	0.50	2.1	5.26	0.67
4 - A10 (N)	1.4	4.99	0.57	0.8	4.05	0.45
	Year 2035 + Dev Northern Site					
1 - London Rd	0.8	5.17	0.45	0.3	3.08	0.22
2 - Sainsbury Depot Access	0.0	4.17	0.01	0.0	3.36	0.01
3 - A10 (S)	1.1	3.82	0.52	2.5	5.97	0.71
4 - A10 (N)	1.7	5.56	0.61	0.9	4.27	0.48
	Year 2035 + Dev Southern Site					
1 - London Rd	0.8	4.80	0.42	0.3	3.10	0.22
2 - Sainsbury Depot Access	0.0	3.96	0.01	0.0	3.39	0.01
3 - A10 (S)	1.2	3.98	0.54	2.1	5.30	0.67
4 - A10 (N)	1.4	5.05	0.58	0.9	4.31	0.48
	Year 2035 + Dev Total					
1 - London Rd	0.8	5.19	0.45	0.3	3.16	0.23
2 - Sainsbury Depot Access	0.0	4.18	0.01	0.0	3.45	0.01
3 - A10 (S)	1.3	4.13	0.55	2.5	5.97	0.71
4 - A10 (N)	1.7	5.59	0.62	1.0	4.55	0.51

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	A10-London Rd RA
Location	Buntingford
Site number	
Date	16/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JUBB\SRadford
Description	Geometric Input from OS/Satelite Mapping

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Year 2023 Baseline	AM	FLAT	07:45	08:45	60	15	✓
D2	Year 2023 Baseline	PM	FLAT	17:00	18:00	60	15	✓
D3	Year 2035 Baseline	AM	FLAT	07:45	08:45	60	15	✓
D4	Year 2035 Baseline	PM	FLAT	17:00	18:00	60	15	✓
D5	Year 2035 + Dev Northern Site	AM	FLAT	07:45	08:45	60	15	✓
D6	Year 2035 + Dev Northern Site	PM	FLAT	17:00	18:00	60	15	✓
D7	Year 2035 + Dev Southern Site	AM	FLAT	07:45	08:45	60	15	✓
D8	Year 2035 + Dev Southern Site	PM	FLAT	17:00	18:00	60	15	✓
D9	Year 2035 + Dev Total	AM	FLAT	07:45	08:45	60	15	✓
D10	Year 2035 + Dev Total	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

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

Year 2023 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A10 (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A10 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.93	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.93	A

Arms

Arms

Arm	Name	Description	No give-way line
1	London Rd		
2	Sainsbury Depot Access		
3	A10 (S)		
4	A10 (N)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - London Rd	3.70	9.40	21.8	18.0	54.0	44.0		
2 - Sainsbury Depot Access	4.10	8.00	16.7	18.0	54.0	43.0		
3 - A10 (S)	3.40	7.30	77.5	33.0	54.0	19.0		
4 - A10 (N)	3.50	7.00	42.7	35.0	54.0	30.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - London Rd	0.620	1950
2 - Sainsbury Depot Access	0.598	1822
3 - A10 (S)	0.691	2166
4 - A10 (N)	0.639	1940

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 period length (min)	Time segment length (min)	Run automatically
D1	Year 2023 Baseline	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - London Rd		FLAT	✓	518	100.000
2 - Sainsbury Depot Access		FLAT	✓	6	100.000
3 - A10 (S)		FLAT	✓	956	100.000
4 - A10 (N)		FLAT	✓	918	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	9	417	92
	2 - Sainsbury Depot Access	1	0	4	1
	3 - A10 (S)	234	8	0	714
	4 - A10 (N)	54	4	860	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	0	3	9
	2 - Sainsbury Depot Access	0	0	0	0
	3 - A10 (S)	9	0	0	6
	4 - A10 (N)	15	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - London Rd	0.37	4.20	0.6	A	518	518
2 - Sainsbury Depot Access	0.01	3.61	0.0	A	6	6
3 - A10 (S)	0.46	3.35	0.9	A	956	956
4 - A10 (N)	0.51	4.38	1.1	A	918	918

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	518	130	868	1412	0.367	516	288	0.0	0.6	4.166	A
2 - Sainsbury Depot Access	6	2	1363	1007	0.006	6	21	0.0	0.0	3.594	A
3 - A10 (S)	956	239	94	2101	0.455	952	1275	0.0	0.9	3.334	A
4 - A10 (N)	918	230	242	1786	0.514	914	804	0.0	1.1	4.334	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	518	130	872	1409	0.368	518	289	0.6	0.6	4.199	A
2 - Sainsbury Depot Access	6	2	1369	1003	0.006	6	21	0.0	0.0	3.608	A
3 - A10 (S)	956	239	94	2101	0.455	956	1281	0.9	0.9	3.353	A
4 - A10 (N)	918	230	243	1785	0.514	918	807	1.1	1.1	4.380	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	518	130	872	1409	0.368	518	289	0.6	0.6	4.199	A
2 - Sainsbury Depot Access	6	2	1369	1003	0.006	6	21	0.0	0.0	3.608	A
3 - A10 (S)	956	239	94	2101	0.455	956	1281	0.9	0.9	3.353	A
4 - A10 (N)	918	230	243	1785	0.514	918	807	1.1	1.1	4.380	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	518	130	872	1409	0.368	518	289	0.6	0.6	4.199	A
2 - Sainsbury Depot Access	6	2	1369	1003	0.006	6	21	0.0	0.0	3.608	A
3 - A10 (S)	956	239	94	2101	0.455	956	1281	0.9	0.9	3.353	A
4 - A10 (N)	918	230	243	1785	0.514	918	807	1.1	1.1	4.380	A

Year 2023 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A10 (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A10 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.97	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.97	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	Year 2023 Baseline	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - London Rd		FLAT	✓	299	100.000
2 - Sainsbury Depot Access		FLAT	✓	9	100.000
3 - A10 (S)		FLAT	✓	1288	100.000
4 - A10 (N)		FLAT	✓	662	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	8	236	55
	2 - Sainsbury Depot Access	4	0	4	1
	3 - A10 (S)	439	1	0	848
	4 - A10 (N)	64	2	596	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	0	1	2
	2 - Sainsbury Depot Access	0	0	33	0
	3 - A10 (S)	1	0	0	3
	4 - A10 (N)	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - London Rd	0.19	2.85	0.2	A	299	299
2 - Sainsbury Depot Access	0.01	3.15	0.0	A	9	9
3 - A10 (S)	0.61	4.40	1.6	A	1288	1288
4 - A10 (N)	0.40	3.65	0.7	A	662	662

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	299	75	597	1580	0.189	298	505	0.0	0.2	2.839	A
2 - Sainsbury Depot Access	9	2	884	1293	0.007	9	11	0.0	0.0	3.149	A
3 - A10 (S)	1288	322	60	2124	0.606	1282	833	0.0	1.6	4.339	A
4 - A10 (N)	662	166	442	1658	0.399	659	900	0.0	0.7	3.629	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	299	75	599	1578	0.189	299	507	0.2	0.2	2.845	A
2 - Sainsbury Depot Access	9	2	887	1291	0.007	9	11	0.0	0.0	3.154	A
3 - A10 (S)	1288	322	60	2124	0.606	1288	836	1.6	1.6	4.404	A
4 - A10 (N)	662	166	444	1657	0.400	662	904	0.7	0.7	3.651	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	299	75	599	1578	0.189	299	507	0.2	0.2	2.845	A
2 - Sainsbury Depot Access	9	2	887	1291	0.007	9	11	0.0	0.0	3.154	A
3 - A10 (S)	1288	322	60	2124	0.606	1288	836	1.6	1.6	4.404	A
4 - A10 (N)	662	166	444	1657	0.400	662	904	0.7	0.7	3.651	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	299	75	599	1578	0.189	299	507	0.2	0.2	2.845	A
2 - Sainsbury Depot Access	9	2	887	1291	0.007	9	11	0.0	0.0	3.154	A
3 - A10 (S)	1288	322	60	2124	0.606	1288	836	1.6	1.6	4.404	A
4 - A10 (N)	662	166	444	1657	0.400	662	904	0.7	0.7	3.651	A

Year 2035 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A10 (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A10 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.42	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.42	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	Year 2035 Baseline	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - London Rd		FLAT	✓	570	100.000
2 - Sainsbury Depot Access		FLAT	✓	6	100.000
3 - A10 (S)		FLAT	✓	1051	100.000
4 - A10 (N)		FLAT	✓	1009	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	10	458	102
	2 - Sainsbury Depot Access	1	0	4	1
	3 - A10 (S)	257	9	0	785
	4 - A10 (N)	59	4	946	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	0	3	9
	2 - Sainsbury Depot Access	0	0	0	0
	3 - A10 (S)	9	0	0	6
	4 - A10 (N)	15	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - London Rd	0.42	4.77	0.8	A	570	570
2 - Sainsbury Depot Access	0.01	3.93	0.0	A	6	6
3 - A10 (S)	0.50	3.68	1.1	A	1051	1051
4 - A10 (N)	0.57	4.99	1.4	A	1009	1009

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	570	143	954	1358	0.420	567	316	0.0	0.7	4.711	A
2 - Sainsbury Depot Access	6	2	1498	926	0.006	6	23	0.0	0.0	3.911	A
3 - A10 (S)	1051	263	103	2094	0.502	1047	1400	0.0	1.1	3.651	A
4 - A10 (N)	1009	252	266	1770	0.570	1003	884	0.0	1.4	4.918	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	570	143	959	1355	0.421	570	317	0.7	0.8	4.766	A
2 - Sainsbury Depot Access	6	2	1506	921	0.007	6	23	0.0	0.0	3.932	A
3 - A10 (S)	1051	263	104	2094	0.502	1051	1408	1.1	1.1	3.681	A
4 - A10 (N)	1009	252	267	1770	0.570	1009	888	1.4	1.4	4.992	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	570	143	959	1355	0.421	570	317	0.8	0.8	4.766	A
2 - Sainsbury Depot Access	6	2	1506	921	0.007	6	23	0.0	0.0	3.932	A
3 - A10 (S)	1051	263	104	2094	0.502	1051	1408	1.1	1.1	3.681	A
4 - A10 (N)	1009	252	267	1770	0.570	1009	888	1.4	1.4	4.992	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	570	143	959	1355	0.421	570	317	0.8	0.8	4.766	A
2 - Sainsbury Depot Access	6	2	1506	921	0.007	6	23	0.0	0.0	3.932	A
3 - A10 (S)	1051	263	104	2094	0.502	1051	1408	1.1	1.1	3.681	A
4 - A10 (N)	1009	252	267	1770	0.570	1009	888	1.4	1.4	4.992	A

Year 2035 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A10 (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A10 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.60	A

Junction Network

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	Year 2035 Baseline	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - London Rd		FLAT	✓	330	100.000
2 - Sainsbury Depot Access		FLAT	✓	9	100.000
3 - A10 (S)		FLAT	✓	1420	100.000
4 - A10 (N)		FLAT	✓	730	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	9	260	61
	2 - Sainsbury Depot Access	4	0	4	1
	3 - A10 (S)	484	1	0	935
	4 - A10 (N)	71	2	657	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	0	1	2
	2 - Sainsbury Depot Access	0	0	33	0
	3 - A10 (S)	1	0	0	3
	4 - A10 (N)	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - London Rd	0.21	3.01	0.3	A	330	330
2 - Sainsbury Depot Access	0.01	3.29	0.0	A	9	9
3 - A10 (S)	0.67	5.26	2.1	A	1420	1420
4 - A10 (N)	0.45	4.05	0.8	A	730	730

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	330	83	657	1542	0.214	329	556	0.0	0.3	2.998	A
2 - Sainsbury Depot Access	9	2	974	1239	0.007	9	12	0.0	0.0	3.287	A
3 - A10 (S)	1420	355	66	2120	0.670	1412	917	0.0	2.0	5.142	A
4 - A10 (N)	730	183	486	1630	0.448	727	991	0.0	0.8	4.009	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	330	83	660	1541	0.214	330	559	0.3	0.3	3.007	A
2 - Sainsbury Depot Access	9	2	978	1237	0.007	9	12	0.0	0.0	3.294	A
3 - A10 (S)	1420	355	66	2120	0.670	1420	921	2.0	2.1	5.258	A
4 - A10 (N)	730	183	489	1628	0.448	730	997	0.8	0.8	4.045	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	330	83	660	1541	0.214	330	559	0.3	0.3	3.007	A
2 - Sainsbury Depot Access	9	2	978	1237	0.007	9	12	0.0	0.0	3.294	A
3 - A10 (S)	1420	355	66	2120	0.670	1420	921	2.1	2.1	5.260	A
4 - A10 (N)	730	183	489	1628	0.448	730	997	0.8	0.8	4.045	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	330	83	660	1541	0.214	330	559	0.3	0.3	3.007	A
2 - Sainsbury Depot Access	9	2	978	1237	0.007	9	12	0.0	0.0	3.294	A
3 - A10 (S)	1420	355	66	2120	0.670	1420	921	2.1	2.1	5.260	A
4 - A10 (N)	730	183	489	1628	0.448	730	997	0.8	0.8	4.045	A

Year 2035 + Dev Northern Site, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A10 (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A10 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.79	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	Year 2035 + Dev Northern Site	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - London Rd		FLAT	✓	587	100.000
2 - Sainsbury Depot Access		FLAT	✓	6	100.000
3 - A10 (S)		FLAT	✓	1077	100.000
4 - A10 (N)		FLAT	✓	1086	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	10	458	119
	2 - Sainsbury Depot Access	1	0	4	1
	3 - A10 (S)	257	9	0	811
	4 - A10 (N)	66	4	1016	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	0	3	9
	2 - Sainsbury Depot Access	0	0	0	0
	3 - A10 (S)	9	0	0	6
	4 - A10 (N)	15	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - London Rd	0.45	5.17	0.8	A	587	587
2 - Sainsbury Depot Access	0.01	4.17	0.0	A	6	6
3 - A10 (S)	0.52	3.82	1.1	A	1077	1077
4 - A10 (N)	0.61	5.56	1.7	A	1086	1086

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	587	147	1023	1316	0.446	584	323	0.0	0.8	5.099	A
2 - Sainsbury Depot Access	6	2	1584	875	0.007	6	23	0.0	0.0	4.142	A
3 - A10 (S)	1077	269	120	2083	0.517	1072	1469	0.0	1.1	3.784	A
4 - A10 (N)	1086	272	266	1770	0.613	1079	927	0.0	1.6	5.448	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	587	147	1029	1312	0.447	587	324	0.8	0.8	5.170	A
2 - Sainsbury Depot Access	6	2	1593	869	0.007	6	23	0.0	0.0	4.169	A
3 - A10 (S)	1077	269	121	2082	0.517	1077	1478	1.1	1.1	3.819	A
4 - A10 (N)	1086	272	267	1770	0.614	1086	931	1.6	1.7	5.556	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	587	147	1029	1312	0.448	587	324	0.8	0.8	5.170	A
2 - Sainsbury Depot Access	6	2	1593	869	0.007	6	23	0.0	0.0	4.169	A
3 - A10 (S)	1077	269	121	2082	0.517	1077	1478	1.1	1.1	3.819	A
4 - A10 (N)	1086	272	267	1770	0.614	1086	931	1.7	1.7	5.556	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	587	147	1029	1312	0.448	587	324	0.8	0.8	5.170	A
2 - Sainsbury Depot Access	6	2	1593	869	0.007	6	23	0.0	0.0	4.169	A
3 - A10 (S)	1077	269	121	2082	0.517	1077	1478	1.1	1.1	3.819	A
4 - A10 (N)	1086	272	267	1770	0.614	1086	931	1.7	1.7	5.556	A

Year 2035 + Dev Northern Site, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A10 (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A10 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.09	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.09	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	Year 2035 + Dev Northern Site	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - London Rd		FLAT	✓	336	100.000
2 - Sainsbury Depot Access		FLAT	✓	9	100.000
3 - A10 (S)		FLAT	✓	1499	100.000
4 - A10 (N)		FLAT	✓	777	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	9	260	67
	2 - Sainsbury Depot Access	4	0	4	1
	3 - A10 (S)	484	1	0	1014
	4 - A10 (N)	83	2	692	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	0	1	2
	2 - Sainsbury Depot Access	0	0	33	0
	3 - A10 (S)	1	0	0	3
	4 - A10 (N)	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - London Rd	0.22	3.08	0.3	A	336	336
2 - Sainsbury Depot Access	0.01	3.36	0.0	A	9	9
3 - A10 (S)	0.71	5.97	2.5	A	1499	1499
4 - A10 (N)	0.48	4.27	0.9	A	777	777

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	336	84	692	1521	0.221	335	567	0.0	0.3	3.068	A
2 - Sainsbury Depot Access	9	2	1015	1215	0.007	9	12	0.0	0.0	3.353	A
3 - A10 (S)	1499	375	72	2116	0.708	1489	952	0.0	2.4	5.792	A
4 - A10 (N)	777	194	486	1630	0.477	773	1075	0.0	0.9	4.223	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	336	84	695	1519	0.221	336	571	0.3	0.3	3.078	A
2 - Sainsbury Depot Access	9	2	1019	1213	0.007	9	12	0.0	0.0	3.361	A
3 - A10 (S)	1499	375	72	2116	0.708	1499	956	2.4	2.5	5.969	A
4 - A10 (N)	777	194	489	1628	0.477	777	1082	0.9	0.9	4.268	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	336	84	695	1519	0.221	336	571	0.3	0.3	3.078	A
2 - Sainsbury Depot Access	9	2	1019	1213	0.007	9	12	0.0	0.0	3.361	A
3 - A10 (S)	1499	375	72	2116	0.708	1499	956	2.5	2.5	5.971	A
4 - A10 (N)	777	194	489	1628	0.477	777	1082	0.9	0.9	4.268	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	336	84	695	1519	0.221	336	571	0.3	0.3	3.078	A
2 - Sainsbury Depot Access	9	2	1019	1213	0.007	9	12	0.0	0.0	3.361	A
3 - A10 (S)	1499	375	72	2116	0.708	1499	956	2.5	2.5	5.971	A
4 - A10 (N)	777	194	489	1628	0.477	777	1082	0.9	0.9	4.268	A

Year 2035 + Dev Southern Site, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A10 (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A10 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.55	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.55	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	Year 2035 + Dev Southern Site	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - London Rd		FLAT	✓	570	100.000
2 - Sainsbury Depot Access		FLAT	✓	6	100.000
3 - A10 (S)		FLAT	✓	1130	100.000
4 - A10 (N)		FLAT	✓	1018	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	10	458	102
	2 - Sainsbury Depot Access	1	0	4	1
	3 - A10 (S)	257	9	0	864
	4 - A10 (N)	59	4	955	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	0	3	9
	2 - Sainsbury Depot Access	0	0	0	0
	3 - A10 (S)	9	0	0	6
	4 - A10 (N)	15	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - London Rd	0.42	4.80	0.8	A	570	570
2 - Sainsbury Depot Access	0.01	3.96	0.0	A	6	6
3 - A10 (S)	0.54	3.98	1.2	A	1130	1130
4 - A10 (N)	0.58	5.05	1.4	A	1018	1018

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	570	143	963	1353	0.421	567	316	0.0	0.8	4.744	A
2 - Sainsbury Depot Access	6	2	1507	921	0.007	6	23	0.0	0.0	3.934	A
3 - A10 (S)	1130	283	103	2094	0.540	1125	1409	0.0	1.2	3.941	A
4 - A10 (N)	1018	255	266	1770	0.575	1012	963	0.0	1.4	4.974	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	570	143	968	1350	0.422	570	317	0.8	0.8	4.800	A
2 - Sainsbury Depot Access	6	2	1515	916	0.007	6	23	0.0	0.0	3.955	A
3 - A10 (S)	1130	283	104	2094	0.540	1130	1417	1.2	1.2	3.982	A
4 - A10 (N)	1018	255	267	1770	0.575	1018	967	1.4	1.4	5.052	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	570	143	968	1350	0.422	570	317	0.8	0.8	4.800	A
2 - Sainsbury Depot Access	6	2	1515	916	0.007	6	23	0.0	0.0	3.955	A
3 - A10 (S)	1130	283	104	2094	0.540	1130	1417	1.2	1.2	3.982	A
4 - A10 (N)	1018	255	267	1770	0.575	1018	967	1.4	1.4	5.052	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	570	143	968	1350	0.422	570	317	0.8	0.8	4.800	A
2 - Sainsbury Depot Access	6	2	1515	916	0.007	6	23	0.0	0.0	3.955	A
3 - A10 (S)	1130	283	104	2094	0.540	1130	1417	1.2	1.2	3.982	A
4 - A10 (N)	1018	255	267	1770	0.575	1018	967	1.4	1.4	5.052	A

Year 2035 + Dev Southern Site, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A10 (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A10 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.70	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.70	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	Year 2035 + Dev Southern Site	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - London Rd		FLAT	✓	330	100.000
2 - Sainsbury Depot Access		FLAT	✓	9	100.000
3 - A10 (S)		FLAT	✓	1425	100.000
4 - A10 (N)		FLAT	✓	786	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	9	260	61
	2 - Sainsbury Depot Access	4	0	4	1
	3 - A10 (S)	484	1	0	940
	4 - A10 (N)	71	2	713	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	0	1	2
	2 - Sainsbury Depot Access	0	0	33	0
	3 - A10 (S)	1	0	0	3
	4 - A10 (N)	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - London Rd	0.22	3.10	0.3	A	330	330
2 - Sainsbury Depot Access	0.01	3.39	0.0	A	9	9
3 - A10 (S)	0.67	5.30	2.1	A	1425	1425
4 - A10 (N)	0.48	4.31	0.9	A	786	786

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	330	83	713	1508	0.219	329	556	0.0	0.3	3.085	A
2 - Sainsbury Depot Access	9	2	1030	1206	0.007	9	12	0.0	0.0	3.378	A
3 - A10 (S)	1425	356	66	2120	0.672	1417	973	0.0	2.1	5.177	A
4 - A10 (N)	786	197	486	1630	0.482	782	996	0.0	0.9	4.268	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	330	83	716	1506	0.219	330	559	0.3	0.3	3.096	A
2 - Sainsbury Depot Access	9	2	1034	1204	0.007	9	12	0.0	0.0	3.386	A
3 - A10 (S)	1425	356	66	2120	0.672	1425	977	2.1	2.1	5.296	A
4 - A10 (N)	786	197	489	1628	0.483	786	1002	0.9	0.9	4.314	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	330	83	716	1506	0.219	330	559	0.3	0.3	3.096	A
2 - Sainsbury Depot Access	9	2	1034	1204	0.007	9	12	0.0	0.0	3.386	A
3 - A10 (S)	1425	356	66	2120	0.672	1425	977	2.1	2.1	5.298	A
4 - A10 (N)	786	197	489	1628	0.483	786	1002	0.9	0.9	4.314	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	330	83	716	1506	0.219	330	559	0.3	0.3	3.096	A
2 - Sainsbury Depot Access	9	2	1034	1204	0.007	9	12	0.0	0.0	3.386	A
3 - A10 (S)	1425	356	66	2120	0.672	1425	977	2.1	2.1	5.298	A
4 - A10 (N)	786	197	489	1628	0.483	786	1002	0.9	0.9	4.314	A

Year 2035 + Dev Total , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A10 (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A10 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.91	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	Year 2035 + Dev Total	AM	FLAT	07:45	08:45	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - London Rd		FLAT	✓	587	100.000
2 - Sainsbury Depot Access		FLAT	✓	6	100.000
3 - A10 (S)		FLAT	✓	1153	100.000
4 - A10 (N)		FLAT	✓	1090	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	10	458	119
	2 - Sainsbury Depot Access	1	0	4	1
	3 - A10 (S)	257	9	0	887
	4 - A10 (N)	66	4	1020	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	0	3	9
	2 - Sainsbury Depot Access	0	0	0	0
	3 - A10 (S)	9	0	0	6
	4 - A10 (N)	15	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - London Rd	0.45	5.19	0.8	A	587	587
2 - Sainsbury Depot Access	0.01	4.18	0.0	A	6	6
3 - A10 (S)	0.55	4.13	1.3	A	1153	1153
4 - A10 (N)	0.62	5.59	1.7	A	1090	1090

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	587	147	1027	1313	0.447	584	322	0.0	0.8	5.114	A
2 - Sainsbury Depot Access	6	2	1587	873	0.007	6	23	0.0	0.0	4.153	A
3 - A10 (S)	1153	288	120	2083	0.554	1148	1473	0.0	1.3	4.083	A
4 - A10 (N)	1090	273	266	1771	0.616	1083	1002	0.0	1.7	5.477	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	587	147	1033	1309	0.448	587	324	0.8	0.8	5.188	A
2 - Sainsbury Depot Access	6	2	1597	867	0.007	6	23	0.0	0.0	4.180	A
3 - A10 (S)	1153	288	121	2082	0.554	1153	1482	1.3	1.3	4.130	A
4 - A10 (N)	1090	273	267	1770	0.616	1090	1007	1.7	1.7	5.588	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	587	147	1033	1309	0.448	587	324	0.8	0.8	5.188	A
2 - Sainsbury Depot Access	6	2	1597	867	0.007	6	23	0.0	0.0	4.180	A
3 - A10 (S)	1153	288	121	2082	0.554	1153	1482	1.3	1.3	4.130	A
4 - A10 (N)	1090	273	267	1770	0.616	1090	1007	1.7	1.7	5.588	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	587	147	1033	1309	0.448	587	324	0.8	0.8	5.188	A
2 - Sainsbury Depot Access	6	2	1597	867	0.007	6	23	0.0	0.0	4.180	A
3 - A10 (S)	1153	288	121	2082	0.554	1153	1482	1.3	1.3	4.130	A
4 - A10 (N)	1090	273	267	1770	0.616	1090	1007	1.7	1.7	5.588	A

Year 2035 + Dev Total , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A10 (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A10 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.17	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	Year 2035 + Dev Total	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - London Rd		FLAT	✓	336	100.000
2 - Sainsbury Depot Access		FLAT	✓	9	100.000
3 - A10 (S)		FLAT	✓	1499	100.000
4 - A10 (N)		FLAT	✓	829	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	9	260	67
	2 - Sainsbury Depot Access	4	0	4	1
	3 - A10 (S)	484	1	0	1014
	4 - A10 (N)	83	2	744	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - London Rd	2 - Sainsbury Depot Access	3 - A10 (S)	4 - A10 (N)
From	1 - London Rd	0	0	1	2
	2 - Sainsbury Depot Access	0	0	33	0
	3 - A10 (S)	1	0	0	3
	4 - A10 (N)	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - London Rd	0.23	3.16	0.3	A	336	336
2 - Sainsbury Depot Access	0.01	3.45	0.0	A	9	9
3 - A10 (S)	0.71	5.97	2.5	A	1499	1499
4 - A10 (N)	0.51	4.55	1.0	A	829	829

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	336	84	743	1489	0.226	335	567	0.0	0.3	3.153	A
2 - Sainsbury Depot Access	9	2	1066	1184	0.008	9	12	0.0	0.0	3.441	A
3 - A10 (S)	1499	375	72	2116	0.708	1489	1003	0.0	2.4	5.792	A
4 - A10 (N)	829	207	486	1630	0.509	825	1075	0.0	1.0	4.491	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	336	84	747	1487	0.226	336	571	0.3	0.3	3.164	A
2 - Sainsbury Depot Access	9	2	1071	1181	0.008	9	12	0.0	0.0	3.450	A
3 - A10 (S)	1499	375	72	2116	0.708	1499	1008	2.4	2.5	5.969	A
4 - A10 (N)	829	207	489	1628	0.509	829	1082	1.0	1.0	4.546	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	336	84	747	1487	0.226	336	571	0.3	0.3	3.164	A
2 - Sainsbury Depot Access	9	2	1071	1181	0.008	9	12	0.0	0.0	3.450	A
3 - A10 (S)	1499	375	72	2116	0.708	1499	1008	2.5	2.5	5.971	A
4 - A10 (N)	829	207	489	1628	0.509	829	1082	1.0	1.0	4.546	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - London Rd	336	84	747	1487	0.226	336	571	0.3	0.3	3.164	A
2 - Sainsbury Depot Access	9	2	1071	1181	0.008	9	12	0.0	0.0	3.450	A
3 - A10 (S)	1499	375	72	2116	0.708	1499	1008	2.5	2.5	5.971	A
4 - A10 (N)	829	207	489	1628	0.509	829	1082	1.0	1.0	4.546	A

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.0.4.1693
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Filename: South Site Access RA.j10
Path: Y:\PROJECT FOLDER\23161 Buntingford\Calculations\4. Transport\1. ARCADY\TA Assessment 060224\06022024 Tests
Report generation date: 06/02/2024 11:32:14

»Year 2035 + Northern Site, AM
»Year 2035 + Northern Site, PM
»Year 2035 + Southern Site, AM
»Year 2035 + Southern Site, PM
»Year 2035 + Both Sites, AM
»Year 2035 + Both Sites, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Year 2035 + Northern Site					
1 - Site Access North	0.2	5.44	0.17	0.1	4.80	0.11
2 - Baldock Rd East	1.5	7.33	0.59	1.4	7.20	0.59
3 - Site Access South	0.0	0.00	0.00	0.0	0.00	0.00
4 - Baldock Rd West	1.2	6.96	0.55	0.9	6.21	0.49
	Year 2035 + Southern Site					
1 - Site Access North	0.0	0.00	0.00	0.0	0.00	0.00
2 - Baldock Rd East	2.1	9.57	0.68	1.0	5.92	0.50
3 - Site Access South	0.0	4.90	0.04	0.3	5.99	0.23
4 - Baldock Rd West	1.4	7.48	0.59	0.9	5.97	0.46
	Year 2035 + Both Sites					
1 - Site Access North	0.2	6.23	0.18	0.1	5.21	0.12
2 - Baldock Rd East	3.5	14.51	0.78	1.5	7.30	0.59
3 - Site Access South	0.0	5.58	0.04	0.3	6.60	0.24
4 - Baldock Rd West	2.2	10.18	0.69	1.1	6.91	0.51

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	
Location	
Site number	
Date	20/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JUBB\SRadford
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	Year 2035 + Northern Site	AM	FLAT	07:45	08:45	60	15
D2	Year 2035 + Northern Site	PM	FLAT	17:00	18:00	60	15
D3	Year 2035 + Southern Site	AM	FLAT	07:45	08:45	60	15
D4	Year 2035 + Southern Site	PM	FLAT	17:00	18:00	60	15
D5	Year 2035 + Both Sites	AM	FLAT	07:45	08:45	60	15
D6	Year 2035 + Both Sites	PM	FLAT	17:00	18:00	60	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Year 2035 + Northern Site, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Site Access Junction	Standard Roundabout		1, 2, 3, 4	7.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.00	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Site Access North		
2	Baldock Rd East		
3	Site Access South		
4	Baldock Rd West		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Site Access North	3.30	4.50	4.4	10.0	28.0	36.0		
2 - Baldock Rd East	3.60	4.80	6.8	10.0	28.0	37.0		
3 - Site Access South	3.00	4.50	7.9	14.0	28.0	50.0		
4 - Baldock Rd West	3.80	4.80	5.3	10.0	28.0	49.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Site Access North	0.517	1111
2 - Baldock Rd East	0.540	1226
3 - Site Access South	0.505	1084
4 - Baldock Rd West	0.519	1186

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 period length (min)	Time segment length (min)
D1	Year 2035 + Northern Site	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Site Access North		✓	132	100.000
2 - Baldock Rd East		✓	720	100.000
3 - Site Access South		✓	0	100.000
4 - Baldock Rd West		✓	627	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	104	0	28
	2 - Baldock Rd East	82	0	0	638
	3 - Site Access South	0	0	0	0
	4 - Baldock Rd West	13	614	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	0	0	0
	2 - Baldock Rd East	0	0	0	0
	3 - Site Access South	0	0	0	0
	4 - Baldock Rd West	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Site Access North	0.17	5.44	0.2	A
2 - Baldock Rd East	0.59	7.33	1.5	A
3 - Site Access South	0.00	0.00	0.0	A
4 - Baldock Rd West	0.55	6.96	1.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	132	609	796	0.166	131	0.2	5.409	A
2 - Baldock Rd East	720	28	1211	0.594	714	1.4	7.163	A
3 - Site Access South	0	742	709	0.000	0	0.0	0.000	A
4 - Baldock Rd West	627	81	1144	0.548	622	1.2	6.836	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	132	614	793	0.166	132	0.2	5.443	A
2 - Baldock Rd East	720	28	1211	0.594	720	1.5	7.324	A
3 - Site Access South	0	748	706	0.000	0	0.0	0.000	A
4 - Baldock Rd West	627	82	1144	0.548	627	1.2	6.963	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	132	614	793	0.166	132	0.2	5.443	A
2 - Baldock Rd East	720	28	1211	0.594	720	1.5	7.327	A
3 - Site Access South	0	748	706	0.000	0	0.0	0.000	A
4 - Baldock Rd West	627	82	1144	0.548	627	1.2	6.963	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	132	614	793	0.166	132	0.2	5.443	A
2 - Baldock Rd East	720	28	1211	0.594	720	1.5	7.327	A
3 - Site Access South	0	748	706	0.000	0	0.0	0.000	A
4 - Baldock Rd West	627	82	1144	0.548	627	1.2	6.963	A

Year 2035 + Northern Site, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Site Access Junction	Standard Roundabout		1, 2, 3, 4	6.63	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.63	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	Year 2035 + Northern Site	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Site Access North		✓	94	100.000
2 - Baldock Rd East		✓	718	100.000
3 - Site Access South		✓	0	100.000
4 - Baldock Rd West		✓	548	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	79	0	15
	2 - Baldock Rd East	113	0	0	605
	3 - Site Access South	0	0	0	0
	4 - Baldock Rd West	31	517	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	0	0	0
	2 - Baldock Rd East	0	0	0	0
	3 - Site Access South	0	0	0	0
	4 - Baldock Rd West	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Site Access North	0.11	4.80	0.1	A
2 - Baldock Rd East	0.59	7.20	1.4	A
3 - Site Access South	0.00	0.00	0.0	A
4 - Baldock Rd West	0.49	6.21	0.9	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	94	513	845	0.111	94	0.1	4.785	A
2 - Baldock Rd East	718	15	1218	0.589	712	1.4	7.040	A
3 - Site Access South	0	727	717	0.000	0	0.0	0.000	A
4 - Baldock Rd West	548	112	1128	0.486	544	0.9	6.125	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	94	517	843	0.111	94	0.1	4.803	A
2 - Baldock Rd East	718	15	1218	0.589	718	1.4	7.192	A
3 - Site Access South	0	733	714	0.000	0	0.0	0.000	A
4 - Baldock Rd West	548	113	1128	0.486	548	0.9	6.208	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	94	517	843	0.111	94	0.1	4.803	A
2 - Baldock Rd East	718	15	1218	0.589	718	1.4	7.195	A
3 - Site Access South	0	733	714	0.000	0	0.0	0.000	A
4 - Baldock Rd West	548	113	1128	0.486	548	0.9	6.208	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	94	517	843	0.111	94	0.1	4.803	A
2 - Baldock Rd East	718	15	1218	0.589	718	1.4	7.195	A
3 - Site Access South	0	733	714	0.000	0	0.0	0.000	A
4 - Baldock Rd West	548	113	1128	0.486	548	0.9	6.208	A

Year 2035 + Southern Site, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Site Access Junction	Standard Roundabout		1, 2, 3, 4	8.54	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.54	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	Year 2035 + Southern Site	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Site Access North		✓	0	100.000
2 - Baldock Rd East		✓	806	100.000
3 - Site Access South		✓	27	100.000
4 - Baldock Rd West		✓	696	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	0	0	0
	2 - Baldock Rd East	0	0	168	638
	3 - Site Access South	0	18	0	9
	4 - Baldock Rd West	0	614	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	0	0	0
	2 - Baldock Rd East	0	0	0	0
	3 - Site Access South	0	0	0	0
	4 - Baldock Rd West	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Site Access North	0.00	0.00	0.0	A
2 - Baldock Rd East	0.68	9.57	2.1	A
3 - Site Access South	0.04	4.90	0.0	A
4 - Baldock Rd West	0.59	7.48	1.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	0	708	745	0.000	0	0.0	0.000	A
2 - Baldock Rd East	806	81	1182	0.682	798	2.1	9.173	A
3 - Site Access South	27	631	765	0.035	27	0.0	4.875	A
4 - Baldock Rd West	696	18	1177	0.591	690	1.4	7.314	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	0	714	742	0.000	0	0.0	0.000	A
2 - Baldock Rd East	806	82	1182	0.682	806	2.1	9.559	A
3 - Site Access South	27	638	762	0.035	27	0.0	4.899	A
4 - Baldock Rd West	696	18	1177	0.591	696	1.4	7.479	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	0	714	742	0.000	0	0.0	0.000	A
2 - Baldock Rd East	806	82	1182	0.682	806	2.1	9.566	A
3 - Site Access South	27	638	762	0.035	27	0.0	4.899	A
4 - Baldock Rd West	696	18	1177	0.591	696	1.4	7.482	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	0	714	742	0.000	0	0.0	0.000	A
2 - Baldock Rd East	806	82	1182	0.682	806	2.1	9.568	A
3 - Site Access South	27	638	762	0.035	27	0.0	4.899	A
4 - Baldock Rd West	696	18	1177	0.591	696	1.4	7.482	A

Year 2035 + Southern Site, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Site Access Junction	Standard Roundabout		1, 2, 3, 4	5.95	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.95	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	Year 2035 + Southern Site	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Site Access North		✓	0	100.000
2 - Baldock Rd East		✓	616	100.000
3 - Site Access South		✓	177	100.000
4 - Baldock Rd West		✓	522	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	0	0	0
	2 - Baldock Rd East	0	0	11	605
	3 - Site Access South	0	119	0	58
	4 - Baldock Rd West	0	517	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	0	0	0
	2 - Baldock Rd East	0	0	0	0
	3 - Site Access South	0	0	0	0
	4 - Baldock Rd West	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Site Access North	0.00	0.00	0.0	A
2 - Baldock Rd East	0.50	5.92	1.0	A
3 - Site Access South	0.23	5.99	0.3	A
4 - Baldock Rd West	0.46	5.97	0.9	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	0	637	781	0.000	0	0.0	0.000	A
2 - Baldock Rd East	616	5	1224	0.503	612	1.0	5.849	A
3 - Site Access South	177	601	780	0.227	176	0.3	5.945	A
4 - Baldock Rd West	522	118	1125	0.464	519	0.9	5.903	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	0	641	779	0.000	0	0.0	0.000	A
2 - Baldock Rd East	616	5	1224	0.503	616	1.0	5.923	A
3 - Site Access South	177	605	778	0.227	177	0.3	5.985	A
4 - Baldock Rd West	522	119	1125	0.464	522	0.9	5.972	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	0	641	779	0.000	0	0.0	0.000	A
2 - Baldock Rd East	616	5	1224	0.503	616	1.0	5.923	A
3 - Site Access South	177	605	778	0.227	177	0.3	5.985	A
4 - Baldock Rd West	522	119	1125	0.464	522	0.9	5.972	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	0	641	779	0.000	0	0.0	0.000	A
2 - Baldock Rd East	616	5	1224	0.503	616	1.0	5.923	A
3 - Site Access South	177	605	778	0.227	177	0.3	5.985	A
4 - Baldock Rd West	522	119	1125	0.464	522	0.9	5.972	A

Year 2035 + Both Sites, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Site Access Junction	Standard Roundabout		1, 2, 3, 4	11.94	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.94	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	Year 2035 + Both Sites	AM	FLAT	07:45	08:45	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Site Access North		✓	126	100.000
2 - Baldock Rd East		✓	880	100.000
3 - Site Access South		✓	24	100.000
4 - Baldock Rd West		✓	783	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	100	0	26
	2 - Baldock Rd East	80	0	162	638
	3 - Site Access South	0	16	0	8
	4 - Baldock Rd West	12	614	80	77

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	0	0	0
	2 - Baldock Rd East	0	0	0	0
	3 - Site Access South	0	0	0	0
	4 - Baldock Rd West	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Site Access North	0.18	6.23	0.2	A
2 - Baldock Rd East	0.78	14.51	3.5	B
3 - Site Access South	0.04	5.58	0.0	A
4 - Baldock Rd West	0.69	10.18	2.2	B

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	126	778	708	0.178	125	0.2	6.165	A
2 - Baldock Rd East	880	181	1129	0.780	867	3.3	13.160	B
3 - Site Access South	24	809	675	0.036	24	0.0	5.525	A
4 - Baldock Rd West	783	95	1137	0.688	774	2.1	9.707	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	126	787	704	0.179	126	0.2	6.228	A
2 - Baldock Rd East	880	183	1128	0.780	880	3.4	14.443	B
3 - Site Access South	24	821	669	0.036	24	0.0	5.577	A
4 - Baldock Rd West	783	96	1137	0.689	783	2.2	10.163	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	126	787	704	0.179	126	0.2	6.229	A
2 - Baldock Rd East	880	183	1128	0.780	880	3.5	14.489	B
3 - Site Access South	24	821	669	0.036	24	0.0	5.578	A
4 - Baldock Rd West	783	96	1137	0.689	783	2.2	10.171	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	126	787	704	0.179	126	0.2	6.229	A
2 - Baldock Rd East	880	183	1128	0.780	880	3.5	14.507	B
3 - Site Access South	24	821	669	0.036	24	0.0	5.578	A
4 - Baldock Rd West	783	96	1137	0.689	783	2.2	10.175	B

Year 2035 + Both Sites, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Site Access Junction	Standard Roundabout		1, 2, 3, 4	6.96	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.96	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	Year 2035 + Both Sites	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Site Access North		✓	92	100.000
2 - Baldock Rd East		✓	723	100.000
3 - Site Access South		✓	170	100.000
4 - Baldock Rd West		✓	550	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	77	0	15
	2 - Baldock Rd East	109	0	9	605
	3 - Site Access South	0	114	0	56
	4 - Baldock Rd West	29	517	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Site Access North	2 - Baldock Rd East	3 - Site Access South	4 - Baldock Rd West
From	1 - Site Access North	0	0	0	0
	2 - Baldock Rd East	0	0	0	0
	3 - Site Access South	0	0	0	0
	4 - Baldock Rd West	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Site Access North	0.12	5.21	0.1	A
2 - Baldock Rd East	0.59	7.30	1.5	A
3 - Site Access South	0.24	6.60	0.3	A
4 - Baldock Rd West	0.51	6.91	1.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	92	630	785	0.117	91	0.1	5.189	A
2 - Baldock Rd East	723	19	1216	0.595	717	1.4	7.136	A
3 - Site Access South	170	723	719	0.237	169	0.3	6.532	A
4 - Baldock Rd West	550	221	1072	0.513	546	1.0	6.795	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	92	635	782	0.118	92	0.1	5.213	A
2 - Baldock Rd East	723	19	1216	0.595	723	1.5	7.297	A
3 - Site Access South	170	729	716	0.238	170	0.3	6.595	A
4 - Baldock Rd West	550	223	1071	0.514	550	1.0	6.912	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	92	635	782	0.118	92	0.1	5.213	A
2 - Baldock Rd East	723	19	1216	0.595	723	1.5	7.300	A
3 - Site Access South	170	729	716	0.238	170	0.3	6.595	A
4 - Baldock Rd West	550	223	1071	0.514	550	1.1	6.912	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Site Access North	92	635	782	0.118	92	0.1	5.213	A
2 - Baldock Rd East	723	19	1216	0.595	723	1.5	7.300	A
3 - Site Access South	170	729	716	0.238	170	0.3	6.596	A
4 - Baldock Rd West	550	223	1071	0.514	550	1.1	6.912	A